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The Psychology of Close Relationships: Fourteen Core Principles

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Abstract

Relationship science is a theory-rich discipline, but there have been no attempts to articulate the broader themes or principles that crosscut the theories themselves. We sought to fill that void by reviewing the psychological literature on close relationships to extract its core principles. This review revealed 14 principles, which collectively address four central questions: (a) What is a relationship? (b) How do relationships operate? (c) What tendencies do people bring to their relationships? and (d) How does the context affect relationships? The 14 principles paint a cohesive and unified picture of romantic relationships, one that portrays a strong and maturing discipline. On the downside, the principles afford few of the sorts of conflicting predictions that can be especially helpful in fostering novel theory development. We conclude that relationship science is likely to benefit from simultaneous pushes toward both greater integration across theories (to reduce redundancy) and greater emphasis on the circumstances under which existing (or not-yet-developed) principles conflict with one another.

Keywords

Relationship science, core principles, attachment theory, interdependence theory, culinary approach

Central Points

- 1. This paper presents the first attempt to discern the core principles that crosscut the major theories in relationship science, especially the theories within psychology.
- 2. A review of the major theories used a novel procedure called the *culinary approach*, which seeks to extract the core principles (the basic theoretical building blocks—the basic ingredients) from a given discipline and addresses how theorists can use them to refine existing theories or develop new theories.
- 3. Applying the extraction process to relationship science revealed 14 core principles, which help to answer four basic questions in the literature: (a) What is a relationship? (b) How do relationships operate? (c) What tendencies do people bring to their relationships? and (d) How does the context affect relationships?
- 4. The literature review revealed a cohesive discipline, one with few notable conflicts among the core theoretical principles.
- 5. We suggest that relationship science would benefit from both (a) greater recognition of the principle-level overlap or redundancy across theories and (b) greater effort to adopt novel perspectives on relationship dynamics, ideally perspectives that raise important challenges to the dominant paradigm.

The Psychology of Close Relationships: Fourteen Core Principles

[R]elationships with other humans are both the foundation and the theme of the human condition: We are born into relationships, we live our lives in relationships with others, and when we die, the effects of our relationships survive in the lives of the living, reverberating throughout the tissue of their relationships. —Ellen Berscheid, 1999, pp. 261-262

Poets, novelists, and philosophers have long recognized the centrality of relationships to human existence. Yet the coalescence of an integrated science devoted to understanding human relationships dates back only to the 1980s. Today, relationship science is an interdisciplinary field that employs diverse empirical methods to understand the initiation, development, maintenance, and dissolution of interpersonal relationships. It addresses the structure and trajectory of relationships, how relationships operate, and how relationship outcomes are influenced by both the personal characteristics that people bring to their relationships and the broader context in which relationships are embedded. Relationship scientists investigate many types of relationships, but the primary emphasis is on *close* relationships—those characterized by "strong, frequent, and diverse interdependence that lasts over a considerable period of time" (Kelley et al., 1983, p. 38) especially well-established romantic relationships. In her classic article on the "greening of relationship science," Berscheid (1999) discussed the growing coherence and influence of relationship science on myriad scholarly fields, presciently forecasting the growth of a flourishing discipline in the twenty-first century (see also Campbell & Simpson, 2013; Reis, 2007).

Researchers have written many reviews of the close relationships literature, including in previous volumes of the Annual Review of Psychology (e.g., Clark & Reis, 1988; Gottman, 1998). In the present review, we focus on the major theories that guide research in relationship science,

¹ Close relationships researchers investigate a wide range of relationships, even in the subcase of romantic relationships. Although there are main effect differences across relationship types (Kurdek, 2005), the available evidence suggests that "the processes that regulate relationship functioning generalize across gay, lesbian, and heterosexual couples" (Kurdek, 2004, p. 880). Thus, we have no reason to believe that the 14 principles discussed below qualitatively differ across different romantic relationship arrangements. As such, and because the vast majority of research has examined heterosexual romantic relationships, our examples focus on the heterosexual case.

with a particular emphasis on those deriving from social and personality psychology. We seek to understand what assumptions these theories share, the extent to which they align or conflict, and how they could be augmented and complemented. Toward those ends, we attempt to (a) extract from the literature a set of core principles that psychologists have identified to understand close relationships, and (b) illustrate how articulating and organizing these core principles can promote theory refinement and development.

Major Theories in Relationship Science

Relationship science has strong theories, two of which—interdependence theory and attachment theory—have been especially influential. *Interdependence theory*, which began as a game-theoretic model of dyadic interaction, traces its roots to Thibaut and Kelley's (1959) The Social Psychology of Groups. It was first adapted to understand close relationships in the 1970s (Kelley, 1979; Levinger & Snoek, 1972) and became a dominant theory of such relationships in the 1980s (Kelley et al., 1983; Rusbult, 1983). According to interdependence theory, social situations vary on several dimensions, and this variation influences relationship processes and outcomes (Kelley et al., 2003). For example, situations in which a man is more (vs. less) dependent on his girlfriend for rewarding experiences should increase the extent to which he monitors her behavior for signs that she loves and is committed to him. His high level of dependence puts him in a low-power position unless she is also highly dependent upon him. High levels of mutual dependence typically promote cooperative behavior when partners have corresponding interests, but conflictual behavior when they have noncorrespondent interests.

Attachment theory, which initially focused on infant-caregiver relationships, traces its roots to Bowlby's (1969, 1973, 1980) trilogy on attachment, separation, and loss. The theory was adapted to explain the nature of close relationships between adults in the 1980s (Hazan & Shaver, 1987), and it joined interdependence theory as a dominant model of adult relationships in the 1990s

(Hazan & Shaver, 1994). According to attachment theory, people develop emotional bonds with significant others (usually romantic partners in adulthood), and they are motivated to maintain these bonds over time (Mikulincer & Shaver, 2007). People seek proximity to their primary attachment figure, especially when they are stressed, ill, or afraid, and they rely on the psychological security provided by this person when pursuing challenging activities that can promote mastery and personal growth. Individuals vary along two dimensions of attachment insecurity: (a) anxiety, the extent to which they need reassurance that their attachment figures love and will stay with them; and (b) avoidance, the extent to which they are uncomfortable with emotional intimacy and being vulnerable. Secure individuals, who score low on both dimensions, typically display the most constructive relationship processes and have the most positive relationship outcomes.

Several other theoretical perspectives have also been influential in relationship science, including risk regulation theory (Murray, Holmes, & Collins, 2006), self-expansion theory (Aron, Lewandowski, Mashek, & Aron, 2013), the communal/exchange model (Clark & Mills, 2011), the interpersonal process model of intimacy (Reis & Shaver, 1988), and the vulnerability-stressadaptation model (Karney & Bradbury, 1995). The existence of such theories, along with many others, is a major strength of relationship science: These theories have fruitfully guided thousands of empirical investigations of how people think, feel, and behave in close relationships.

Nevertheless, it is not obvious how, or whether, these theories cohere and what qualities they have in common. Some theories overlap in intended ways. For example, risk regulation theory (Murray et al., 2006) deliberately combines elements of attachment theory and interdependence theory. Other theories overlap in underappreciated ways. For example, the ideal standards model (Simpson, Fletcher, & Campbell, 2001) focuses on standards, whereas the suffocation model (Finkel, Hui, Carswell, & Larson, 2014) focuses on expectations, two constructs that are almost

synonymous in interdependence theory. Other theories discuss processes that are rarely articulated elsewhere. For example, the emphasis on stressors external to the relationship in the vulnerabilitystress-adaptation model (Karney & Bradbury, 1995) is neglected in most other theories (but see Hill, 1949; McCubbin & Patterson, 1983). Relationship science is fortunate to have this rich assemblage of theories, but their collective depiction is murky because the degree to which the field's core principles complement, circumscribe, overlap with, or conflict with one another remains unclear.2

Extracting Principles: A Culinary Metaphor

The primary goal of this paper is to articulate the principles that cross-cut many of the theories in relationship science. Consider a culinary metaphor in which each theory is a dish (e.g., a curry) composed of discrete ingredients (e.g., a grain, a protein, a vegetable, several spices). We set ourselves the task of extracting the core principles—the basic ingredients—and then determining which principles emerge repeatedly across different theories. Our approach, in other words, involved temporarily setting the theories aside in order to identify and organize a set of core principles that characterize relationship science in general. Toward the end of the paper, we illustrate how theorists might use them in theory refinement and novel theory development.

In general, the goal of the extraction process is not to replace current theories, nor is it to generate a comprehensive list of every theoretical idea ever introduced within the relevant research domain. Rather, the goal is to identify the key—the most widespread and influential principles that have influenced theory development and hypothesis generation in the field. This assessment can help determine whether and how various theories align, perhaps through

² The evolutionary psychology of human mating (Buss, 2008) developed alongside mainstream relationship science. By and large, however, these two fields have developed in parallel. They address some overlapping topics, but they tend to employ different research methods and exhibit modest cross-fertilization of ideas (see Durante et al., 2016; Eastwick, in press). In the Discussion section, we address some ways in which relationship science could benefit from greater incorporation of ideas from evolutionary psychology.

redundancy or by emphasizing different features of a phenomenon (akin to the proverbial blind men examining different parts of an elephant). Additionally, it fills the "theoretical pantry" with the main ingredients required for the theory development (cooking) process.

In applying this culinary approach to relationship science, we started by examining recent psychologically oriented handbook volumes, textbooks, and review articles to identify the major theories/models within the research domain and to extract an initial list of core principles. We then obtained feedback on this initial list from 16 leading relationship scientists in psychology and used their feedback to refine the list, ultimately producing the 14 core principles discussed below (see glossary).

Each principle is described at a fairly high level of abstraction so it can align with multiple theories; our goal is to capture the general thrust of how each theory characterizes a given principle, even if there is minor variation across theories in the principle's precise characterization. Each principle can be used to develop empirical hypotheses, but none of them specifies how particular constructs should be operationalized (i.e., there is no gold-standard measure required by a particular principle). Reflecting the current state of the field, the principles exist at somewhat different levels of analysis. Some, for example, apply to a person at a single moment in time, whereas others apply to a person in general or across time; some imply a particular causal process (e.g., responsive behaviors increase relationship quality), whereas others specify only that a construct accounts for variance in a process or outcome (e.g., culture accounts for variance in the quality of relationship functioning).³ Consistent with the culinary metaphor, most theories incorporate or address only some of the 14 principles, in the same way that specific dishes do not

³ All of the principles we discuss can be disconfirmed, though it may be easier to disconfirm principles that specify a particular causal process (e.g., the responsive-behavior example) than principles that specify that a construct should predict an outcome in general (e.g., the culture-accounts-for-variance example).

use all the ingredients in the pantry; it is unlikely that a cogent theory could incorporate all 14 principles, especially at this rather early stage of our field's development.

By necessity, our extraction process involved many subjective judgments. For example, what counts as a theory? Which theories are most relevant to relationship science? Is a given principle sufficiently "core" to warrant inclusion? Thus, we make no claim that our conclusions reflect the Truth regarding the key principles that define relationship science from a psychological perspective; other scholars might make different decisions or draw different conclusions about the discipline's core principles. That there is subjectivity in this approach, however, does not mean that the conclusions are arbitrary. Indeed, the conclusions are constrained by the theories in our research domain, which means that any competent extraction effort ought to generate principles that are reasonably compatible with one another. We hope that our synthesis starts a dialogue about the core principles that anchor relationship science—and about how the principles might be used to both refine current theories and generated new ones.

The Core Principles of Relationship Science

Once we extracted the 14 principles (see the glossary), we embedded them within a sensible, albeit post hoc, organizational structure. We settled on a four-set structure built around central theoretical questions in relationship science: (a) What is a relationship? (b) How do relationships operate? (c) What tendencies do people bring to their relationships? and (d) How does the context affect relationships? Figure 1 depicts an organizational framework for conceptualizing the 14 principles within this four-set structure.

Set 1: What Is a Relationship?

Relationship scientists have written extensively on how to define terms such as "close" and "relationship" (e.g., Berscheid & Regan, 2005; Kelley et al., 1983). One pervasive concept that characterizes all close relationships is that partners are dependent on one another to obtain good outcomes and facilitate the pursuit of their most important needs and goals (see Finkel & Simpson, 2015). Beyond these broad definitional efforts, there also has been extensive theorizing about the nature of close relationships. Set 1 contains three core principles that address how and why a relationship is more than the sum of its parts (the uniqueness principle), the merging of two partners into a single psychological entity (the integration principle), and the way relationships change over time (the trajectory principle).

Uniqueness. Relationship outcomes depend not only on the specific qualities of each partner, but also on the unique patterns that emerge when the partners' qualities intersect.

Relationship scientists underscore that a relationship functions as its own entity—one that is distinct from and irreducible to the two constituent partners (Berscheid, 1999). For example, even if two individuals rarely self-disclose, their idiosyncratic personal characteristics may mesh in a unique way that leads both of them to self-disclose a great deal to each other. From a statistical standpoint, uniqueness effects are evident in large amounts of "relationship variance" in Social Relations Model studies and in actor × partner interaction effects in Actor-Partner Interdependence Model studies (Kenny & Kashy, 2011).

Various theories address the uniqueness principle in distinct ways, with most emphasizing certain characteristics of relationship partners or specific interpersonal outcomes. Interdependence theory (Kelley et al., 2003) proposes that the qualities of each partner influence how the two partners interact in particular situations and, consequently, the outcomes they reap from those interactions. Transactive goal dynamics theory (Fitzsimons, Finkel, & vanDellen, 2015) argues that successful goal attainment depends on features of the self (e.g., a man's desire to lose weight) in conjunction with those of the partner (e.g., his wife's training as a dietician). Relational regulation theory (Lakey & Orehek, 2011) posits that the extent to which social interaction successfully regulates affect, behavior, and cognition depends on the idiosyncratic traits,

preferences, and personal tastes of each partner (e.g., the two partners find it soothing if she plays guitar for while he cooks).

There are many good empirical examples of uniqueness. For example, relationship variance explains most of the total variance in perceptions of mate value and long-term attraction, indicating that beauty (and other desirable qualities of a mate) really is largely in the eye of the beholder (Eastwick & Hunt, 2014). Mutuality of commitment—the degree to which both partners report comparable levels of commitment to the relationship—predicts unique variance in relationship well-being, above and beyond the two partners' levels of commitment (Drigotas, Rusbult & Verette, 1999). Capitalization discussions—those in which one partner attempts to savor positive news with the other (Gable & Reis, 2010)—tend to be especially difficult and unsatisfying if the person sharing the news is high in attachment anxiety and the partner is high in attachment avoidance (Shallcross et al., 2011). Depressive symptoms during the transition to parenthood are particularly pronounced when highly neurotic individuals have highly disagreeable spouses (Marshall, Simpson, & Rholes, 2015). In short, relationships cannot be understood fully by studying main effects involving the two partners; the consideration of the unique dyadic context generated by the two of them is also required.

Integration. Opportunities and motivations for interdependence tend to facilitate cognitive, affective, motivational, or behavioral merging between partners.

In many close relationships, the psychological boundaries that separate partners are blurry, making it difficult to discern where one partner ends and the other begins. The self component in terms such as "self-concept" and "self-regulation" takes on a less individualistic focus. Consider the *self-concept*, which often is deeply embedded in, and can be altered by, close relationships (Andersen & Chen, 2002). As a relationship develops, and as the desire to maintain it increases, an individual's self-concept usually becomes increasingly intertwined with the partner and

relationship. In unstructured relationship thought-listing tasks, for example, higher relationship commitment predicts greater spontaneous use of plural pronouns like we, us, and our (Agnew, Van Lange, Rusbult, & Langston, 1998). People become confused about whether they or their partner has a given attribute (e.g., extraversion), as illustrated by research showing that individuals are slower and less accurate when making me/not me decisions under time-pressure if either they or their partner possesses the relevant attribute than if neither or both of them do (Mashek, Aron, & Boncimino, 2003). Similar effects are also found in newly formed relationships when an individual desires high interdependence with her potential partner (Slotter & Gardner, 2009). Perhaps due to this merging of identities, the tendency for individuals to exhibit self-enhancing biases generalizes to their close (but not nonclose) relationship partners (Sedikides, Campbell, Reeder, & Elliot, 1998).

Self-regulation is also embedded within close relationships. According to transactive goal dynamics theory (Finkel, Fitzsimons, & vanDellen, in press; Fitzsimons et al., 2015), relationship partners form a single self-regulating unit that involves a complex web of goals, pursuits, and outcomes. The optimal unit of analysis for understanding goal dynamics is the dyad or group, not the individual. Alice, for instance, might set a goal for John, such as losing some weight; she might then pursue this goal by buying healthier snacks, or John might pursue it by foregoing desserts. Alice might also set a goal for herself, such as submitting a work project on time, which John helps her pursue by doing some solo parenting so she can complete her project. Depending on how efficiently partners coordinate their goals and pursuits, goal interdependence can either bolster or undermine each person's goal success. When goal coordination is strong, partners can achieve a level of goal success that would have been impossible if they were single or had a less compatible partner. In fact, research has shown that individuals assigned to think about ways in

which their romantic partner is helpful in their pursuit of a goal work less hard at pursuing that goal (Fitzsimons & Finkel, 2011), which frees resources for other goal pursuits.

When performing joint tasks, people who desire a communal rather than an exchange relationship tend to behave in ways that obscure rather than accentuate their independent contributions, which makes overall performance function as a shared dyadic contribution rather than as a combination of two independent contributions. Even at a physiological level, the line separating close relationship partners is fuzzy (Beckes & Coan, 2011; IJzerman et al., 2015; Sbarra & Hazan, 2008). Romantic partners performing laboratory interaction tasks, for example, exhibit increased alignment over time in their respiratory sinus arrhythmia (a biomarker of feeling safe), an effect that is stronger among individuals who are more satisfied with their relationship (Helm, Sbarra, & Ferrer, 2014).

Trajectory. The long-term trajectories of relationship dynamics are affected by each partner's continually updated perceptions of the couple's relationship-relevant interactions and experiences.

Relationships change over time. Early close relationships models posited that change reflected a normative series of stages or filters. For example, the intersection model of pair relatedness (Levinger & Snoek, 1972) proposes that relationship partners move through stages of escalating interdependence as they become aware of each other, interact, and eventually form a relationship characterized by a couple-level identity. The relational development model (Knapp, Vangelisti, & Caughlin, 2014) suggests that couples move through a series of stages both when beginning a relationship (e.g., initiating, then intensifying, then bonding) and when ending a relationship (e.g., differentiating, then stagnating, then terminating). Shifts between stages are often marked by transitions—turning points where partners' level of commitment becomes explicit (Loving,

Gleason, & Pope, 2009) or life events that change the relationship, such as the transition to parenthood (Rholes et al., 2011).

Other models focus on how specific relationship constructs ebb and flow across time. According to social penetration theory (Altman & Taylor, 1973), relationship partners develop intimacy as they gradually increase the depth and breadth of their self-disclosures. Attachment theorists propose that the three behavioral systems associated with pairbonding develop at different rates, with the sexual mating system being particularly important early in a relationship and the attachment and caregiving systems taking on greater importance once the relationship has become established (Zeifman & Hazan, 2008). Interdependence theorists have focused on how the situations a given couple encounters produce relationship-specific behavioral tendencies, which often become reified as injunctive norms (Thibaut & Kelley, 1959). For example, if one partner likes action films and the other likes screwball comedies, the couples might develop a strong turntaking norm, which would not exist in couples where partners had identical film preferences. People also update their internal working models over time (Bretherton & Munholland, 2008). Research has confirmed that events that produce feelings of greater attachment security lead to changes in partner-specific attachment models (e.g., expectations that one's current partner is reliable), which subsequently change global attachment models (e.g., expectations that partners in general are reliable; Fraley, 2007; Pierce & Lydon, 2001).

Many of the events and experiences that cause relationships to change occur in simple, ordinary interactions and commonplace situations. Indeed, relational regulation theory (Lakey & Orehek, 2011) suggests that people's perceptions of social support originate mainly from everyday conversations and shared activities with partners, not in response to major life stressors. Consequently, relationship outcomes are challenging to predict before a relationship begins, even if one has considerable knowledge of each partner's personal characteristics (Finkel, Eastwick,

Karney, Reis, & Sprecher, 2012). The ReCAST model (Eastwick, Keneski, Morgan, & McDonald, 2016) posits that long-term, committed relationships and short-term, casual relationships are often indistinguishable until two people have gotten to know each other over an extended period of time, primarily because people do not know if they want to be in a committed relationship with a specific person until they can fully gauge its emotional and sexual chemistry. But relationships do not remain unpredictable forever: Once relationship partners progress to advanced relationship stages (e.g., marriage), latent strengths and vulnerabilities presage whether partners' judgments of relationship quality will remain strong or deteriorate (Lavner, Bradbury, & Karney, 2012).

Set 2: How Do Relationships Operate?

Besides examining existential and temporal features of relationships, relationship scientists also investigate how individuals think, feel, and behave with regard to their experiences and interactions with their partners. Set 2 encompasses four core principles, which address how individuals evaluate their partners/relationships (the evaluation principle), the ways in which partners respond to each other's needs (the responsiveness principle), how partners react dyadically to conflict and other important relationship events (the resolution principle), and how they (typically) manage to sustain their relationship, despite challenges (the maintenance principle).

Evaluation. People evaluate their relationships and partners on a set of positive and negative constructs, which tend to be moderately negatively correlated.

People constantly evaluate the world around them, and their relationships and partners are no exception. Most people make relationship evaluations on separable positivity and negativity dimensions (Gable & Reis, 2001), and researchers have used this two-dimensional

conceptualization to examine the effects of ambivalence—simultaneously high positive and high negative evaluations—on relationship processes and outcomes (e.g., Uchino et al, 2013).

Typically, however, individuals who evaluate a relationship more positively also evaluate it less negatively, so most evaluative variables are bipolar and labeled according to their positive endpoint (e.g., satisfaction, commitment, trust, etc.). Each of these constructs has its own definition, time-course, and measure, and various theoretical perspectives have attempted to explain how and why these constructs are related or distinct.

According to the triangular theory (Sternberg, 1986), for example, love has three elements, which can be present or absent to varying degrees: intimacy (warm feelings of connectedness), passion (romantic and sexual attraction), and commitment (the decision to maintain the relationship). Other scholars have focused on the time-course of passion and intimacy, finding that passion is a function of the first derivative of intimacy over time: When intimacy is increasing, passion is high; when it is stable (regardless of its level), passion is low (Rubin & Campbell, 2012). These and other positive evaluative constructs are conceptually distinct, but they often are positively correlated, sometimes quite highly. Indeed, even though six of the major evaluative constructs in relationship science—commitment, trust, love, passion, intimacy, and satisfaction are distinct, they share considerable variance and form a single, broad dimension reflecting overall relationship quality (Fletcher, Simpson, & Thomas, 2000).

Most and perhaps all of these constructs include not only reflective/consciously accessible components, but also impulsive/automatic components (Murray, Gomillion, Holmes, Harris, & Lamarche, 2013). Using distinct measurement approaches (e.g., explicit vs. implicit priming), both components can be assessed; depending on the context, explicit or implicit measures may account for more of the variance in predicting a given relationship process or outcome (Banse & Kowalick, 2007; McNulty, Olson, Meltzer, & Shaffer, 2013).

Responsiveness. Responsive behaviors promote relationship quality for both the self and the partner.

People's assessments of relationship quality are strongly influenced by they and their partners interact together, including their degree of mutual responsiveness—the extent to which they are "cognizant of, sensitive to, and behaviorally supportive of" each other's core needs and values (Reis, 2007, p. 9; also see Clark & Lemay, 2010; Reis & Clark, 2013). Studies have confirmed that partners' responsive behaviors across a wide range of negative and positive experiences predict greater personal and relationship well-being (Debrot, Cook, Perrez, & Horn, 2012; Gable, Gosnell, Maisel, & Strachman, 2012), above and beyond the positive effects of other more general forms of support (Otto, Laurenceau, Siegel, & Belcher, 2015).

This emphasis on responsiveness to the partner's core needs and values underscores that one cannot be responsive simply by learning a set of techniques and then applying them in all situations (Finkel, Larson, Carswell, & Hui, 2014). Rather, responsiveness requires tailoring one's actions to the unique needs of one's partner in a particular situation. Consider this classic example: Having somebody immediately repay your favor is responsive if you want an exchange relationship with her, but it is unresponsive if you desire a communal relationship (Clark & Mills, 1979).

When individuals believe their partner is responsive to their needs, they typically feel good about themselves and are more willing to place themselves in emotionally vulnerable positions, which can enhance the quality of their relationship (Murray et al., 2006). People vary, of course, in how comfortable they are being emotionally vulnerable, an individual difference that influences not only how responsive they are, but how they are likely to react to responsive behavior from their partner. When in a support-provision role, insecurely attached individuals tend to provide less responsive support when their partners are upset (Feeney & Collins, 2001; Simpson, Rholes &

Nelligan, 1992). When in a support-recipient role, such individuals report greater felt insecurity and display relationship-destructive behaviors, although receiving more responsive support tailored to their needs buffers them from experiencing these adverse states (Lemay & Dudley, 2011; Simpson & Overall, 2014). Responsiveness, in other words, plays a crucial role—frequently in conjunction the partners' individual difference qualities—in social support contexts in which one partner helps the other cope with negative experiences or stressors. Indeed, the extent to which individuals perceive that they have high-quality support available predicts greater well-being and better health outcomes (Robles, Slatcher, Trombello, & McGinn, 2014).

Responsiveness is also important in capitalization situations (Gable & Reis, 2010), where responsive reactions typically involve active, constructive behaviors like excitement or enthusiasm (Feeney & Collins, 2015). These reactions often yield positive outcomes, such as increases in the discloser's positive mood or self-esteem, which in turn leads the discloser to feel closer to the responsive partner. Conversely, passive or destructive responses like apathy or envy signal a lack of responsiveness and frequently elicit distancing responses from disclosers.

Resolution. The manner in which the two partners communicate about and cope with relationship events affects long-term relationship quality and stability.

Certain relational events stand out, reverberating with psychological resonance for one or both partners. These events may be commonplace, such as the fifteenth fight over chores this month, or infrequent, such as the birth of a child. The ways in which these events affect a relationship often hinges on how both partners behave in response to them (Overall & McNulty, 2017).

The range of these resonant events is vast, but because negative relational events have stronger consequences for relationship well-being than positive ones do (Gottman, 1998), conflictual interaction tends to be especially significant. Communication often becomes fraught during conflict, and relationship satisfaction and stability largely depend on how partners construe and

respond to each other's behavior. In addition, the effectiveness and pace with which partners recover from conflict episodes independently predict relationship satisfaction and stability (e.g., Gottman & Levenson, 1999).

The response options to conflict reside within a constructive/destructive × active/passive behavioral space (Rusbult, Zembrodt & Gunn, 1982; see Overall & McNulty, 2017, for a similar model). Responses within this space have downstream effects on relationship quality; active/constructive responses, for example, tend to predict higher satisfaction and lower break-up likelihood (Rusbult et al., 1982). Observational research has documented four behavioral patterns enacted during conflict interactions that forecast relationship distress and divorce proneness: globally criticizing your partner's personality, responding defensively to your partner's criticism, conveying the belief that your partner is beneath you, and refusing to engage with your partner's concerns (Gottman, 1998).

Major relationship problems sometimes need to be directly addressed in order to resolve persistent, nagging issues that, if left unattended, could further destabilize the relationship. For example, compared to partners who are more passive or destructive, partners who directly and openly confront major problems in active, constructive ways experience greater distress during and immediately following conflict discussions, but they and their partners are more likely to resolve these problems and have happier relationships over time (Overall, Fletcher, Simpson, & Sibley, 2009). It appears that direct opposition is beneficial when serious problems have to be addressed and partners can make changes, but it is often harmful when partners do not have the traits or skills to be adequately responsive to one another (Overall & McNulty, 2017). Indirect (i.e., passive) cooperative communication, on the other hand, appears to be harmful when major problems need to be resolved, but it can be beneficial when (a) problems are minor, (b) things cannot be changed, or (c) one or both partners are too defensive to resolve the problem effectively.

Forgiveness research has revealed that the way in which both partners behave and react following major interpersonal transgressions alters how resolution unfolds. If, for example, transgressors make stronger amends and victims forgive them more wholeheartedly following a major relationship transgression, victims tend to develop greater self-respect and clearer self-views (Luchies, Finkel, McNulty, & Kumashiro, 2010), which should result in better and more constructive interactions later on. Indeed, the expression of greater forgiveness by the victim predicts more constructive patterns of marital conflict resolution and greater long-term relationship stability across time (Fincham, Beach, & Davila, 2004). If, however, transgressors fail to make adequate amends or are verbally aggressive, victims who are highly (vs. modestly) forgiving tend to respect themselves less and feel less satisfied in the marriage (Luchies et al., 2010; McNulty, 2008).

Maintenance. Partners in committed relationships exhibit cognitions and behaviors that promote the relationship's persistence over time, even if doing so involves self-deceptive biases.

Forgiveness is one of many processes that protect and promote relationships over time processes that are collectively called *relationship maintenance mechanisms*. Many of them involve a transformation process in which partners override their immediate self-interests in favor of behaviors that are more beneficial for the partner or the relationship (Kelley & Thibaut, 1978). One of the most robust predictors of the tendency to enact relationship maintenance mechanisms is relationship commitment, which emerges from feelings of satisfaction and investment in the relationship and from the belief that the alternatives to involvement in the relationship are less desirable (Le & Agnew, 2003). Greater relationship commitment, in turn, is associated with enacting relationship-maintaining cognitions and behaviors, such as perceiving one's relationship as better than others' (including in the sexual arena; de Jong & Reis, 2015), ignoring or mentally derogating romantic alternatives, making sacrifices to benefit the relationship, and forgiving

partner transgressions (Rusbult, Olsen, Davis, & Hannon 2001). Causal evidence for these relationship maintenance effects comes from experiments that manipulate commitment, such as those in which participants exposed to a high commitment prime were more forgiving of potential partner transgressions than those exposed to a low commitment prime (Finkel, Rusbult, Kumashiro, & Hannon, 2002).

Some of the relationship-promoting effects of commitment stem from motivated biases. For example, the positive association of commitment with perceptions that one's relationship is better than others' relationships is stronger when one's relationship is threatened (Rusbult, Van Lange, Wildschut, Yovetich, & Verette, 2000). The negative association of commitment with the assessment of romantic alternatives as desirable is stronger when alternatives are objectively more appealing; in fact, the negative association disappears when alternatives are objectively unappealing, presumably because they do not threaten the relationship and do not require derogated (Johnson & Rusbult, 1989; Simpson, Gangestad, & Lerma, 1990). Similarly, although romantically unattached men tend to find a novel woman more desirable when she is at the most fertile stage of her ovulatory cycle, men who are involved in a committed romantic relationship show the opposite pattern (Miller & Maner, 2010). That is, men in relationships actually find the woman *less* attractive when she is highly fertile, presumably because she is especially tempting and threatening to their existing relationships, and they are therefore motivated to perceive her negatively.

When engaged in relationship maintenance activities, one partner's commitment becomes more closely tied to the other's trust (Wieselquist, Rusbult, Foster, & Agnew, 1999). It is, after all, fairly easy to trust someone who forgives your transgressions and derogates attractive alternatives. Trust, in turn, is associated with less monitoring of the partner's behavior as the trusting individual develops more faith that the partner has her best interests at heart (Holmes & Rempel, 1989).

Indeed, individuals who trust their partners more exhibit relationship-promoting biases in which they misremember their partner's relationship transgressions as being more benign than they actually were (Luchies et al., 2013).

Relationship scientists have also drawn from other theoretical frameworks to identify relationship maintenance mechanisms. Research, for example, has shown that positive illusions about the partner predict salutary relationship outcomes over time (Murray et al., 2011), and making more generous attributions about the causes of a partner's behavior predict higher relationship satisfaction (Bradbury & Fincham, 1990). Of course, reality does act as a constraint on people's rose-colored glasses (Fletcher & Kerr, 2010; West & Kenny, 2011), and biases may be more or less pronounced depending on the specific features of a situation. For example, the strength of people's positive biases are more pronounced when they are pursuing important relationship goals rather than deliberating about which goals to pursue (Gagné & Lydon, 2004). Relationship-promoting effects are also found when partners engage in novel and arousing (rather than merely pleasant) activities with each other (Aron et al., 2000) and when adopting the perspective of a neutral, benevolent third-party when thinking about relationship conflict (Finkel, Slotter, Luchies, Walton, & Gross, 2013).

Set 3: What Tendencies Do People Bring To Their Relationships?

Thus far, our discussion has focused predominantly on relationship functioning. We have largely sidestepped both the normative or idiosyncratic tendencies that individuals bring to their relationships (Set 3) and the contextual factors that might influence relationship processes (Set 4). Set 3 contains three core principles that address how and why relationship functioning is influenced by the partners' personality qualities (the predisposition principle), their needs and goals (the instrumentality principle), and the benchmarks they use to evaluate the relationship (the standards principle).

Predisposition. People bring certain personality qualities to their relationships, some of which influence their own and their partners' relationship well-being.

The most basic tendencies that people bring to their relationships are tied to their personality and temperament. The effects of personal strengths (e.g., high self-esteem, attachment security, approach goals) or vulnerabilities (e.g., neuroticism, rejection sensitivity, avoidance goals) can be amplified by events that transpire within relationships or in the wider environment. For example, John, who has low self-esteem and adopts avoidance goals in his relationship (e.g., avoiding conflict), may not worry much about the status of his relationship with Alice if they are getting along well and everything is fine at work. However, when either the relationship or work generates stress, his personal vulnerabilities may rise to the fore and make him think, feel, and behave in relationship-damaging ways, which adversely affects Alice and their later interactions (Gable & Impett, 2012; Murray et al., 2006).

Several relationship theories are relevant to the predisposition principle. Attachment theory (Bowlby, 1973), for instance, proposes that the ways an individual is treated by significant others (attachment figures) across the life-course—and especially during childhood—produce internal working models of the self and others, which then guide how she thinks, feels, and behaves in later interpersonal contexts, particularly stressful ones. Securely attached individuals, who have received nurturing and sensitive care, develop positive models of the self and others and, therefore, behave more positively and constructively toward their partners (Mikulincer & Shaver, 2007), especially when one or both of them are upset (Collins & Feeney, 2004; Simpson et al., 1992). Anxiously attached individuals, who have received unpredictable or inconsistent care, develop negative models of the self (viewing themselves as unworthy of love), which motivates them to be hypervigilant to signs their partner might be pulling away. Avoidantly attached individuals, who have been rebuffed or rejected, develop negative models of others (viewing

others as uncaring), which motivates them to keep their attachment systems deactivated by being self-reliant, especially in stressful situations (Simpson & Rholes, 2012).

The predisposition principle is prominent in other theories and bodies of research, as well. For example, according to evolutionary models of social development (reviewed in Simpson & Belsky, 2016), stressful circumstances (e.g., early unpredictable environments) result in poorer parenting, which creates enduring vulnerabilities (e.g., attachment insecurity) that eventually affect the quality and stability of an individual's romantic relationships years later (Szepsenwol et al., in press). The communal/exchange model (Clark & Mills, 2011) predicts and confirms that people who bring greater communal strength to a relationship typically provide more costly benefits to their partners. The intimacy process model (Reis & Shaver, 1988) predicts and reveals the degree to which an individual discloses important personal information to her partner—and how the partner then perceives this information and reacts to it—is shaped by the unique motives, needs, goals, and fears (the working models) that each partner brings to the relationship (Laurenceau, Feldman Barrett, & Pietromonaco, 1998). And certain personality traits—especially neuroticism, which develops early in life—predict a host of negative relationship outcomes later in life (McNulty, 2013).

Instrumentality. People bring certain goals and needs to their relationships, and the dynamics between the two partners affect the extent to which they succeed in meeting these goals and needs.

Beyond personality differences, people also bring many needs and goals to relationships. Some of these motivational elements are species-typical. Attachment theory, for example, contends that humans have an innate need to develop attachment bonds (Bowlby, 1969), whereas self-expansion theory suggests that humans have an innate need to expand the self (Aron et al., 2013). Applications of self-determination theory in the relationships domain indicate that people

look to their significant others to help them achieve their innate psychological needs toward autonomy, competence, and relatedness (La Guardia, Ryan, Couchman, & Deci, 2000). Other goals, such as the desire to reduce carbohydrate consumption, are more idiosyncratic. Relationship scientists investigate the ways in which relationships influence the degree to which individuals are able to fulfill these needs and goals.

One foundational need relevant to the formation and maintenance of close relationships may be attachment—the need to establish an emotionally close relationship that fosters felt security (Baumeister & Leary, 1995; Bowlby, 1969). Attachment theory's central idea is that human adults (in contrast to chimpanzee or bonobo adults, our closest genetic relatives) evolved to form deep, long-term emotional attachments with other adults, presumably because such bonds promoted survival of our species' altricial infants ancestrally (Eastwick, 2009; Finkel & Eastwick, 2015; Fletcher, Simpson, Campbell, & Overall, 2015). Human adults also seek out their primary attachment figures (e.g., a romantic partner) for subsidiary attachment-related needs, such as comfort when they are upset or as a source of strength when pursuing challenging goals (Feeney & Collins, 2015). Brain imaging research reveals that people subjected to physical pain exhibit stronger reductions in activation of neural systems supporting emotional and behavioral threat responses when they are randomly assigned to hold their spouse's hand, especially if they have a higher-quality marriage (Coan, Schaefer, & Davidson, 2006). Other studies demonstrate that merely viewing a photo of one's romantic partner when enduring physical pain activates brain regions linked to safety signaling, especially among those who believe their partner is highly supportive (Eisenberger et al., 2011).

Close others influence people's goal pursuit processes in diverse ways. For example, when the opportunity arises, people tend to outsource their goal-related activities to their significant others, which may reduce the effort they exert when pursuing their goals (Fitzsimons & Finkel, 2011),

and they draw closer to those who help them achieve their high-priority goals (Fitzsimons & Shah, 2008). As noted previously, the degree to which goal interdependence bolsters or undermines an individual's goal success is partially determined by how effectively partners can coordinate, such as by pooling and efficiently allocating their goal-relevant resources across the many goals that both partners possess (Fitzsimons et al., 2015). When things go well, partners not only achieve better goal-related outcomes on a daily basis; they also move toward their ideal selves across time (Rusbult, Finkel, & Kumashiro, 2009).

Even when we consider existential outcomes, close others also play a major role. Perhaps the most remarkable evidence of this is that marital status (married vs. single) and marital quality (higher vs. lower) both predict lower morbidity and mortality rates (Holt-Lunstad, Smith, & Layton, 2010; Robles et al., 2014).

Standards. People bring certain standards to their relationships, and they tend to experience greater relationship well-being when the relationships exceed these standards.

A third tendency that people bring to relationships is their personal standards, a construct that assumes a prominent role in many relationships theories. This idea is encapsulated in Thibaut and Kelley's (1959) comparison level (CL), which refers to people's overall assessment of the outcomes they believe they deserve in a particular relationship. According to interdependence theory (Kelley & Thibaut, 1978; Thibaut & Kelley, 1959) and its offshoots (Rusbult, 1983), people are more satisfied with a relationship when the outcomes (rewards minus costs) it provides exceed their CL.

Many domain-specific relationship theories also focus on standards or on similar concepts, such as expectations, ideals, or preferences. For example, the triangular theory of love posits that greater relationship quality is indexed by smaller discrepancies between an individual's ideal level of each component of love (intimacy, passion, commitment) and the actual amount of love that

she/he experiences on each component (Sternberg, 1986). The ideal standards model (Simpson et al., 2001) claims that individuals should experience higher relationship quality when they perceive greater alignment between their ideals for particular traits in a romantic partner (warmth-loyalty, vitality-attractiveness, and status-resources) and their partner's actual traits. The suffocation model (Finkel et al., 2014) suggests that people have varied historically in the degree to which they expect their spouses to fulfill needs that are low (e.g., safety) versus high (e.g., self-actualization) in Maslow's hierarchy of needs; the extent to which their relationships meet these expectations is theorized to predict marital quality more strongly for higher-level than lower-level needs.

High standards bode poorly for relationship well-being when people cannot attain them (McNulty, 2016); that is, people tend to be less happy when their actual partners and relationships do not fulfill their lofty standards. Conversely, high standards bode well for relationship wellbeing when such standards motivate individuals to engage in behaviors that improve relationship outcomes, such as when molding a less-than-ideal partner into an ideal one (Murray et al., 1996). Although high standards often motivate prorelationship cognitions and behaviors in people who have strong relationship skills, they also produce disappointment in those with poor relationship skills (McNulty & Karney, 2004).

People sometimes deviate from strict veridicality when comparing their standards with reality. For example, people in relationships characterized by aggression, but who nonetheless remain committed to the relationship, adopt more tolerant standards for partner aggression (Arriaga, Capezza, & Daly, 2016). In addition, people's ideal partner preferences change over time to match the desirable qualities their current partner possesses (Fletcher, Simpson, & Thomas, 2000; Neff & Karney, 2003). And people have difficulty comparing, on a trait-by-trait basis, the concrete features of a flesh-and-blood partner with their abstract standards. Consequently, the match between ideals and a partner's traits is typically irrelevant to relationship outcomes if ideals are

measured on single traits (e.g., attractiveness) isolated from the partner's complete suite of traits (Eastwick, Luchies, Finkel, & Hunt, 2014).

Set 4: How Does the Context Affect Relationships?

Consistent with classic person × situation models (e.g., Lewin, 1936), the relationships literature complements its analysis of the tendencies that people bring to their relationships with an analysis of the situational and contextual factors that influence relationship processes and outcomes (McNulty, 2016). Thus, Set 4 includes four core principles, which range from a more micro to a more macro level of analysis. These principles address how and why partners navigate situations in which their interests diverge (the diagnosticity principle), how they respond to appealing alternatives (the alternatives principle), how stressors affect relationship dynamics (the stress principle), and how the broader social network and culture influence relationship dynamics (the culture principle).

Diagnosticity. Situations vary in the extent to which they afford opportunities to evaluate a partner's true goals and motives regarding the relationship.

Some situations provide better opportunities than others for revealing a partner's relationshiprelevant goals and motives. For example, an individual's behavior in highly noncorrespondent situations such as "strain tests"—when a good outcome for one partner produces a bad outcome for the other partner—can reveal his or her relationship goals, motives, and orientations more clearly than correspondent situations do (Holmes, 1981; 2002; Kelley & Thibaut, 1978). If John agrees to quit his dream job and leave his friends and family so Alice can pursue her dream job in a faraway city, his willingness to make these sacrifices reveals just how much he cares about her and is committed to their relationship. Alice's ability to make relatively unambiguous attributions about John's motives would have been diminished if the situation were more correspondent, such as if he disliked his current job and did not have close social ties where they were living. Because

highly noncorrespondent situations allow individuals to demonstrate their willingness to make significant sacrifices for their partner and relationship, such prorelationship behavior from one partner tends to promote the other partner's trust (Shallcross & Simpson, 2012; Wieselquist et al., 1999), among other relationship benefits (Simpson, 2007).

Diagnostic situations are central to several theories in relationship science. According to interdependence theory (Holmes, 1981, 2002; Rusbult & Van Lange, 2003), when relationship partners find themselves in noncorrespondent situations such as strain tests, the partner being asked to make a sacrifice must try to set aside his personal desires and transform motivation to do what is best for the partner and relationship. He must then coordinate plans and actions with his partner to help achieve her important goals. This explains why strain-tests in particular are such powerfully diagnostic situations—they leave little attributional ambiguity regarding the extent and nature of the sacrificing partner's transformation of motivation. But if partners fail strain-tests because they do not engage in prorelationship transformation of motivation, relationships run the risk of becoming unstable (Rusbult et al., 2001).

Diagnosticity is also a key element of both the risk regulation model (Murray et al., 2006) and the mutual responsiveness model (Murray & Holmes, 2009). Individuals are typically motivated to connect emotionally with their partners while protecting the self from excessive vulnerability. Compared to correspondent situations, noncorrespondent situations highlight the fundamental conflict between (a) seeking connection and allowing the self to be vulnerable versus (b) protecting the self and avoiding potential rejection. This is a basic conflict that both partners must struggle to resolve because relationships cannot fully develop unless the two of them are willing to take leaps of faith (Murray et al., 2006) and reciprocally disclose intimate information (Reis & Shaver, 1988), actions that make them vulnerable to possible exploitation (Cavallo, Fitzsimons, & Holmes, 2009).

Alternatives. The presence of attractive alternatives to a current relationship—including the option of not being in a relationship at all—threatens relationship quality and persistence.

Shifting our focus up from the immediate social situation, another contextual feature is whether, and the extent to which, individuals have options that make it desirable for them to leave an existing relationship. Similar to standards, the desirability of alternatives plays a vital role in interdependence theory (Kelley & Thibaut, 1978; Thibaut and Kelley, 1959) and the investment model (Rusbult, 1983). Specifically, the comparison level for alternatives concept (CLAlt) reflects the outcomes that individuals would experience in their best alternative to being in the current relationship, including being single. Relationship stability is hypothesized to be more closely aligned with CL_{Alt} (the extent to which a person can achieve better outcomes in another relationship) than with CL (the extent to which a person's current relationship outcomes exceed his/her standards). That is, CL_{Alt} determines the extent to which a person is dependent on his partner to achieve his needs, goals, and other desirable outcomes.

Most CL_{Alt} studies have emphasized people's subjective (rather than objective) perceptions of the degree to which current alternatives are appealing. Research has shown, for example, that the better people perceive their alternatives, the more likely their relationships will dissolve (Le, Dove, Agnew, Korn, & Mutso, 2010). Research has also tested this association using experimental manipulations: When participants are randomly assigned to believe that their own sex is in the numerical minority (vs. majority), they report lower relationship quality with their current partners, presumably because the abundance of opposite-sex people suggest that better options may be available (Kim, 2013).

Most relationship models characterize desirable alternatives as threats that individuals should be motivated to ignore, downplay, or derogate to mitigate negative effects on their relationships (Durante et al., 2016; Lydon & Karremans, 2015). This process is evident in controlled, conscious responses to attractive alternatives, such as when individuals explicitly evaluate the desirability of opposite-sex alternative partners (Johnson & Rusbult, 1989; Simpson et al., 1990). However, it is also evident in automatic, spontaneous responses, such as the amount of time individuals spend looking at attractive alternatives (Maner, Gailliot, & Miller, 2009; Miller, 1997) or display affiliative nonverbal behaviors in response to them (Karremans & Verwijmeren, 2008).

Some theoretical analyses linked to these findings adopt an evolutionary perspective. Pairbonds most likely evolved in humans because such relationships offer adaptive benefits for offspring (Eastwick, 2009). However, it takes considerable time and energy to cultivate a strong pairbond, which suggests that the derogation process may be an evolved adaptation that motivates committed romantic partners to train their attention on each other to preserve the existing pairbonded relationship (Maner, Rouby, & Gonzaga, 2008). The process of derogating desirable alternatives is also consistent with cognitive dissonance perspectives: Once people have made a difficult-to-reverse choice (e.g., committing to a partner), they become motivated to perceive nonchosen alternatives as less desirable (Brehm, 1956).

To be sure, people can sustain committed relationships while also pursuing sexual, even loving, relationships with other partners, as in the case of *polyamory*, a relationship structure in which individuals have "consensual loving and romantic relationships with more than one partner" (Conley, Ziegler, Moors, Matsick, & Valentine, 2012, p. 126). In fact, polyamorous relationships may be stable precisely because people do not construe their additional sexual partners as true alternatives that would replace a current partner.

Stress. High demands external to the relationship predict worse relationship outcomes, especially if the demands exceed the two partners' (individual or combined) resources for coping.

Beyond the effects of the immediate situation and romantic alternatives, external factors, especially stressors, can also affect relationship functioning. It is difficult to sustain a high-quality relationship when confronting acute or chronic stress external to the relationship (Karney & Bradbury, 1995). Indeed, a broad spectrum of stressors—including job loss, financial strain, incarceration, chronic illness, infertility, and natural disasters—predicts myriad adverse relationship outcomes, including low satisfaction and breakup (Karney & Neff, 2015; Randall & Bodenmann, 2009).

Building on ideas discussed earlier, research has shown that some couples manage stress better than others do. One major factor in explaining this variation is the level of coping-relevant resources, such as lacking sufficient money or feeling psychologically depleted due to workrelated stress (Hill, 1949; McCubbin & Patterson, 1983). According to stress buffering perspectives (Cohen & Wills, 1985), the adverse effects of stressors are especially strong if such resources are low. But among couples who have good problem-solving skills, navigating moderate levels of stress early on strengthens the relationship over time, as long as they responded to those stressors effectively (Neff & Broady, 2011).

The most influential framework for conceptualizing the impact of stress on relationship functioning is Karney and Bradbury's (1995) vulnerability-stress-adaptation model, which emphasizes the role of interpersonal processes in mediating the effects of stress and resources on relationship outcomes. According to this model, stress exerts its adverse effects on relationship processes and outcomes via two routes (Karney & Neff, 2015). First, stress alters how much time partners have for each other and how they use that time. Partners who encounter high levels of stress have less time to engage in tasks that might increase emotional or physical intimacy, and they use more of their winnowed time dealing with stressful, challenging situations (Neff & Karney, 2009). Second, stress depletes the self-regulatory resources that partners need in order to respond constructively to relationship challenges (Repetti, 1989). Partners whose self-regulatory resources have been depleted are especially prone to retaliation in response to provocation (Finkel et al., 2009), and the subjective experience of self-regulatory depletion mediates the association of stress on both negative marital behaviors and diminished marital satisfaction (Buck & Neff, 2012). These effects are particularly strong when individuals are tempted to lash out at their partners, but they are smaller or nonexistent in the absence of such temptation (Finkel et al., 2012).

Culture. Relationships are embedded in social networks and a cultural milieu—including norms, practices, and traditions—that shape the nature and trajectory of those relationships.

As we broaden the contextual lens to consider cultural and subcultural effects on relationships, we turn to social ecological models, which posit that environmental contexts have nested layers (e.g., Bronfenbrenner, 1986). More specifically, individuals are embedded in social networks of friends and family whose approval or disapproval of a given relationship might affect its trajectory. These social networks are themselves embedded in cultural contexts consisting of norms, values, and scripts—and relationships are also shaped by these socially shared constructs. Finally, cultures are embedded in national and historical contexts that can cause relationships to differ across time and place.

At the level of the social network, approval from friends and family members predicts greater relationship satisfaction and stability (Felmlee, 2001). In some cases, friends and family members may engage in specific behaviors that help a relationship flourish or flounder; in other cases, simply hearing a significant other's positive reaction about one's current partner can reduce uncertainty and increase the likelihood of investing more in the relationship (Sprecher, 2011).

People also share knowledge about sexual scripts and norms within the local culture, which subsequently guide behavior (Simon & Gagnon, 2003). Fraternity membership, for example, predicts the extent to which sexual activity is part of the script that undergraduates use when describing a typical date (Bartoli & Clark, 2006), and norms about appropriate sexual behaviors vary as a function of regional levels of education and religiosity (Laumann, Gagnon, Michael, & Michaels, 1994).

Finally, relationships can be influenced by the national and historical context. For example, the degree to which individuals are willing to engage in casual sexual activity is linked to national indicators such as the rate of infectious diseases and women's economic power (Schaller & Murray, 2008; Schmitt et al., 2005). People in the U.S. have always expected their marriage to help them fulfill certain needs, but the particular needs have varied over time; Americans were especially likely to prioritize needs like safety and food production circa 1800, needs like intimacy and sexual fulfillment circa 1900, and needs like self-discovery and self-expression circa 2000 (Finkel, Hui, et al., 2014). The rise of the post-industrial economy in Western cultures during the second half of the twentieth century facilitated a "grand gender convergence" (although certainly not an equalization) in men's and women's social roles (Goldin, 2014), which profoundly influenced relationship dynamics, especially in marriages (Finkel, Hui, et al., 2014).

Evolutionary models of culture connect these different context levels to specific psychological processes. Transmitted cultural models, for instance, depict how and why people share beliefs, practices, and knowledge, usually emphasizing the processes of adopting, changing, and improving these products of shared culture (Richerson & Boyd, 2005). As an example, college administrators frequently hold workshops that increase students' sensitivity to issues surrounding sexual consent that change how the students engage in sexual behavior. Evoked cultural models posit that encountering a particular environmental cue that was prevalent in our ancestral past, such as the presence versus absence of a responsive caregiver (Simpson & Belsky, 2016), triggers adaptive cognitive and behavioral responses (Gangestad, Buss, & Haselton, 2006). For example, environments containing more pathogens may trigger preferences for romantic partners who carry genes associated with better health (Gangestad et al., 2006). These two forms of culture may influence psychological functioning in tandem or independently (Eastwick, 2013).

Combining the Principles to Refine or Develop Theories

Scholars can use these 14 core principles from the psychological literature on relationships (see Figure 1 and the glossary) to clarify and refine existing theories and perhaps generate new ones. Using the metaphoric terminology of the culinary approach, the cook (the theorist) can canvas the pantry (the collection of principles) for particular ingredients (specific principles), prepare the recipe (select and arrange the ingredients), and then cook the dish (develop the theory).

Refining Existing Theories

To refine an existing theory, theorists might first map each of the 14 principles onto a theory, retaining the principles that overlap or fit with it and setting aside those that do not. Theorists can then determine whether the addition of one or more of the extra principles—those that were not part of the original theory—might broaden the explanatory power of the theory enough to offset the additional complexity that comes with including more principles.

We illustrate this process using transactive goal dynamics theory (Finkel et al., in press; Fitzsimons et al., 2015). We focus on this theory because we are very familiar with it and because it is new, which means that there are few published articulations of the core principles. Transactive goal dynamics theory contains elements of Principles 2 (integration), 4 (evaluation), 5 (responsiveness), 8 (predisposition), 9 (instrumentality), and 12 (alternatives). Specifically, it proposes that: (a) relationship partners form a shared system of goal pursuits (integration), (b) subjective assessments of relationship commitment predict increased merging (evaluation), (c) goal success is maximized when partners support each other in ways tailored to each partner's idiosyncratic goals and needs (responsiveness), (d) each partner has certain skills and preferences that can be leveraged for optimal goal functioning at the dyadic level (predisposition), (e) partners

influence each other's degree of goal success (instrumentality), and (f) the relationship is more likely to continue if it results in goal success that exceeds what the two partners would otherwise experience (alternatives). In short, we can formulate much of the content of transactive goal dynamics theory with just these six ingredients.

As with most theories, transactive goal dynamics theory also contains important elements that do not rise to the level of a core principle. For example, one tenet of the theory is that stronger goal interdependence in a relationship should predict poorer goal-related recovery following a breakup. Such idiosyncratic elements are crucial in defining the unique terrain that a given theory seeks to address.

Transactive goal dynamics theory, however, leaves eight core principles unused. Hence, a scholar seeking to refine or expand the theory might consider whether adding any additional principles might benefit, refine, or improve the theory enough to offset the complexity of doing so, or whether incorporating additional principles might generate novel hypotheses. For example, transactive goal dynamics theory is not a theory of goal content; it primarily takes the two partners' goals as a given rather than investigating how or why they adopted these particular goals. From the perspective of Principle 14 (culture), a theorist might wonder whether the goal contents that people bring to their relationships—for example, the desired level or type of interdependence in the relationship—differ in important ways across cultural or historical contexts, and whether such variation has implications for relationship quality and longevity. This analysis might lead to the novel hypothesis that emotional responsiveness is more important for such outcomes in the twenty-first century U.S. than in Jane Austen's England (Light & Fitzsimons, 2014).

Generating New Theories

Other scholars might want to use the principles not to refine or expand an existing theory, but to guide theory development in a bottom-up manner. Although this process can begin in various

ways (e.g., one might start with observations about relationship dynamics in the world around them), it is likely to entail a systematic consideration of whether each of the principles can inform thinking that leads to the generation of new insights and hypotheses. For example, a scholar might wish to develop a new theoretical perspective on the circumstances under which sexual intercourse draws partners closer together versus pushes them apart. Merely looking at the list of core principles will not yield a new theoretical perspective, but it might be a productive first step. A scholar can consider whether each principle is likely to yield a deeper, better, or more nuanced understanding a topic, and she can then explore how the most relevant principles interrelate in theoretically interesting ways. To facilitate this process, she may generate a path diagram that specifies precisely how the variables should interrelate—including processes such as mediation, moderation, and feedback loops. Because the principles are cast at a relatively high level of abstraction, they can be exported readily to different research domains. For example, the researcher might find it easier to apply two or three principles—rather than an entire relationships theory—to an existing evolutionary perspective on how sex affects relationship partners.

Optimizing Relationship Science: Theoretical Cohesion versus Conflict

What has this exercise taught us? For one, we have learned that there are few instances in which a notable principle used in one theory clearly conflicts with a notable principle used in another theory.⁴ Many of us recall a time when interdependence theorists whispered the objection that attachment theory was too focused on individual differences. But as attachment theory complemented research in individual differences with research on normative attachment processes

⁴ One reason for this cohesion may be the abstract nature of the 14 principles. When different theories operationalize, test, and combine constructs associated with specific principles in novel ways, this may generate different or competing predictions, as has occurred in recent debates within the field. For example, although scholars agree that standards matter (Principle 10), there is debate about the circumstances under which those standards influence relationship outcomes (Eastwick, Luchies, Finkel, & Hunt, 2014; Schmitt, 2014). Nonetheless, there could also be conflict at the level of abstraction of the 14 principles, but our extensive literature review unearthed minimal evidence of any such conflict within relationship science.

(Mikulincer & Shaver, 2007), the whispers dissipated. Today, many prominent relationship models derive specific hypotheses based on ideas borrowed from different theories. When developing the risk regulation model, for example, Murray and colleagues (2006) extracted several key features of interdependence theory and attachment theory, combined them in novel ways, and then added new theoretical components to generate an important process model that tied together several major ideas in the field.

In many ways, such strong theoretical cohesion is marvelous. Although relationship scientists have many theories and models that address distinct relationship processes, we appear to have something approximating a consensual theoretical paradigm. This paradigm, which encompasses the 14 principles reviewed above, is compelling and generative. Recent edited volumes (e.g., Simpson & Campbell, 2013) and journal special issues (e.g., Finkel & Simpson, 2015) indicate that relationship science is thriving.

But there are also downsides to having such a cohesive discipline. Science often benefits from tests between conflicting ideas. Even though it is pleasant to work in an environment characterized by consensus, it sometimes takes friction to generate forward motion. We believe that the current theoretical paradigms in relationship science are excellent, but the field might benefit from some theoretical conflicts—alternative accounts that might sharpen and hone one another. For example, our field could explore whether the dominant view that people are best served by being in a secure relationship with a romantic partner is misguided, at least under some circumstances, such as when close friends provide a better option (DePaulo & Morris, 2005). We could also re-examine the widespread, albeit implicit, assumption that relationship stability is a "good" outcome (with abusive relationships being one exception) and breakups are a "bad" outcome. Perhaps we could challenge this dominant view by examining the circumstances under which people are best-served by leaving their relationship or seeking to "trade up" for a partner who is more compatible.

Revisiting broad questions and assumptions such as these accentuate the fact that many relationship scientists have focused quite heavily on the life cycle of one relationship rather than the multiple relationships that many people develop across their lives.

Evolutionary psychology, for example, potentially poses some serious challenges to certain theories and models in relationship science, particularly in the realm of mate selection. The evolutionary psychology of human mating adopts foundational assumptions that differ from many of those in relationship science (Durante et al., 2016; Eastwick, in press). In particular, evolutionary perspectives highlight not only the adaptive value of strong pairbonds, but also the potential adaptive value of behaviors such as sexual infidelity, trading up, and stalking (Buss & Shackelford, 1997). If a scholar extracted the core principles in the evolutionary psychological literature on mating, one of them might be that people evolved to seek opportunistic copulations outside of long-term, committed relationships. The hypotheses that follow from this principle seem to fundamentally conflict with hypotheses that follow from the maintenance principle above (Durante et al., 2016). If ancestral humans enjoyed a survival advantage from such relationshipdestructive behaviors, how can relationship scientists reconcile this with the field's strong emphasis on the benefits—including the survival benefits—of exclusive romantic relationships (Holt-Lunstad et al., 2010; Robles et al., 2014)? And if humans are best-served by having accurate insights about their partner's romantic attraction to others so they can guard against matepoaching, why do they shield themselves from the truth precisely in those circumstances when the threat of one's partner's extra-relationship temptation is strongest (Johnson & Rusbult, 1989; Simpson, Ickes, & Blackstone, 1995)?

In these instances and several others, evolutionary psychology directly challenges some of the foundational assumptions and principles in relationship science. If those assumptions and

principles withstand the challenge, the current relationship science paradigm will be solidified. If they do not, it will need to be altered. Regardless of the outcome, our discipline benefits.

Conclusion

Relationship science has come a long way in a relatively short period of time. It has become a rich discipline characterized by strong theories and highly generative research paradigms. According to our analysis, the field has 14 core principles that address what a relationship is, how relationships operate, what tendencies people bring to their relationships, and how contextual factors affect relationship processes and outcomes. At present, the major theories in our field largely align and rarely conflict.

As we look to the future, it will be interesting to see whether various theories gradually merge into a single, unified theory of relationships, or whether some major disagreements will enter mainstream relationship science. As the field continues to mature, it is likely to benefit from simultaneous trends toward greater theoretical unification, on one hand, and greater theoretical disagreement, on the other. Such trends should refine, deepen, and extend our understanding of how and why relationships function as they do in daily life, potentially providing clinicians and policymakers with more effective tools for helping people achieve deeper and more fulfilling relationships.

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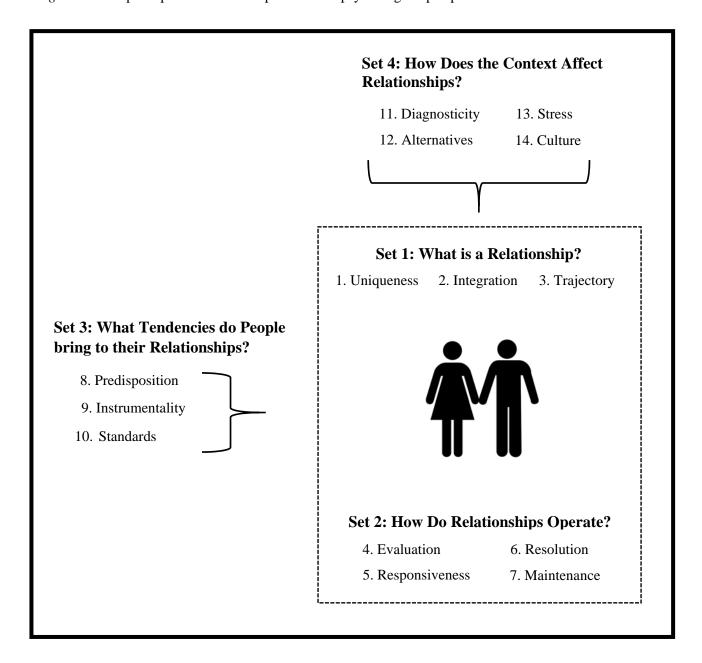
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Figure 1. Core principles in relationship science: A psychological perspective.



Note. Although the clipart image depicts a heterosexual couple, the available evidence suggests that all 14 core principles generalize to other relationship structures, including those involving gay men or lesbians (see Footnote 1).

Note to copyeditor. Clipart image from here: https://pixabay.com/en/man-woman-toilet-holdinghands-297369/.

Glossary. The 14 principles extracted from the psychology literature on relationship science.

Set	Number	Name	Definition
1	1	Uniqueness	Relationship outcomes depend not only on the specific qualities of each partner, but also on the unique patterns that emerge when the partners' qualities intersect
1	2	Integration	Opportunities and motivations for interdependence tend to facilitate cognitive, affective, motivational, or behavioral merging between partners
1	3	Trajectory	The long-term trajectories of relationship dynamics are affected by each partner's continually updated perceptions of the couple's relationship-relevant interactions and experiences
2	4	Evaluation	People evaluate their relationships and partners on a set of positive and negative constructs, which tend to be moderately negatively correlated
2	5	Responsiveness	Responsive behaviors promote relationship quality for both the self and the partner
2	6	Resolution	The manner in which the two partners communicate about and cope with relationship events affects long-term relationship quality and stability
2	7	Maintenance	Partners in committed relationships exhibit cognitions and behaviors that serve to promote the relationship's persistence over time, even if doing so involves self-deceptive biases
3	8	Predisposition	People bring certain personality qualities to their relationships, some of which influence their own and their partners' relationship well-being
3	9	Instrumentality	People bring certain goals and needs to their relationships, and the dynamics between the two partners affect the extent to which they succeed in meeting these goals and needs
3	10	Standards	People bring certain standards to their relationships, and they tend to experience greater relationship well-being to the extent that the relationships exceed these standards
4	11	Diagnosticity	Situations vary in the extent to which they afford opportunities to evaluate a partner's true goals and motives regarding the relationship
4	12	Alternatives	The presence of attractive alternatives to a current relationship—including the option of not being in a relationship at all—threatens relationship quality and persistence
4	13	Stress	High demands external to the relationship predict worse relationship outcomes, especially if the demands exceed the two partners' (individual or combined) resources for coping
4	14	Culture	Relationships are embedded in social networks and a cultural milieu—including norms, practices, and traditions—that shape the nature and trajectory of those relationships

Note. "Set" refers to the four major theoretical questions that the principles address: (1) What is a relationship? (2) How do relationships operate? (3) What tendencies do people bring to their relationships? and (4) How does the context affect relationships?