

Annual Review of Psychology Attachment in Adulthood: Recent Developments, Emerging Debates, and Future Directions

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Annu. Rev. Psychol. 2019. 70:401-22

The *Annual Review of Psychology* is online at psych.annualreviews.org

https://doi.org/10.1146/annurev-psych-010418-102813

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Keywords

attachment, relationships, continuity, personality change, individual differences

Abstract

Some of the most emotionally powerful experiences result from the development, maintenance, and disruption of attachment relationships. In this article, I review several emerging themes and unresolved debates in the social-psychological study of adult attachment, including debates about the ways in which attachment-related functions shift over the course of development, what makes some people secure or insecure in their close relationships, consensual nonmonogamy, the evolutionary function of insecure attachment, and models of thriving through relationships.

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INTRODUCTION

In a popular essay recently published in the *New York Magazine*, writer Bethany Saltman (2016) confronts several challenging questions at the interface of personality development, parenting, and relationships. Specifically, she describes the struggles that she has faced over the course of her life, including recurring self-doubts, ambivalent relationships with parents and various boyfriends in adolescence, and the uncertainties she experiences as a parent. One of Saltman's concerns is that the insecurities that she harbors about her past may adversely and indirectly influence the way she relates to her daughter and husband.

Saltman (2016) turns to attachment theory—a well-known theory of human relationships and personality development—to come to terms with these issues. Attachment theory attempts to explain the close emotional bonds that people develop with significant others in their lives, most notably parents and romantic partners, and how those bonds shape human experience across the life course. One of its themes is that secure relationships can provide the foundation for psychological well-being. However, when relationships are insecure or characterized by uncertainty, they can lead to self-doubts and a range of interpersonal outcomes that might make it difficult to function either as an effective parent or as an effective partner.

Although theories in psychology tend to come and go, attachment theory has been an unusual exception. Since its inception over half a century ago, the theory has been a rallying point for popular discourse on relationships, personality development, psychotherapy, and parenting (Holmes 2001). Not only has it shaped the way numerous people, including Bethany Saltman, make sense of themselves and their relationships, it has inspired thousands of studies in subfields of psychology as diverse as developmental psychology, animal behavior, social and personality psychology,

neuroscience, and clinical science (see Cassidy & Shaver 2016). Indeed, in many respects, attachment theory has emerged as one of the leading theoretical frameworks for broadly understanding interpersonal functioning, relationships, and personality development in social and personality psychology (Fraley & Shaver 2018).

The purpose of this article is to review some of the emerging themes and unresolved debates in the social-psychological study of adult attachment. Space limitations do not permit me to review the full range of important developments that have taken place in recent years (for a brief overview of attachment theory, see the sidebar titled Background and History: The Foundations of Attachment Theory). For example, I do not cover recent work on attachment, genetics, and

BACKGROUND AND HISTORY: THE FOUNDATIONS OF ATTACHMENT THEORY

John Bowlby developed attachment theory as a way to explain the intense distress experienced by children who had been separated from their primary caregivers (for a review, see Bretherton 1992). Bowlby (1982) observed that infants would go to extraordinary lengths to prevent separation from a parent. Many of the prevailing theories at the time explained these reactions as resulting from the lack of adequate care by surrogates or the removal of a primary food source. However, by the 1950s, these explanations were beginning to seem inadequate: Children who were separated from their parents in residential nurseries were distressed despite receiving adequate care from the nursing staff, and Harlow's (1958) research on contact comfort was beginning to suggest that love was something more than a strategy to satisfy hunger-related drives.

To explain the profound emotional responses of children who had been separated from their parents, Bowlby (1982) drew upon emerging ideas in ethology, cognitive science, and control systems theory. He proposed that infants are born with an attachment behavioral system—a motivational system that leads infants to form deep, emotional bonds to others who can provide support and protection (i.e., attachment figures). He argued that such a system would be adaptive for human infants, who are born without the ability to feed, defend, or care for themselves.

Although most children develop attachments to their primary caregivers, there are individual differences in the quality of those attachments. Ainsworth and her colleagues (1978) formalized this idea using the strange situation—a laboratory paradigm for studying attachment in a standardized fashion. In this procedure, parents and their children are separated from and reunited with one another over a series of episodes designed to gradually increase levels of stress. The majority of children tested in the strange situation are securely attached: They are visibly upset by the separation from and search for their missing caregivers. Upon reunion, they seek contact with their parents and are easily soothed. Not all children, however, behave in a secure manner. Some children, labeled as avoidant, may not express clear signals of distress upon separation and, upon reunion, often avoid seeking physical contact with caregivers. Other children, labeled as anxious—resistant, are distressed during the separation, seek contact from their caregivers upon reunion, but are unable to be easily soothed. They exhibit signs of anger and resistance, despite efforts to seek comfort from the caregiver. These attachment patterns are thought to be a function of the mental representations, or working models, that children construct as a function of their caregiving experiences (see Bretherton & Munholland 2008, De Wolff & van IJzendoorn 1997).

The majority of early research on attachment focused exclusively on infant-caregiver relationships. That focus started to change in the 1980s, as researchers in social and personality psychology began considering the implications of attachment for adult psychological functioning. For example, Hazan & Shaver (1987) argued that romantic love is, in part, a manifestation of the attachment system. They observed a number of parallels between infant-parent attachments and romantic relationships, including a desire to be in physical proximity to the other; seeking the other when distressed, scared, or ill; and using the other as a secure base from which to explore the world. Hazan & Shaver argued that the attachment behavioral system does not become dormant as children develop. Instead, it is co-opted to facilitate pair bonding in adult relationships.

Hazan & Shaver (1987) also proposed that the kinds of differences that Ainsworth et al. (1978) observed in the strange situation parallel differences in the ways in which adults think about and approach romantic relationships. Using a self-report measure that was designed to tap adult analogs of Ainsworth et al.'s attachment patterns, they found that the majority of adults were relatively secure in their romantic relationships. Secure adults reported being comfortable opening up to others and depending on them and were not worried about the long-term prospects of their relationships. Other adults reported being insecure in their relationships, i.e., being uncomfortable depending on their partners or worried that their partners were not as responsive as desired. In modern research, individual differences in attachment patterns or attachment styles are often represented in a two-dimensional space defined by attachment anxiety and attachment avoidance.

Although work in the social and personality tradition has its origins in attempts to understand romantic relationships, its scope has expanded to include psychological functioning in adulthood more generally. Attachment theory is currently one of the leading theoretical frameworks for understanding interpersonal functioning, relationships, well-being, and personality development in social and personality psychology (Fraley & Shaver 2018).

neuroscience (e.g., Fraley & Shaver 2018, Gillath 2015); the ways in which security priming can influence relational processes (e.g., Gillath et al. 2008b); or the interface of attachment, sex, and caregiving (e.g., Birnbaum & Reis 2018, Gillath et al. 2008a). Fortunately, many of these topics have been reviewed in recent books (e.g., Gillath et al. 2016, Mikulincer & Shaver 2016), and interested readers are encouraged to consult those. I selectively focus on unresolved and potentially controversial issues that have emerged in the past few years. In short, the goal of this review is not to be exhaustive, but rather to highlight some constructive areas for empirical study, theoretical debate and refinement, and innovation.

HOW DO ATTACHMENT-RELATED FUNCTIONS SHIFT OVER THE COURSE OF DEVELOPMENT? WHAT ARE ATTACHMENT HIERARCHIES AND HOW SHOULD THEY BE ASSESSED?

An attachment is typically defined as an emotional bond in which a person seeks proximity to the attachment object and uses them as a safe haven during times of distress and as a secure base from which to explore the world. Most infants form their first attachments with their primary caregivers (Colin 1996). However, as children develop, they begin to shift an increasing number of attachment-related functions from parents to peers. Although adolescents, for example, continue to rely on their parents as a secure base from which to explore the world, they begin seeking proximity to their peers and using them as safe havens during times of distress (Hazan & Zeifman 1994, Nickerson & Nagle 2005). By the time they reach adulthood, many people organize their attachment behavior around peers (e.g., friends and romantic partners) rather than parents (Doherty & Feeney 2004).

A growing body of research has examined the factors that facilitate the development of new attachment bonds in adolescence and adulthood. For example, research has shown that people become more likely to use their romantic partners as attachment figures as the relationship persists. That is, relationships that have lasted for 2 or more years are more likely to be full-blown attachments than relationships that have lasted fewer than 2 years (Doherty & Feeney 2004). Moreover, factors such as living with one's partner, being in a committed relationship, and having a supportive partner can each facilitate the development of an attachment bond (Feeney 2004, Fraley & Davis 1997). People who are relatively secure, in general, are more likely than those who are generally insecure to form attachment bonds with peers or partners (Doherty & Feeney 2004,

Attachment bond:

an enduring emotional bond that one person develops toward another, typically a parent, close friend, or romantic partner

Attachment figure: a person used as a safe haven during uncertainty and as a secure base from which to explore Fraley & Davis 1997). Thus, the development of attachment bonds in adulthood appears to be facilitated by having a secure foundation on which to cultivate new relationships.

OUESTIONS ABOUT TIME COURSE

Although research suggests that the development of attachment bonds in adulthood is a gradual process, the time course is a matter of debate. Hazan & Zeifman (1994) proposed that a typical romantic relationship becomes an attachment bond after 2 years. Other research suggests that it is relatively common for young adults in early-stage relationships to use their romantic partners for secure base and safe haven functions (e.g., Fagundes & Schindler 2012). For example, Heffernan et al. (2012) found that approximately 50% of their respondents who had been dating for 3 months reported using their partners as a secure base. Thus, it seems that the field has yet to reach a consensus about the time course of attachment development in adulthood.

HIERARCHIES VERSUS NETWORKS

There are ongoing debates about whether the development of new attachment relationships requires the displacement of existing ones. In the early literature on attachment, scholars often referred to a hierarchy of attachment figures—an expression that captures the notion that some attachment figures may be more important than others in serving attachment-related functions (e.g., Bowlby 1982). Scholars have sometimes taken Bowlby's hierarchical metaphor to imply that only one person can be at the top of the hierarchy (i.e., the primary attachment figure). However, it is not clear from Bowlby's writings whether his language was meant to be descriptive of the way social relations work (e.g., one person tends to be more salient than others) or whether it reflected a hypothesis about the psychological dynamics that govern the formation of attachment bonds (e.g., psychological constraints built into the attachment system that require that only one person can function as a primary attachment figure).

Some research suggests that, when one person moves up in the attachment hierarchy, other people move down. For example, in a longitudinal study of adolescents, as people came to use their romantic partners for attachment-related functions (e.g., safe haven, secure base), they became less likely to use their friends as attachment figures (Umemura et al. 2017). Other research, however, suggests that many people use two or more significant others as attachment figures (e.g., Rowe & Carnelley 2005), suggesting that the idea of a singular, primary attachment figure may be inaccurate for many adults. Further work is needed to learn whether the process of developing a new attachment bond necessitates the weakening of existing bonds.

QUESTIONS ABOUT ASSESSMENT AND DISCRIMINANT VALIDITY

In some ways, the distinction between secure and avoidant attachment can be characterized as the extent to which a person is comfortable using another person as a safe haven and secure base. A person who is relatively avoidant is, by definition, uncomfortable opening up to others and depending on them (Bartholomew & Horowitz 1991). Thus, to the extent to which a person is avoidant in their romantic relationship, it is also the case that they are unlikely to use their partner as an attachment figure. This raises the question of whether the assessment of attachment style is any different than the assessment of the extent to which a person is used as an attachment figure.

This ambiguity does not exist in attachment research on children. When parent-child dyads are tested in the strange situation, it is assumed that infants are attached to their parents and that the different patterns of attachment (e.g., secure, anxious, avoidant; see the sidebar titled Background and History: The Foundations of Attachment Theory) are reflections of the quality

Attachment hierarchy:

a conceptual ordering of the extent to which different people (e.g., mother, partner) serve attachment functions

Attachment style:

relatively stable pattern of thoughts, feelings, and behaviors that people exhibit in the context of their relationships Attachment avoidance: the extent to which a person is uncomfortable opening up to others or using them for attachment functions of that attachment rather than the presence versus absence of an attachment bond per se. An infant classified as avoidant, for example, is considered to be avoidantly attached to the parent; it is not assumed that the avoidant child is indifferent to or lacks a bond to the parent (see Cassidy 2016). Given the importance of attachment for survival in infancy, it is easy to appreciate how a child can be attached to someone, even if that person does not serve as a reliable safe haven or secure base.

Beyond childhood, bonding is not necessarily a life or death situation. If an adult is uncertain about whether a partner can be counted on for support when needed, then that uncertainty can be used in the psychological calculus underlying the transfer of attachment-related functions to the partner. Thus, attachment avoidance in adulthood could reflect an unwillingness to use a romantic partner as an attachment figure; it could also reflect the absence of a prototypical attachment bond.

Beyond this issue, uncertainty remains about how best to measure the extent to which someone is used as an attachment figure. Hazan & Zeifman (1994) were among the first to systematically study the ways in which attachment-related functions transfer from parents to peers. They developed a set of interview questions that tapped into different aspects of attachment, such as "Who is the person you want to be with when you are feeling upset or down?" for safe haven and "Who is the person you can always count on?" for secure base, and asked people of different ages to nominate people who served each of those functions. Many researchers have built on this tradition, often using self-report versions of these original instruments. Some of these instruments are scored in a target-specific manner, such as by counting the number of items for which a person nominated a mother, a father, a partner, or a friend (e.g., Fraley & Davis 1997). Some of these methods use social-network approaches in which a person nominates important people in their life and then answers specific attachment-related questions about each of those people (e.g., Gillath et al. 2017, Trinke & Bartholomew 1997). Other recent approaches have used bull's-eye methods in which people locate the position of important others relative to themselves (as represented as distance from the center of a bull's-eye diagram) (Rowe & Carnelley 2005). Finally, other methods involve asking people to rate the extent to which different attachment functions characterize their relationship with specific people in their lives using more traditional rating-scale methods in social and personality psychology (e.g., Tancredy & Fraley 2006).

It is unclear which of these approaches is optimal. There has not been any research that systematically compares and contrasts these different methods. Perhaps they all converge in meaningful ways, which would make the choice of which measure to use less crucial. However, each approach also provides different kinds of information, which, in turn, affects the kinds of research questions that can be addressed. For example, if one is interested in the relative positioning of different targets in a person's attachment hierarchy, one cannot use ranking methods because ranking methods impose ordered distinctions even in situations where ordered distinctions do not exist.

WHAT MAKES SOME PEOPLE SECURE IN THEIR CLOSE RELATIONSHIPS? EARLY EXPERIENCE, STABILITY, AND CHANGE

The majority of research on adult attachment has focused on individual differences in what social and personality psychologists refer to as attachment styles, attachment orientations, or attachment patterns: the extent to which people are secure or insecure in their close relationships. Researchers have found, for example, that those who are secure are more likely than those who are insecure to (a) communicate effectively in their relationships, (b) resolve interpersonal conflict appropriately, (c) recall and discuss painful experiences in a competent manner, (d) feel satisfied and committed in their relationships, (e) regulate their emotions effectively, and (f) report low susceptibility to symptoms of psychopathology and poor physical health (for reviews, see Gillath et al. 2016, Mikulincer & Shaver 2016).

Why are some adults more secure than others in the way they experience their attachment relationships? One of the themes of attachment theory is that adult attachment patterns have their origins in caregiving experiences. That is, one reason that some people may be relatively secure in adulthood compared to others is that they have experienced a history of supportive, responsive relationships. Until recently, these assumptions had been evaluated exclusively through retrospective methods. Those studies demonstrated that secure adults are more likely than insecure adults to report having had warm and supportive parents (Hazan & Shaver 1987) and to come from more stable family environments (Mickelson et al. 1997).

In recent years, however, a number of longitudinal studies have been published that examined the association between early caregiving experiences and attachment prospectively. For example, Fraley and his colleagues (2013) examined data from participants in the National Institute of Child Health and Human Development Study of Early Child Care and Youth Development—a large sample of parents and their children who have been studied over time, beginning when the children were 1 month of age. They found that, at age 18, secure participants were more likely than insecure participants to have had more supportive parenting over time, to have come from families characterized by stability (e.g., low levels of parental depression, fathers living in the household), and to have had higher-quality friendships in adolescence.

Although a growing number of longitudinal studies have reported associations between early caregiving experiences and adult attachment styles (e.g., Chopik et al. 2014, Salo et al. 2011, Zayas et al. 2011), these associations are not strong, and they are not necessarily consistent across various ways of measuring attachment or operationalizing early experiences. For example, in the Fraley et al. (2013) study, changes in caregiving environments over time better predicted avoidant attachment at age 18 than did the quality of early experiences per se. Moreover, in the Chopik et al. (2014) study, there was not a significant association between early maternal nurturance and adult attachment per se; instead, the significant associations were between maternal nurturance and changes in avoidant attachment from age 14 to age 23.

WHY ARE THESE ASSOCIATIONS NOT STRONG? EMERGING IDEAS ON THE DEVELOPMENT AND MAINTENANCE OF ADULT ATTACHMENT STYLES

One of the implications of these longitudinal findings is that, although adult attachment styles may have their origins, in part, in early experiences, those early experiences do not completely determine whether people become secure or insecure as adults (see Fraley & Roisman 2018). Many people, despite having supportive caregiving experiences, are insecure in their adult relationships. Similarly, many other people, despite having less-than-ideal caregiving experiences, are relatively secure as adults. Thus, one of the ongoing priorities in the adult attachment research is to understand how and when attachment changes and the processes that govern continuity and change. In the sections below, I summarize some of the ideas that have emerged from recent discussions of these issues.

The Organizational Perspective

According to the organizational perspective, early experiences should be construed not as determinants of development, but rather as setting the stage for optimal psychological functioning (Sroufe et al. 2005). This view has been a mainstay of developmental research on attachment but has only recently begun to influence the way scholars in social and personality psychology think about the antecedents of adult attachment (e.g., Simpson et al. 2011). Supportive caregiving

Working model:

mental representation that a person constructs concerning their self-worth and the availability, responsiveness, and trustworthiness of close others experiences with parents, for example, may help the child build the kind of competence needed to be successful in other social relationships. These interpersonal experiences, in turn, may help the child navigate the transition to adulthood (e.g., Simpson et al. 2007). However, importantly, each of these junctures presents an opportunity for attachment styles to change. Despite supportive parental relationships, for example, a child may end up in a peer group in which they do not feel fully included, and this experience may erode their sense of security.

The organizational perspective encourages researchers to focus on both the contexts that allow people to maintain their attachment patterns and the contexts that might lead to change. This is a major departure from the stereotypical portrayal of attachment research, which holds that early experiences fully determine adult interpersonal functioning (e.g., Duck 1994). Simpson and his colleagues have epitomized the organizational approach in social-psychological research. They have examined, for example, the ways in which social competence in adolescence predicts emotional functioning in romantic relationships (Simpson et al. 2007). They have also found that important life transitions, such as the transition to parenthood, serve as contexts that can lead to discontinuities in attachment. For example, Simpson et al. (2003) found that recent mothers who were anxiously attached were less likely to perceive their husbands as supportive and were more susceptible to postnatal depression.

The Differentiation of Attachment Representations

A second idea emerging from this literature is that attachment styles are not singular; they are differentiated and hierarchical. When faced with experiences that diverge from their expectations, people do not necessarily revise or update their mental representations of themselves and close others (i.e., their working models): They may create new representations to accommodate those distinctive experiences. As a consequence, some adults concurrently hold insecure working models concerning their parental relationships and secure working models concerning their romantic partners.

Although this approach has not been widely incorporated into modern research, Collins & Read (1994) anticipated the value of this distinction in their discussion of the hierarchical nature of attachment. They argued that, in addition to global representations of attachment, people also develop representations that are specific to certain relational categories (e.g., parental relationships, peer relationships) and, within that category, even more specific relationships (e.g., those pertaining to a specific individual). Given the hierarchical organization of these representations, there should be some degree of coherence among them. In fact, people who are insecure in general are more likely than those who are secure in general to be insecure in specific relational contexts (Overall et al. 2003). However, the model allows for exceptions to exist. For example, an adult can have an insecure relationship with their mother but nonetheless be relatively secure in their marriage (e.g., Baldwin et al. 1996). Within the hierarchical framework, these discrepancies are expected consequences of diverging interpersonal experiences.

The hierarchical model has the potential to motivate investigation of several interesting research questions at the interface of development, stability, and change. For example, we do not know whether diverging interpersonal experiences in one domain selectively impact attachment representations in that relational domain. Relatedly, it is not known whether changes across different representations are coordinated. It could be the case that, when one's attachment to a romantic partner becomes more secure, one's attachment to other people (e.g., parents) also becomes more secure. However, these changes could also take place independently or directionally (i.e., changes in one kind of relationship predict changes in others, but not the other way around). Different attachment representations could also differentially contribute to

relationship functioning. For example, Klohnen and her colleagues (2005) found that general, romantic partner, and maternal attachment all made unique contributions to various measures of well-being. However, romantic relationship outcomes were only correlated with relationship-specific representations (see also Cozzarelli et al. 2000). In short, there is a lot to be learned by examining the ways in which attachment representations in different relationships are related to important relational and psychological outcomes.

Socialization-Selection Asymmetries

A third idea is that there are asymmetries in plasticity over time. Research demonstrates (a) that attachment styles tend to be more stable in adult samples than in adolescent samples (Jones et al. 2018) and (b) that attachment styles are more stable in established relationships (e.g., the relationships people have with their parents) than in less established relationships (e.g., romantic relationships) (Fraley et al. 2011). To explain these patterns, Fraley & Roisman (2018) proposed that socialization processes may be more dominant early in the life span—or early in the history of a specific relationship. However, as people mature, person-driven processes begin to play a more dominant role in interpersonal interactions, such that people seek out contexts that are congruent with their existing working models. They referred to these trade-offs as socialization—selection asymmetries to capture the idea that socialization processes dominate early, and selection processes dominate later.

There are two implications of this model for understanding development, continuity, and change. First, although attachment styles are open to revision in adulthood, it may, in fact, be relatively challenging to modify them. (Similarly, changing relationship-specific attachment patterns in established relationships may be more challenging than altering them at the start of newer relationships.) Second, attachment patterns may be more susceptible to a variety of influences in childhood than in adulthood. If this is true, it may be difficult to identify strong predictors of adult attachment in early experiences, as discussed above. However, once those influences have consolidated, they may create a relatively enduring pattern that continues to manifest in a variety of adult outcomes (e.g., Raby et al. 2015).

Changing Attachment Styles: The Attachment Security Enhancement Model

A growing body of research suggests that attachment styles change over time. Indeed, multiple factors have been linked to changes in attachment style in adulthood, including the transition to parenthood (Feeney et al. 2003, Simpson et al. 2003), relationship breakups (Kirkpatrick & Hazan 1994, Sbarra & Hazan 2008), the experience of war-related trauma (Mikulincer et al. 2011), relationship conflict and support (Chow et al. 2016, Green et al. 2011, La Guardia et al. 2000), the meaning or construal of life events (Davila & Sargent 2003), stable vulnerability factors (Davila et al. 1997), and therapy (Johnson 2009, Taylor et al. 2015).

Nonetheless, understanding how and why attachment patterns change remains a challenge. One recent and promising solution to this problem is the attachment security enhancement model (ASEM) (Arriaga et al. 2017). One of the valuable contributions of the ASEM is that it differentiates between two situations that can trigger insecurity in the context of close relationships. First, people can experience attachment insecurity when they perceive that their partners are inaccessible, are unresponsive to their needs, or lack commitment to the relationship. Second, insecurity can also be triggered when people perceive threats to their autonomy and independence, as may be the case when someone perceives that their partner is being too controlling or is impinging on their personal space.

Attachment security enhancement model (ASEM): a model of how romantic relationships can promote security in the short and long term

Attachment anxiety: the extent to which a person feels uncertain about the availability and responsiveness of an attachment figure

Importantly, the ASEM not only articulates the distinction between these two kinds of triggering conditions, but also attempts to explain how relationship partners can buffer these forms of insecurity in day-to-day interactions. According to Arriaga and her colleagues (2017), insecurities rooted in attachment anxiety are mitigated in the short term when partners use safe strategies: strategies that convey that a strong and intimate emotional bond exists or those that help deescalate negative emotions (e.g., soothing and calming behavior) when a partner is distressed (e.g., Kim et al. 2018, Overall et al. 2014). In contrast, to mitigate the negative consequences of avoidant defenses, Arriaga and her colleagues propose the use of soft strategies: strategies that respect the person's need for autonomy, make intimacy seem nonthreatening, and communicate clearly why certain requests are normal or reasonable (i.e., minimizing the appearance of being demanding or manipulative; e.g., Overall et al. 2013).

These different strategies are designed to buffer insecurity in day-to-day interpersonal interactions and, as such, can provide the scaffolding for successful relationship development. But, as Arriaga and her colleagues (2017) note, these strategies are unlikely to address deep-seated insecurities. How can deeper insecurities be revised? The ASEM makes a suggestion, although Arriaga and her colleagues admit that it is a tentative one. The suggestion is that fostering a secure model of the self can enhance security among people who are highly anxious with respect to attachment, and that fostering a secure model of others can enhance security among people who are highly avoidant. Situations that foster self-confidence may cause people who are highly anxious to feel greater self-worth and experience benefits of autonomy, which reduces insecure dependence on others. Situations that foster positive associations with dependence—such as having fun during intimacy-inducing interactions or experiencing unanticipated rewards when receiving or giving support—may cause people who are highly avoidant to diminish distrust and the need for distancing.

The crux of the argument is that partners may effectively manage situations that cause momentary insecurities to make them less threatening, but buffering in-the-moment insecurity may not be enough to foster longer-term security. Analyses that compare concurrent associations of insecurity to lagged changes in security support the distinct short-term versus long-term processes predicted by the ASEM (Arriaga et al. 2014).

Age-Related Shifts in Attachment

An emerging theme in recent research is that there may be developmental shifts in attachment styles over the life course. The majority of research on stability and change in attachment has focused on rank-order stability—the extent to which individual differences in attachment patterns are preserved across time (e.g., Fraley et al. 2011). People can maintain stability in their rank order across time even if their levels of security are changing, and vice versa (Caspi & Roberts 2001). Thus, researchers have begun to investigate whether mean levels of attachment anxiety and attachment avoidance change over time.

Research on mean-level changes in attachment to date has largely focused on cross-sectional comparisons. In a sample of over 86,000 people, Chopik and his colleagues (2013) examined how attachment anxiety and attachment avoidance varied for people ranging in age from 18 to 70. Specifically, using a measure that focuses on romantic relationships in general, rather than on specific relationships, they found that attachment anxiety tended to be lower in older adults than in younger adults. Moreover, attachment avoidance tended to be a bit higher in older adults than in younger ones. Assuming that these patterns do not reflect cohort effects (i.e., people born in different time periods differ from others for reasons unrelated to development), they suggest that people tend to become less anxious in attachment as they transition from early adulthood to late adulthood (see also Chopik & Edelstein 2014, Magai 2008).

Hudson et al. (2015) extended these findings by assessing attachment both as a global construct and as a relationship-specific one (i.e., assessing security in the context of specific relationships, such as relationships with parents and partners). Adults tended to become more anxious in their relationships with their parents across time, whereas they became less anxious with their romantic partners across time. Hudson and his colleagues interpreted these diverging patterns across relationship types as reflecting different psychological processes. Namely, adults may begin to feel slightly more uncertain in their relationships with their parents once they leave home, potentially leading to increases in anxiety. These increases might be preserved as parents age and their adult children become concerned for their well-being. In romantic relationships, however, the enduring nature of the relationship is prima facie evidence of the partner's availability and commitment. Thus, as relationships persist, attachment anxiety in the context of those relationships declines.

Although this kind of research is important for mapping the potential age-graded trends in attachment from a life span perspective, there are at least two limitations of this work. Most obviously, the work is cross-sectional and potentially conflates cohort effects with developmental ones. For example, cultural forces specific to certain cohorts may push for certain attachment patterns. Konrath et al. (2014) argued, for example, that dismissing—avoidant attachment is more prevalent in cohorts born in recent decades than in cohorts born in prior decades. Research designs that allow for cohort variation and longitudinal variation are crucial for separating cohort and developmental processes. Second, given that many of the explanations offered for these trends are due to age-related differences in social roles and life contexts (e.g., Chopik et al. 2013), an important direction for future research is to explicitly examine whether such factors (e.g., learning that a parent has unanticipated health problems) are related to changes in attachment security.

CONSENSUAL NONMONOGAMY AND ATTACHMENT

A central feature of an attachment is its exclusivity. That is, when one person is attached to another, that person experiences the sense that the attachment figure is irreplaceable. Indeed, the loss of an attachment figure often creates an emotional hole that cannot be easily filled by other people (e.g., Weiss 1975). Thus, when attachment theory is extended to the realm of adult romantic relationships, the implication is that the attachment system facilitates the development of monogamous relationships—relationships in which one individual is the focus of a person's attachment behavior. Indeed, ethological research often defines attachment with respect to monogamous pair bonding (see Fraley et al. 2005).

The exclusivity implied by applications of attachment theory to romantic relationships stands in contrast to one of the emerging research areas in the study of close relationships: consensual nonmonogamy (CNM). CNM is defined as a relationship arrangement in which all partners involved agree to have more than one romantic or sexual relationship at the same time (Conley et al. 2017). CNM relationships can assume many forms, including polyamory (i.e., relationships in which the focus tends to be on romantic and sexual involvement with more than one partner), open relationships (i.e., relationships in which the focus tends to be on having more than one sexual partner), and swinging (i.e., relationships in which the focus tends to be on sexual relations engaged in as a couple rather than individually) (for more detail, see Moors et al. 2017). Engagement in CNM relationships appears to be common: Approximately one in five US individuals have engaged in a CNM relationship at some point during their lifetime (Haupert et al. 2017). Moreover, according to Conley et al. (2013), up to 5% of people in relationships report current involvement in one or more of these CNM relationships.

As several scholars have observed, the phenomenon of CNM relationships poses problems for relationship theories, such as attachment theory, that rely on the assumption that people

Consensual nonmonogamy (CNM): a relationship arrangement in which all partners agree to have more than one concurrent romantic or sexual relationship

are designed to seek exclusive relationships with others (Conley et al. 2017). Not only does the phenomenon of CNM violate the assumptions of such theories, but the theoretical orientation on exclusivity itself also has the potential to stigmatize those involved in CNM relationships and research on CNM relationships.

Researchers have begun to investigate CNM relationships from an attachment perspective. For example, Moors et al. (2015) examined the association between attachment styles and attitudes toward CNM relationships in a sample of 1,281 adults who had not previously participated in CNM relationships. They found that people who were more avoidant with respect to attachment were more likely to hold favorable attitudes toward CNM relationships. At first glance, these findings would seem to suggest that CNM relationships may be more common among those who are relatively insecure. However, in a second study that compared individuals who were involved in CNM relationships with those who were not, Moors and her colleagues (2015) found that those in CNM relationships were less avoidant than those who were in monogamous relationships.

These findings present a paradox. Why is it that those who are not in CNM relationships, but who have favorable attitudes toward them, are relatively avoidant, whereas those who are in CNM relationships are relatively secure?

There are several potential resolutions to this puzzle. One possibility is that the relative rates of security among those in CNM relationships reflects a sampling bias: Those who are sought out to participate in research from online CNM communities, such as those targeted in study 2 of Moors et al. (2015), might be those who have found such arrangements especially rewarding. The fact that those in CNM relationships were more secure than (rather than just as secure as) those in monogamous relationships suggests that this could be the case. Future research using nonselective sampling methods should be able to resolve this issue.

Another potential resolution to this paradox, perhaps surprisingly, may come from attachment theory itself. Given the stigma against CNM arrangements, those who are relatively secure may be most comfortable going against the prevailing social norms. As discussed below, a key theme in attachment theory is that having a secure base instills in people the confidence that is needed to take on new challenges, explore new identities, and actualize the self. Thus, people who are securely attached to their parents or to their partners may be more secure in exploring other relationships as well, and in embracing those ties when they are rewarding and severing them when they are not.

One of the challenges in understanding these issues is that there are likely to be sizable individual differences in the motives that people have for entering into CNM arrangements. Moreover, different CNM arrangements may themselves reflect distinct motivations. For example, some people may enter into nonmonogamous arrangements because they are relatively avoidant: They do not want to depend on others or to get too close to them. By having multiple relationship partners with few strings attached, it may be possible for them to have sexual or relational needs met without having to invest too much in a specific person. Some CNM arrangements, in other words, may be reflections of short-term mating strategies, and research on young adults suggests that highly avoidant people are more likely to endorse low-commitment sexual liaisons (Gillath & Schachner 2006, Schmitt 2005).

However, other people may enter into CNM arrangements not because they fear intimacy and commitment, but rather because they wish to explore or embrace the emotional and physical connections that they have with others (see Moors et al. 2017). Adults who engage in polyamorous arrangements, for example, may do so because they truly love more than one person (Jenkins 2017). Being able to recognize this and pursue it, despite current social norms, may require having a strong sense of security. Thus, one valuable direction for future research is to learn more about how people's motivations potentially mediate the association between attachment patterns and

engagement in CNM or monogamous relationships. There is a growing body of research on attachment and motivations for sex (e.g., Birnbaum & Reis 2018, Gillath et al. 2008a); integrating this work with research on CNM could be promising.

WHAT IS THE EVOLUTIONARY FUNCTION OF INSECURE ATTACHMENT?

When Bowlby (1982) was writing about the evolutionary function of attachment in infancy, he proposed that attachment behaviors, such as calling out to and searching for a missing attachment figure, were adaptive. Specifically, he argued that such behaviors facilitated proximity between an infant and their attachment figure, thereby decreasing the chances that the child will be preyed upon, abused, or left behind. This classic approach to understanding the evolution of attachment behavior is premised on the assumption that a secure attachment pattern (i.e., being distressed by separation and threat and using the attachment figures as a source of support and safety during such circumstances) is evolutionarily adaptive.

However, what about insecure attachment? Is it the case that avoidant attachment, for example, is a maladaptive strategy—a pattern that has been selected against over the course of evolutionary history? If so, then why, to use Ein-Dor et al.'s (2010) phrasing, are so many of us insecure?

Main & Weston (1982) were some of the first scholars to tackle this question in the context of infant attachment. They argued that avoidant strategies can be adaptive if, for example, a child is consistently rebuffed for "childish" forms of emotional expression. In such cases, the child may learn that a more effective strategy for maintaining proximity to the caregiver is to deactivate prototypical attachment responses, rather than express them. Main & Weston (1982) referred to attachment avoidance as a secondary strategy to emphasize the notion that this pattern emerges as a response to specific environmental contingencies and overrides the initial or primary impulse to seek contact with and protection from attachment figures.

In the years since this proposal, a number of scholars have begun to consider the adaptive functions of insecure attachment patterns in adulthood. Belsky and his colleagues (1991; Simpson & Belsky 2008), for example, have drawn on evolutionary perspectives, such as life history theory, to argue that attachment patterns are part of a broader biosocial developmental pattern. Survival and reproduction in ecological conditions characterized by unpredictability and the lack of resources favor organisms that invest early in reproduction. According to life history perspectives, development requires a trade-off between investing in growth and investing in maturation. When resources are sparse, and rearing conditions are harsh, selection favors organisms that mature early and reproduce rapidly. When resources are more plentiful, and environmental threats are few, selection favors organisms that mature later and invest more heavily in offspring. Scholars who have applied this framework to attachment have suggested not only that unresponsive caregiving environments facilitate avoidant attachment patterns, but also that this consequence is part of a broader suite of effects that involve early sexual maturation and, ultimately, the adoption of reproductive strategies that prioritize quantity over quality (see also Chisholm et al. 2005, Del Giudice 2009, Simpson et al. 2012).

In fact, an extensive body of research shows that adults with avoidant attachment styles are more likely than those with secure attachment styles to favor short-term mating strategies (e.g., Brennan & Shaver 1995, Cooper et al. 1998, Gillath & Schachner 2006, Schmitt 2005). Although early scholars interpreted this evidence as suggesting that attachment styles are nothing more than mating strategies (Kirkpatrick 1998), subsequent scholars have recognized that attachment strategies and mating strategies are likely developed through common processes (Del Giudice 2009).

The most recent rendition of evolutionary approaches to understanding the function of insecure attachment has been advanced by Ein-Dor and his colleagues (e.g., Ein-Dor & Hirschberger 2016, Ein-Dor et al. 2010). His approach, labeled social defense theory (SDT), begins with two assumptions. The first is that humans, unlike other mammals, are not well equipped to deal with certain threats, such as being assaulted by an organized group from another tribe. As such, part of what has made humans successful in the recent evolutionary landscape is that they are highly intelligent and function well in social groups. Second, to understand why insecure attachment strategies can be adaptive, it is necessary to think about group-level processes rather than individual-level processes alone. SDT, in other words, is a modern version of a group-level selection theory (Wilson 2010).

The logic of SDT is best illustrated by considering anxious attachment. The thrust of SDT is that the potential costs of anxious attachment at the level of the individual can be beneficial to groups that consist of anxious people. Highly anxious people, for example, tend to be vigilant to threats, allowing them to more quickly detect environmental signs of danger. Although this comes with a potential psychological cost (e.g., greater anxiety and depression), when these threats are accurately detected and communicated to the group, they can facilitate group survival. Ein-Dor refers to this as a sentinel strategy, and it has the potential to benefit the individual directly (noticing valid threats) and indirectly (allowing the group to react to the threat appropriately).

Highly avoidant people, in contrast, tend to be more self-reliant. Thus, when faced with an environmental danger, they will likely focus on self-protection. In some cases, this may involve eliminating the threat (e.g., putting out a fire), and in others, it may involve identifying an appropriate escape route that others can then also use. Ein-Dor & Hirschberger (2016) refer to this as a rapid fight-or-flight response, and it has the potential to benefit not only the self, but also others.

Although each of these strategies has potential costs and benefits both to psychological well-being and to survival and reproduction, a core part of Ein-Dor & Hirschberger's (2016) argument is that, in heterogeneous groups, those costs average out, allowing each strategy to benefit the group as a whole. Thus, according to SDT, groups that are more diverse with respect to the attachment patterns of the individuals of which they are composed are more likely to be resilient to environmental threats than those that are more homogenous with respect to attachment.

Empirical support for SDT comes from a number of creative studies. For example, Ein-Dor and his colleagues (2011) examined the behavior of groups of adults who were working in a room that was progressively filled with nontoxic smoke from a malfunctioning computer. Groups that tended to be higher in attachment anxiety were faster to notice the smoke than other groups; groups higher in attachment avoidance were faster to escape the danger. Ein-Dor & Tal (2012) created a situation in which participants were led to believe that they had accidentally installed a malicious virus on a computer and were asked to notify the department technicians. Anxious individuals were able to do so faster than less anxious people, despite having to overcome some obstacles along the way.

Much of this research is relatively new, and the key findings have yet to be replicated across labs. However, if they are replicated, SDT could become a promising way to understand some of the evolutionary functions of insecure attachment in adulthood.

THRIVING THROUGH RELATIONSHIPS

Because attachment theorists have traditionally focused on insecurity, relatively little attention has been given to the positive consequences of attachment relationships and secure attachment patterns. There has recently been a movement to counter this trend. For example, Mikulincer & Shaver (2007) adopted the broaden-and-build framework (see Fredrickson 2001) to suggest that the process of appraising attachment figures as available and responsive initiates a cascade of

beneficial processes that can facilitate emotional stability, personal growth, and satisfying close relationships. More recently, Feeney & Collins (2015) have proposed a promising model to explain thriving in close relationships (i.e., thriving through relationships). The model draws upon attachment theory but integrates some of the key themes in attachment with research on social support processes.

Feeney & Collins (2015) define thriving in a multifaceted way, involving hedonic well-being (e.g., happiness), eudaimonic well-being (e.g., having purpose in life), social well-being (e.g., having deep and meaningful social connections), psychological well-being, and physical well-being. According to the model, thriving can take place in at least two contexts. First, thriving can take place in the face of adversity. Specifically, when people experience adversity, they have the potential not only to overcome it, but also to emerge stronger as a result. They may, for example, develop a better-defined sense of purpose or a stronger sense of confidence. Second, thriving can take place as a result of setting goals; working toward those goals; and, more generally, taking advantage of challenges and opportunities for growth.

An important feature of Feeney & Collins's (2015) model is its assumption that relationships provide a key resource for thriving in both of these contexts. Drawing upon attachment theory, Feeney & Collins argue that the traditional way in which researchers approach social support is by studying it in the context of adversity. Attachment theorists emphasize that, when people feel stressed, scared, or uncertain, they turn to their attachment figures for safe haven functions: support, comfort, and assistance. Feeney & Collins extend this theme by arguing that relationships serve to support thriving in the face of adversity not only by buffering people from the negative effects of stress, but also by helping people to emerge stronger from the process. They refer to this dynamic as source of strength (SOS) support.

The SOS role expands the traditional way in which researchers think of social support, which has focused more on stress buffering in times of adversity rather than on thriving or growth through adversity: When distressed, people turn to support figures for strength, comfort, and assistance. To the extent to which the support figure is capable of providing these resources, the support seeker is likely to cope successfully with adversity and may thrive through the adversity. An especially innovative feature of the Feeney & Collins (2015) model is the recognition that attachment figures can facilitate thriving in times of nonadversity, as well. Specifically, support figures can encourage a person to embrace life opportunities, pursue self-defined goals, provide instrumental assistance and encouragement to approach positive challenges, and affirm a partner's desires to grow in specific ways. Feeney & Collins refer to this as relational catalyst (RC) support for thriving. The concept of partners serving as catalysts also meshes well with attachment theory. According to Bowlby (1982), an attachment figure serves as a secure base: a point from which children (or adults) can explore the world. Bowlby's insight was that people can more confidently explore the world (even in risky ways) when they know that someone is encouraging them and advocating for them. RC support can promote thriving through this pathway. A supportive partner, for example, may help their partner grow by expressing enthusiasm for their goals, validating the engagement of those goals, and providing instrumental support along the way.

The thriving through relationships model is relatively new, so there is not yet an extensive empirical literature that evaluates its core ideas. Nonetheless, the model nicely accounts for some of the findings that have been reported in the literature. For example, Collins & Feeney (2000) have found that people who received responsive support during a stressful lab task were more likely than those who did not to show gains in positive mood. Such findings help illustrate the ways in which relationship partners can support thriving during stressful circumstances (e.g., Gillath et al. 2005). Other research has shown that a partner's affirmation of one's ideal self can assist in moving people closer to their ideal self across time (Rusbult et al. 2009) and that a partner's RC support

Thriving through relationships:

a model of how partners can facilitate thriving in response to adversity and through opportunities for growth provision can lead people to accept challenges that have positive downstream consequences for their well-being (Feeney et al. 2017). Such findings are consistent with the RC function of close relationships.

One potential challenge for the model is its assumption that support through adversity may have beneficial consequences for thriving above and beyond a mere buffering role. A wealth of data suggests that people who experience adversity are worse off for it. For example, couples who struggle to make financial ends meet tend to report lower relationship functioning and well-being than those who struggle less (e.g., Conger et al. 2010, Falconier & Epstein 2011). Thus, for the SOS component of the model to be correct, whatever buffering effect partners provide must not only attenuate the potential negative impact of adversity (an idea consistent with most buffering models), but also make the person better off for having experienced it. In short, a strong interpretation of the model is the prediction that adversity combined with SOS support leads to better outcomes than support in the absence of adversity.

Having said that, a compelling case can be made for the notion that adversity does not have uniformly negative effects on people; some people really do seem capable of transforming adversity into something positive, as has been commonly documented in the literature on post-traumatic growth (e.g., Tedeschi & Calhoun 2004). The challenge for the thriving through relationships theory—and for work on overcoming adversity more generally—is showing that the gains are (a) due to adversity per se and not part of the person's overall trajectory of growth and (b) in the case of the Feeney & Collins (2015) model in particular, that the change is due to relational support rather than other mechanisms.

Despite these challenges, it should be clear that the model contains much promise in virtue of the way it brings together the safe haven and secure base components of attachment theory and expands traditional approaches on social support. The role of attachment figures in personal development has been relatively understudied and has not been well integrated into the broader literature on attachment. The Feeney & Collins (2015) model provides the necessary bridge between personal development and attachment and opens some new doors on ways to study thriving in close relationships.

CONCLUSION

Many of the most intense emotions arise during the formation, the maintenance, the disruption, and the renewal of attachment relationships. The formation of a bond is described as falling in love, maintaining a bond as loving someone, and losing a partner as grieving over someone. Similarly, threat of loss arouses anxiety, and actual loss gives rise to sorrow; while each of these situations is likely to arouse anger. The unchallenged maintenance of a bond is experienced as a source of security, and the renewal of a bond as a source of joy.

—Bowlby 1980, p. 40

This passage, from Bowlby's seminal volume on attachment and loss, succinctly distills many of the core themes of attachment theory. Namely, the most emotionally powerful experiences that people have in their lives derive from the development, maintenance, and disruption of attachment relationships. Thus, understanding the ways in which those attachments form, how they function, and how they break down are among the key objectives of psychological science. The purpose of this review is to provide a brief overview of what is currently known about attachment in adulthood and to highlight some of the open questions, emerging themes, and debates in the field. By doing so, it is my hope that this review will be helpful as research continues to progress toward a more complete and nuanced understanding of attachment in adulthood.

SUMMARY POINTS

- Although attachment theory was originally created to understand the intense emotional bond that children develop with their parents, it has been expanded into the realm of adult relationships by social and personality psychologists. It is currently a widely used framework for understanding emotion, close relationships, vulnerability and resilience, and personality development.
- 2. Adults are more likely to rely on romantic partners than on parents for attachment-related functions. Nonetheless, there are many outstanding questions about how attachments develop in adulthood, and whether the development of new attachments happens at the expense of existing ones.
- 3. There are debates about the extent to which attachment experiences in the family of origin predict attachment-related functioning in adulthood. Moreover, although it is now clear that attachment styles can change over time, understanding how they change is an important area of research.
- 4. Emerging research on CNM raises questions about attachment theory's assumption that people have evolved to form exclusive attachments with romantic partners in adulthood.
- 5. The evolutionary function of insecure attachment is not fully understood. Recent perspectives, such as SDT, suggest that insecurity may be beneficial under some conditions.
- Although attachment researchers often focus on insecurity, recent research is emphasizing the ways in which secure attachment dynamics can allow people to thrive through their relationships.

FUTURE ISSUES

- 1. How do the various ways of assessing the extent to which a person is used as an attachment figure converge? What is the ideal way of assessing attachment functions?
- 2. What are the implications of developing a new attachment relationship for the ways in which other attachment relationships function (both how they work and how they are mentally represented)?
- 3. How can we reconcile the notion that attachment theory is a developmental framework with the observation that the associations between early attachment experiences and later ones are relatively weak? What is the relative contribution of early, later, and ongoing interpersonal experiences in shaping who becomes secure and who becomes insecure in their adult relationships?
- 4. If people can hold multiple attachment representations for important people in their lives, then how do these various representations combine to guide psychological functioning? Are some more important than others? Do some cancel others out? Does the priority of different representations vary over the life course?
- 5. What causes attachment styles to change? When changes are observed, are those changes sustained or transient? Are there practical interventions that can be used to facilitate enduring change?

- 6. Does secure attachment facilitate participation in CNM relationships? Can attachment be used to better understand who finds such relationships rewarding?
- 7. Is it possible that people can grow after experiencing adversity, as posited by the thriving through relationships model? That is, can people go beyond recovery alone and become better than would be expected on the basis of pre-event trajectories? If so, to what extent do attachment relationships facilitate this process?

DISCLOSURE STATEMENT

The author is not aware of any affiliations, memberships, funding, or financial holdings that might be perceived as affecting the objectivity of this review.

ACKNOWLEDGMENTS

Thank you to Ximena Arriaga, Jia Chong, Tsachi Ein-Dor, Brooke Feeney, Omri Gillath, Ben Hankin, Faaiza Khan, Elizabeth Lozano, Amy Moors, Glenn Roisman, and Caroline Tancredy for reading and helping to improve previous drafts of this review.

LITERATURE CITED

Ainsworth MDS, Blehar M, Waters E, Wall S. 1978. Patterns of Attachment: A Psychological Study of the Strange Situation. Hillsdale, NJ: Erlbaum

Arriaga XB, Kumashiro M, Finkel EJ, VanderDrift LE, Luchies LB. 2014. Filling the void: bolstering attachment security in committed relationships. Soc. Psychol. Personal. Sci. 5:398–405

Arriaga XB, Kumashiro M, Simpson JA, Overall NC. 2017. Revising working models across time: relationship situations that enhance attachment security. *Personal. Soc. Psychol. Rev.* 22:71–96

Baldwin MW, Keelan JPR, Fehr B, Enns V, Koh-Rangarajoo E. 1996. Social cognitive conceptualization of attachment working models: availability and accessibility effects. 7. Personal. Soc. Psychol. 71:94–104

Bartholomew K, Horowitz L. 1991. Attachment styles among young adults: a test of a four category model. 7. Personal. Soc. Psychol. 61:226–44

Belsky J, Steinberg L, Draper P. 1991. Childhood experience, interpersonal development, and reproductive strategy: an evolutionary theory of socialization. *Child Dev.* 62:647–70

Birnbaum GE, Reis HT. 2018. Evolved to be connected: the dynamics of attachment and sex over the course of romantic relationships. *Curr. Opin. Psychol.* 25:11–15

Bowlby J. 1980. Attachment and Loss, Vol. 3: Sadness and Depression. New York: Basic Books

Bowlby J. 1982. Attachment and Loss, Vol. 1: Attachment. New York: Basic Books. 2nd ed.

Brennan KA, Shaver PR. 1995. Dimensions of adult attachment, affect regulation, and romantic relationship functioning. Personal. Soc. Psychol. Bull. 21:267–83

Bretherton I. 1992. The origins of attachment theory: John Bowlby and Mary Ainsworth. Dev. Psychol. 28:759–75

Bretherton I, Munholland KA. 2008. Internal working models in attachment relationships: elaborating a central construct in Attachment Theory. In *Handbook of Attachment: Theory, Research, and Clinical Applications*, ed. J Cassidy, PR Shaver, pp. 102–27. New York: Guilford. 2nd ed.

Caspi A, Roberts BW. 2001. Personality development across the life course: the argument for change and continuity. Psychol. Ing. 12:49–66

Cassidy J. 2016. The nature of the child's ties. In *Handbook of Attachment: Theory, Research, and Clinical Applications*, ed. J Cassidy, PR Shaver, pp. 3–24. New York: Guilford. 3rd ed.

Cassidy J, Shaver PR. 2016. *Handbook of Attachment: Theory, Research, and Clinical Applications*. New York: Guilford. 3rd ed.

- Chisholm JS, Quinlivan JA, Petersen RW, Coall DA. 2005. Early stress predicts age at menarche and first birth, adult attachment, and expected lifespan. *Hum. Nat.* 16:233–65
- Chopik WJ, Edelstein RS. 2014. Age differences in romantic attachment around the world. Soc. Psychol. Personal. Sci. 5:892–900
- Chopik WJ, Edelstein RS, Fraley RC. 2013. From the cradle to the grave: age differences in attachment from early adulthood to old age. 7. Personal. 81:171–83
- Chopik WJ, Moors AC, Edelstein RS. 2014. Maternal nurturance predicts decreases in attachment avoidance in emerging adulthood. 7. Res. Personal. 53:47–53
- Chow CM, Ruhl H, Buhrmester D. 2016. Reciprocal associations between friendship attachment and relational experiences in adolescence. *J. Soc. Personal Relatsh.* 33(1):122–46
- Colin VL. 1996. Human Attachment. New York: McGraw Hill
- Collins NL, Feeney BC. 2000. A safe haven: an attachment theory perspective on support-seeking and caregiving in adult romantic relationships. J. Personal. Soc. Psychol. 78:1053–73
- Collins NL, Read SJ. 1994. Cognitive representations of attachment: the structure and function of working models. In Advances in Personal Relationships, Vol. 5: Attachment Processes in Adulthood, ed. K Bartholomew, D Perlman, pp. 53–92. Cambridge, UK: Cambridge Univ. Press
- Conger R, Conger K, Martin M. 2010. Socioeconomic status, family processes, and individual development. 7. Marriage Fam. 72:685–704
- Conley TD, Matsick JL, Moors AC, Ziegler A. 2017. Investigation of consensually nonmonogamous relationships: theories, methods, and new directions. Perspect. Psychol. Sci. 12:205–32
- Conley TD, Ziegler A, Moors AC, Matsick JL, Valentine B. 2013. A critical examination of popular assumptions about the benefits and outcomes of monogamous relationships. *Personal. Soc. Psychol. Rev.* 17(2):124–41
- Cooper ML, Shaver PR, Collins NL. 1998. Attachment styles, emotion regulation, and adjustment in adolescence. 7. Personal. Soc. Psychol. 74(5):1380–97
- Cozzarelli C, Hoekstra SJ, Bylsma WH. 2000. General versus specific mental models of attachment: Are they associated with different outcomes? Personal. Soc. Psychol. Bull. 26(5):605–18
- Davila J, Burge D, Hammen C. 1997. Why does attachment style change? J. Personal. Soc. Psychol. 73:826-38
- Davila J, Sargent E. 2003. The meaning of life (events) predicts changes in attachment security. Personal. Soc. Psychol. Bull. 29:1383–95
- De Wolff MS, van IJzendoorn MH. 1997. Sensitivity and attachment: a meta-analysis on parental antecedents of infant attachment. *Child Dev.* 68:571–91
- Del Giudice M. 2009. Sex, attachment, and the development of reproductive strategies. *Behav. Brain Sci.* 32:1–21
- Doherty NA, Feeney JA. 2004. The composition of attachment networks throughout the adult years. *Personal Relatsh*. 11:469–88
- Duck S. 1994. Attaching meaning to attachment. Psychol. Ing. 5:34-38
- Ein-Dor T, Hirschberger G. 2016. Rethinking attachment theory: from a theory of relationships to a theory of individual and group survival. Curr. Dir. Psychol. Sci. 25(4):223–27
- Ein-Dor T, Mikulincer M, Doron G, Shaver PR. 2010. The attachment paradox: How can so many of us (the insecure ones) have no adaptive advantages? *Perspect. Psychol. Sci.* 5(2):123–41
- Ein-Dor T, Mikulincer M, Shaver PR. 2011. Attachment insecurities and the processing of threat-related information: studying the schemas involved in insecure people's coping strategies. J. Personal. Soc. Psychol. 101:78–93
- Ein-Dor T, Tal O. 2012. Scared saviors: evidence that people high in attachment anxiety are more effective in alerting others to threat. Eur. J. Soc. Psychol. 42(6):667–71
- Fagundes CP, Schindler I. 2012. Making of romantic attachment bonds: longitudinal trajectories and implications for relationship stability. *Personal Relatsh.* 19:723–42
- Falconier MK, Epstein NB. 2011. Couples experiencing financial strain: what we know and what we can do. Fam. Relat. 60(3):303–17
- Feeney BC, Collins NL. 2015. A new look at social support: a theoretical perspective on thriving through relationships. Personal. Soc. Psychol. Rev. 19(2):113–47

- Feeney BC, Van Vleet M, Jakubiak BK, Tomlinson JM. 2017. Predicting the pursuit and support of challenging life opportunities. *Personal. Soc. Psychol. Bull.* 43(8):1171–87
- Feeney J, Alexander R, Noller P, Hohaus L. 2003. Attachment insecurity, depression, and the transition to parenthood. *Personal Relatsh.* 10(4):475–93
- Feeney JA. 2004. Transfer of attachment from parents to romantic partners: effects of individual and relationship variables. *J. Fam. Stud.* 10:220–38
- Fraley RC, Brumbaugh CC, Marks MJ. 2005. The evolution and function of adult attachment: a comparative and phylogenetic analysis. *J. Personal. Soc. Psychol.* 89:731–46
- Fraley RC, Davis KE. 1997. Attachment formation and transfer in young adults' close friendships and romantic relationships. *Personal Relatsh.* 4:131–44
- Fraley RC, Roisman GI. 2018. The development of adult attachment styles: four lessons. *Curr. Opin. Psychol.* 25:26–30
- Fraley RC, Roisman GI, Booth-LaForce C, Owen MT, Holland AS. 2013. Interpersonal and genetic origins of adult attachment styles: a longitudinal study from infancy to early adulthood. *J. Personal. Soc. Psychol.* 104:817–38
- Fraley RC, Shaver PR. 2018. Attachment theory and its place in contemporary personality theory and research. In *Handbook of Personality: Theory and Research*, ed. RW Robins, O John. New York: Guilford. 4th ed. In press
- Fraley RC, Vicary AM, Brumbaugh CC, Roisman GI. 2011. Patterns of stability in adult attachment: an empirical test of two models of continuity and change. *7. Personal. Soc. Psychol.* 101:974–92
- Fredrickson BL. 2001. The role of positive emotions in positive psychology: the broaden-and-build theory of positive emotions. *Am. Psychol.* 56:218–26
- Gillath O. 2015. The neuroscience of attachment: using new methods to answer old (and new) questions. In Attachment Theory and Research: New Directions and Emerging Themes, ed. JA Simpson, WS Rholes, pp. 39–67. New York: Guilford
- Gillath O, Karantzas G, Fraley RC. 2016. Adult Attachment: A Concise Guide to Theory and Research. New York: Academic
- Gillath O, Karantzas GC, Selcuk E. 2017. A net of friends: investigating friendship by integrating attachment theory and social network analysis. *Personal. Soc. Psychol. Bull.* 43:1546–65
- Gillath O, Mikulincer M, Birnbaum GE, Shaver PR. 2008a. When sex primes love: subliminal sexual priming motivates relationship goal pursuit. Personal. Soc. Psychol. Bull. 34:1057–69
- Gillath O, Schachner DA. 2006. Sex and love: goals, motives, and strategies—how do sexuality and attachment interact? In *Dynamics of Romantic Love: Attachment, Caregiving, and Sex*, ed. M Mikulincer, GS Goodman, pp. 121–47. New York: Guilford
- Gillath O, Selcuk E, Shaver PR. 2008b. Moving toward a secure attachment style: Can repeated security priming help? Soc. Personal. Psychol. Compass 2:1651-66
- Gillath O, Shaver PR, Mikulincer M, Nitzberg RE, Erez A, IJzendoorn MH. 2005. Attachment, caregiving, and volunteering: placing volunteerism in an attachment-theoretical framework. *Personal Relatsh.* 12:425–46
- Green BL, Furrer CJ, McAllister CL. 2011. Does attachment style influence social support or the other way around? A longitudinal study of Early Head Start mothers. *Attach. Hum. Dev.* 13:27–47
- Harlow HF. 1958. The nature of love. Am. Psychol. 13:673-85
- Haupert ML, Gesselman AN, Moors AC, Fisher HE, Garcia JR. 2017. Prevalence of experiences with consensual nonmonogamous relationships: findings from two national samples of single Americans. J. Sex Marital Ther. 43(5):424–40
- Hazan C, Shaver PR. 1987. Romantic love conceptualized as an attachment process. J. Personal. Soc. Psychol. 52:511-24
- Hazan C, Zeifman D. 1994. Sex and the psychological tether. In Advances in Personal Relationships, Vol. 5: Attachment Processes in Adulthood, ed. K Bartholomew, D Perlman, pp. 151–80. Cambridge: Cambridge Univ. Press
- Heffernan ME, Fraley RC, Vicary AM, Brumbaugh CC. 2012. Attachment features and functions in romantic relationships. 7. Soc. Personal Relatsb. 29:671–93
- Holmes J. 2001. The Search for the Secure Base: Attachment Theory and Psychoanalysis. Abingdon, UK: Routledge

- Hudson NW, Fraley RC, Chopik WJ, Heffernan ME. 2015. Not all attachment relationships develop alike: normative cross-sectional age trajectories in attachment to romantic partners, best friends, and parents. J. Res. Personal. 59:44–55
- Jenkins C. 2017. What Love Is: And What It Could Be. New York: Basic Books
- Johnson SM. 2009. Attachment theory and emotionally focused therapy for individuals and couples. In Attachment Theory and Research in Clinical Work with Adults, ed. J Obegi, E Berant, pp. 410–33. New York: Guilford Press
- Jones JD, Fraley RC, Ehrlich KB, Stern JA, Lejuez CW, et al. 2018. Stability of attachment style in adolescence: an empirical test of alternative developmental processes. Child Dev. 89:871–80
- Kim KJ, Feeney BC, Jakubiak BK. 2018. Touch reduces romantic jealousy in the anxiously attached. *J. Soc. Personal Relatsb.* 35:1019
- Kirkpatrick LA. 1998. Evolution, pair-bonding, and reproductive strategies: a reconceptualization of adult attachment. In Attachment Theory and Close Relationships, ed. JA Simpson, WS Rholes, pp. 353–93. New York: Guilford
- Kirkpatrick LA, Hazan C. 1994. Attachment styles and close relationships: a four-year prospective study. Personal Relatsh. 1:123–42
- Klohnen EC, Weller JA, Luo S, Choe M. 2005. Organization and predictive power of general and relationshipspecific attachment models: one for all, and all for one? *Personal. Soc. Psychol. Bull.* 31(12):1665–82
- Konrath SH, Chopik WJ, Hsing CK, O'Brien E. 2014. Changes in adult attachment styles in American college students over time: a meta-analysis. Personal. Soc. Psychol. Rev. 18(4):326–48
- La Guardia JG, Ryan RM, Couchman CE, Deci EL. 2000. Within-person variation in security of attachment: a self-determination theory perspective on attachment, need fulfillment, and well-being. J. Personal. Soc. Psychol. 79:367–84
- Magai C. 2008. Attachment in middle and later life. In *Handbook of Attachment: Theory, Research, and Clinical Applications*, ed. J Cassidy, PR Shaver, pp. 532–51. New York: Guilford. 2nd ed.
- Main M, Weston D. 1982. Avoidance of the attachment figure in infancy: descriptions and interpretations. In *The Place of Attachment in Human Behavior*, ed. CM Parkes, J Stevenson-Hinde, pp. 31–59. New York: Basic Books
- Mickelson KD, Kessler RC, Shaver PR. 1997. Adult attachment in a nationally representative sample. J. Personal. Soc. Psychol. 73:1092–106
- Mikulincer M, Ein-Dor T, Solomon Z, Shaver PR. 2011. Trajectories of attachment insecurities over a 17-year period: a latent growth curve analysis of the impact of war captivity and posttraumatic stress disorder. J. Soc. Clin. Psychol. 30(9):960–84
- Mikulincer M, Shaver PR. 2007. Attachment in Adulthood: Structure, Dynamics, and Change. New York: Guilford Mikulincer M, Shaver PR. 2016. Attachment in Adulthood: Structure, Dynamics, and Change. New York. NY: Guilford. 2nd ed.
- Moors AC, Conley TD, Edelstein RS, Chopik WJ. 2015. Attached to monogamy? Avoidance predicts will-ingness to engage (but not actual engagement) in consensual non-monogamy. J. Soc. Personal Relatsh. 32(2):222–40
- Moors AC, Matsick J, Schechinger H. 2017. Unique and shared relationship benefits of consensually non-monogamous and monogamous relationships: a review and insights for moving forward. Eur. Psychol. 22(1):55–71
- Nickerson AB, Nagle RJ. 2005. Parent and peer attachment in late childhood and early adolescence. *J. Early Adolesc.* 25:223–49
- Overall NC, Fletcher GJ, Friesen MD. 2003. Mapping the intimate relationship mind: comparisons between three models of attachment representations. *Personal. Soc. Psychol. Bull.* 29(12):1479–93
- Overall NC, Girme YU, Lemay EP Jr., Hammond MT. 2014. Attachment anxiety and reactions to relationship threat: the benefits and costs of inducing guilt in romantic partners. *J. Personal. Soc. Psychol.* 106:235–56
- Overall NC, Simpson JA, Struthers H. 2013. Buffering attachment-related avoidance: softening emotional and behavioral defenses during conflict discussions. *J. Personal. Soc. Psychol.* 104:854–71
- Raby KL, Roisman GI, Fraley RC, Simpson JA. 2015. The predictive significance of early maternal sensitivity in the Minnesota Longitudinal Study of Risk and Adaptation: academic and social competence through age 32 years. Child Dev. 86:695–708

- Rowe AC, Carnelley KB. 2005. Preliminary support for the use of a hierarchical mapping technique to examine attachment networks. *Personal Relatsb.* 12:499–519
- Rusbult CE, Finkel EJ, Kumashiro M. 2009. The Michelangelo phenomenon. Curr. Dir. Psychol. Sci. 18(6):305–9
- Salo J, Jokela M, Lehtimäki T, Keltikangas-Järvinen L. 2011 Serotonin receptor 2A gene moderates the effect of childhood maternal nurturance on adulthood social attachment. Genes Brain Bebav. 10:702–9
- Saltman B. 2016. Can attachment theory explain all of our relationships? *The Cut*, June. https://www.thecut.com/2016/06/attachment-theory-motherhood-c-v-r.html
- Sbarra DA, Hazan C. 2008. Coregulation, dysregulation, self-regulation: an integrative analysis and empirical agenda for understanding adult attachment, separation, loss, and recovery. *Personal. Soc. Psychol. Rev.* 12:141–67
- Schmitt DP. 2005. Is short-term mating the maladaptive result of insecure attachment? A test of competing evolutionary perspectives. *Personal. Soc. Psychol. Bull.* 31(6):747–68
- Simpson JA, Belsky J. 2008. Attachment theory within a modern evolutionary framework. In Handbook of Attachment: Theory, Research, and Clinical Applications, ed. J Cassidy, PR Shaver, pp. 131–57. New York: Guilford. 2nd ed.
- Simpson JA, Collins WA, Salvatore JE. 2011. The impact of early interpersonal experience on adult romantic relationship functioning: recent findings from the Minnesota longitudinal study of risk and adaptation. *Curr. Dir. Psychol. Sci.* 20(6):355–59
- Simpson JA, Collins WA, Tran S, Haydon KC. 2007. Attachment and the experience and expression of emotions in romantic relationships: a developmental perspective. 7. Personal. Soc. Psychol. 92(2):355–67
- Simpson JA, Griskevicius V, Kuo SI, Sung S, Collins WA. 2012. Evolution, stress, and sensitive periods: the influence of unpredictability in early versus late childhood on sex and risky behavior. *Dev. Psychol.* 48(3):674–86
- Simpson JA, Rholes WS, Campbell L, Wilson CL. 2003. Changes in attachment orientations across the transition to parenthood. *J. Exp. Soc. Psychol.* 39:317–31
- Sroufe LA, Egeland B, Carlson EA, Collins WA. 2005. The Development of the Person: The Minnesota Study of Risk and Adaptation from Birth to Adulthood. New York: Guilford
- Tancredy CM, Fraley RC. 2006. The nature of adult twin relationships: an attachment-theoretical perspective. 7. Personal. Soc. Psychol. 90:78–93
- Taylor P, Rietzschel J, Danquah A, Berry K. 2015. Changes in attachment representations during psychological therapy. *Psychother. Res.* 25:222–38
- Tedeschi RG, Calhoun LG. 2004. Posttraumatic growth: conceptual foundations and empirical evidence. Psychol. Inq. 15:1–18
- Trinke SJ, Bartholomew K. 1997. Hierarchies of attachment relationships in young adulthood. J. Soc. Personal Relatsb. 14:603–25
- Umemura T, Lacinová L, Kotrčová K, Fraley RC. 2017. Similarities and differences regarding changes in attachment preferences and attachment styles in relation to romantic relationship length: longitudinal and concurrent analyses. Attach. Hum. Dev. 20:135–59
- Weiss RS. 1975. Marital Separation. New York: Basic Books
- Wilson DS. 2010. Darwin's Cathedral: Evolution, Religion, and the Nature of Society. Chicago: Univ. Chicago Press
- Zayas V, Mischel W, Shoda Y, Aber JL. 2011. Roots of adult attachment: maternal caregiving at 18 months predicts adult attachment to peers and partners. Soc. Psychol. Personal. Sci. 2:289–97