Chapter 4
Attachment and Relationships Across Time: An Organizational-Developmental Perspective

Jeffry A. Simpson, W. Andrew Collins, Allison K. Farrell and K. Lee Raby

Two of the basic questions underlying attachment theory are how attachment bonds change across time and how relationship partners regulate (or fail to regulate) one another's emotional, cognitive, and behavioral responses in stressful situations. These questions are among the fundamental ones that inspired the current volume. They are central to Bowlby's fountainhead theory of attachment between infants and their parents or other caregivers, and they have helped to inspire other efforts to examine the normative development of relationships with partners other than parents across the life course (e.g., Ainsworth 1989; Mikulincer and Shaver 2007; Thompson 2008; Waters and Cummings 2000). Research findings from studies of infants and young children provide a case in point. These studies have revealed a reliable sequence in the development of attachments between infants and caregivers in early life (Schaffer 2002). Attachment behaviors are initially indiscriminant, as young infants are willing to receive care from nearly any capable adult. Gradually, infants' attachment behaviors become more specifically directed to the caregivers that infants most frequently encounter. It is with these partners that attachments are eventually formed.

Though not claiming that specific, functional connections with caregivers are identical with the elements of close relationships in adulthood, writers such as Ainsworth (1989), and Waters and Cummings (2000) have proposed that attachment-related events and experiences with parents and other caregivers early in social development influence how attachment-based relationships are formed, developed, and maintained in different relationships later in life. More specifically, romantic relationship partners are thought to serve as the primary attachment figure in adulthood (Hazan and Zeifman 1994). The normative sequence of attachment development between infants and caregivers may, therefore, also apply to attachments between romantic partners during adulthood.

However, several unique features of romantic partnerships complicate the extension of Bowlby's ideas to relationships between adults. For example, romantic

J. A. Simpson (✉) · W. A. Collins · A. K. Farrell · K. L. Raby
University of Minnesota, Minneapolis, USA
e-mail: simps108@umn.edu

relationships are voluntary, in contrast to parent-child relationships. One implication of voluntariness is that most romantic relationships are more easily terminated than parent–child relationships. In addition, although all relationships are bidirectional to some degree, parent–child relationships carry a stronger expectation of inequality between partners than romantic relationships do. As a result, comparing and contrasting early close relationships to later ones often confounds structural attributes with emotional and interpersonal ones. Despite these challenges, lessons and findings from studies of early attachment relationships provide useful guidance for how one might answer some of the provocative questions posed in the chapters of this volume.

For the past several years, our research group has been examining data collected as part of the Minnesota Longitudinal Study of Risk and Adaptation (MLSRA), a 35-year longitudinal study of individual development across the life-course. Our findings are yielding some provisional answers to several basic questions about the formation, maintenance, and dissolution of attachment relationships between young adults, potentially informing both our understanding of normative development in these relationships and the individual differences that are so pervasive in research on adult romantic attachment.

In this chapter, we first present the normative organizational-developmental perspective that has guided our thinking and research on how and why certain types of interpersonal experiences encountered earlier in life should be systematically related to individual-level and couple-level functioning in later relationships. We then overview the MLSRA project along with some of the core measures that have been collected on this novel longitudinal sample since our target participants were born in the mid-1970s. Next, we discuss the findings of several recently published studies examining how romantic relationships are maintained and sometimes dissolve during early adulthood (age 20–23) along with the ways in which these relationship processes are shaped by the quality of targets' early caregiving experiences. Following this, we describe how an organizational-developmental perspective can elucidate the normative processes through which adult romantic relationships develop, as well as the early interpersonal origins of adult romantic relationships. We conclude the chapter by pointing to some promising directions for future research.

An Organizational Perspective on Social Development

For many years, it was assumed that early interpersonal experiences can influence the developmental trajectory of individuals, including how they typically think, feel, and behave in their closest relationships across the entire life-course. This assumption is a cornerstone of several major theories, including those proposed by Freud (1940), Erikson (1963), and Bowlby (1969, 1973). Our research, which tests some of these cornerstone ideas, is grounded in an organizational perspective on normative social development. According to this framework, new relationships

can be affected by prior experiences in earlier relationships. This organizational-developmental perspective contains four basic principles (see Salvatore et al. 2012; Sroufe et al. 2005), all of which provide insights into normative processes of relationship development and connections with earlier relationship experiences, both within and outside of the network of family members.

According to the first principle, mental representations (i.e., working models) of the self and significant others (i.e., attachment figures) formed early in life tend to guide interaction patterns in later relationships (Sroufe and Fleeson 1986). These internalized representations motivate most individuals to seek connections with others, including people outside the family. This is particularly true of relationships with long-term romantic partners, who often serve as the primary attachment figure in adulthood (Hazan and Zeifman 1994). Bowlby (1973), in fact, claimed that the quality of caregiving enacted by early caregivers acted as a "prototype" for what a person could expect in later relationships, which in turn should affect how he or she thinks, feels, and behaves with current and future partners (Fraley et al. 2013; Simpson and Rholes 2012).

However, these prototypes are not completely deterministic. The second principle is that experiences in early relationships (with parents) and later relationships (with close friends or romantic partners) should *jointly* affect what happens at later points in a person's development (Carlson et al. 2004; Collins et al. 1997; Collins and Sroufe 1999; Sroufe et al. 1990). For example, positive relationship experiences, such as becoming involved with a highly committed, caring, and emotionally well-adjusted partner later in life, may counteract or even change the insecure working models that developed in response to poorer quality relationship experiences earlier in life (such as experiencing rejection or inconsistent parenting during childhood; Ainsworth 1989; Sroufe et al. 2005). Alternatively, individuals who have a secure attachment history may become more insecurely attached if they get involved with partners who lead them to doubt their positive expectations and beliefs about romantic relationships (Rönkä et al. 2002; Tran and Simpson 2009).

Past relationship experiences not only affect working models; they also impact emotion regulation tendencies. The third principle suggests that the way in which people regulate their emotions in adult relationships should be associated with how they learn to regulate their emotions earlier in life, particularly in stressful or challenging situations (Sroufe and Fleeson 1986; Thompson 2008). Synchronous and supportive relationships with early caregivers (i.e., parents) are usually the initial social context in which functional and appropriate emotion-regulation skills are learned and honed (Sroufe et al. 2005). Consistent with this view, attachment security in infancy, which is a barometer of both synchrony between children and their primary caregivers and more effective emotion regulation during early childhood (Schore 2005), predicts more effective emotion-regulation skills in different types of relationships in later life (Thompson 2008). Similarly, attachment security later in life also predicts better emotion regulation in adult relationships (Mikucliner and Shaver 2007; Simpson and Rholes 2012).

Finally, the fourth principle claims that the meaning of a given behavior depends on how it fits with other actions in a specific social context. For example, although there are times when engaging in conflict has positive consequences for partners and their relationship, disengaging from conflict with a romantic partner when it is appropriate to do so should protect people from the corrosive effects of further conflict (Gottman 1994), whereas failure to disengage—especially when continued conflict is futile and the disagreement cannot be resolved—should harm relationship functioning in the future (Gottman and Levenson 1999). One implication of this principle, therefore, is that the behavior of partners in relationships cannot be fully understood unless one takes into account both partners' developmental histories and the broader social context in which they interact.

These four principles represent normative processes that are central to developmental and attachment models (Bowlby 1969, 1973, 1988; Sroufe et al. 2005). With these normative organizational-developmental principles in mind, we now describe the source of the data we have used to test how early social experiences are prospectively linked to later attachment and relationship outcomes.

The Minnesota Longitudinal Study of Risk and Adaptation

The MLSRA began in 1976–1977 when first-time mothers who were receiving free prenatal services at Minneapolis public health clinics were recruited for the study. (For a comprehensive overview of the entire project, including all of its measures and most of its findings, see Sroufe et al. 2005). The mothers' children, whom we call "target" participants, have been the primary focus of the study over the years. Since they were born, approximately 170 targets have been assessed at regular intervals at every major stage of development using numerous multi-method measures, which have included interviews, questionnaires, teacher-ratings, parent-ratings, and videotaped interactions with both their parents and their current romantic partners. Most of our research on adult romantic relationships has focused on approximately 75 targets (and their romantic partners) who were involved in an established relationship when targets were between 20 and 23 years old. These target participants are demographically representative of the full project sample.

Assessments were conducted at critical points of development when the targets were negotiating salient and important socioemotional developmental issues (cf. Erikson 1963), such as forming attachment bonds with their caregivers in infancy, navigating the peer environment in middle childhood, establishing close friendships in adolescence, and forming and maintaining romantic relationships in early adulthood. Each target's level of competence in each of these domains was assessed using different sets of age-appropriate methods and measures. We now describe some of the most important assessments of attachment security that have been conducted with our target participants across their lifetimes and have been used frequently in our research.

When targets were 12 and 18 months old, they were videotaped with their mothers in the Strange Situation (Ainsworth et al. 1978), a well-validated and widely used laboratory procedure that involves a series of separations and reunions between children (targets) and their caregivers (their mother). The Strange Situation procedure assesses a child's willingness and ability to use his or her caregiver to effectively reduce and manage distress, which results from (and is a proxy for) maternal presence and reassurance when a child is upset.

In the Strange Situation, children who are classified as securely attached typically use their caregivers (mothers) as a source of comfort to reduce their negative affect and regulate their negative emotions. This security allows the child to pursue other important tasks, such as exploring the environment and engaging in play. In contrast, children who are classified as insecurely attached do not use—and often act as if they cannot rely on—their caregivers to dissipate their negative affect and manage their negative emotions. Consequently, the attachment systems of insecurely attached children remain activated ("turned on"), and they often remain distressed throughout the entire Strange Situation procedure.

These attachment patterns are closely linked to the quality of caregiving that children receive from their primary caregivers in the home (Ainsworth et al. 1978; Egeland and Farber 1984). Securely attached children typically receive care that is sensitive, warm, and situationally appropriate, especially when they are upset. Insecure children, on the other hand, receive either emotionally distant, rejecting care (in the case of children classified as avoidant-resistant) or neglectful and inconsistent care (in the case of children classified as anxious-resistant). Trained observers then viewed the Strange Situation videotapes of each mother–child dyad and classified each target as having either a secure or an insecure (either anxious or avoidant) relationship with his/her caregiver (mother). Their scores, which could range from 0 (insecure at both 12 and 18 months) to 2 (secure at both times), reflected the number of times that the mother–child attachment relationship was classified as secure across the two Strange Situation assessments.

At several points during early childhood, targets and their parents also engaged in several age-appropriate tasks designed to assess the quality of parental care and the attention that each target received. Maternal supportive presence reflected each caregiver's degree of responsiveness and other behaviors designed to reassure his or her child while the child tried to perform new and somewhat stressful tasks. During home visits when targets were 30 months old, ratings were made of each mother's verbal and emotional responsiveness to her child on the HOME scale (Caldwell et al. 1966). Full descriptions, along with reliability and validity information for these measures, are reported in Sroufe et al. (2005). Standardized scores on each of these measures were calculated and then averaged to create a single indicator of the quality of early caregiving for targets who had at least two contributing measures.

In early and middle childhood, targets completed several measures that assessed their relationship representations and perceptions of different relationships (Carlson et al. 2004). For example, at ages 4–5, they completed the Preschool Interpersonal Problem-Solving Assessment (Shure and Spivack 1970), which assessed how each target resolved interpersonal dilemmas related to parent–child and peer

relationships. Scores reflected theoretically derived ratings of the representational quality of the mother–child as well as peer relationships, including the degree of cognitive flexibility regarding these relationships.

When the targets were in elementary school (ages 6–8), several classroom teachers rated each child in terms of how closely she or he matched a standardized description of a socially competent child. Each child (target) was in a different classroom and school building, so corrections were made to account for different numbers of children in each classroom. Each target's score was his or her rank-order in the classroom (relative to his or her classmates) in the degree to which he or she matched the criterion description of a socially competent child.

At age 8, the organization of relationship representations was assessed again with family drawings (see Main et al. 1985), which were rated on theoretically-derived global scales (see Fury et al. 1997). The primary scores were ratings of the family relationship (e.g., each child's expectations of family interactions, his or her sense of pride in the family group) and ratings of each child's sense of self as being secure within the family group.

At age 12, targets completed several narrative tasks that involved parent–child and peer relationship themes. These included a sentence completion task, a story-telling task, an interpretation of a fable, and a friendship interview. Socioemotional expectations and attitudes across these tasks were assessed with theoretically de-rived rating scales.

At age 16, targets completed interviews that assessed the nature and quality of their relationship with their best friend, including how secure the relationship was and how conflicts were usually resolved. Ratings were made based on the extent to which targets said they could share all personal feelings with their best friend, regardless of the content, and the extent to which they trusted and felt they could count on their best friends in different situations.

At age 19, targets completed the Adult Attachment Interview (AAI; George et al. 1985), during which they reflected on memories of being raised by their parents between the ages of 5–12. The interview was audiotaped, transcribed, and then scored by trained raters for its degree of coherence. Individuals who are classi-fied as secure on the AAI present a clear, well-supported description of their past relationship with both parents. Their episodic memories of childhood tend to be vivid and coherent, and secure individuals have little difficulty recalling important childhood experiences, even if their childhood upbringing was difficult. Individuals classified as insecure, on the other hand, have less coherent narratives. More spe-cifically, those classified as dismissive (avoidant) typically describe their parents and their upbringing as normal or even "ideal," but fail to support these claims with clear, specific episodic memories of significant childhood events. Rather, they tend to disregard or dismiss the importance of attachment figures or attachment-related emotions and behavior. Individuals who are preoccupied on the AAI often discuss their childhood experiences with attachment figures very extensively during the interview. Their AAI interviews tend to reveal deep-seated, unresolved anger to-ward one or both parents, which taints their descriptions and interpretations of past experiences.

As targets entered early adulthood (age 20–21), those who were involved in a committed (6 months or longer) romantic relationship participated in an assessment of romantic relationship functioning. During this assessment, targets and their romantic partners engaged in a videotaped 10-min conflict resolution task during which they tried to resolve the most major point of conflict or disagreement in their relationship. This was immediately followed by a 5-min conflict recovery task, which is described later in the chapter. Both of these tasks were designed to assess how well each target regulated her or his emotions with his/her romantic partner. Both interactions were then rated by trained coders.

Targets and their romantic partners also independently completed the Current Relationship Interview (CRI; Crowell and Owens 1996). The CRI contains a series of questions similar to the AAI, but that focus on representations and memories of the relationship with one's current romantic partner. Targets' responses are scored for discourse properties (e.g., coherence) similar to the AAI. Individuals who are secure on the CRI tend to provide a clear, well-supported description of their current partner and relationship. Insecure individuals (dismissive or preoccupied), in contrast, provide less clear, more confusing, and/or more poorly supported descriptions of experiences with their current partner/relationship.

At age 23, we assessed whether targets were still dating the same romantic partner with whom they were videotaped in the conflict resolution and conflict recovery discussions 2 years earlier. Targets who were involved with a romantic partner of 4 months or longer at age 23 were also interviewed about their current romantic relationship, including their feelings of closeness, acceptance, approaches to conflict resolution, and commitment. These interviews were then coded for the overall quality of the relationship.

Finally, at ages 23, 26, and 32, targets completed measures assessing their anxious and depressive symptoms. Specifically, targets completed the Young Adult Self-Report measure (YASR; Achenbach 1997) as part of the 23-year and 26-year assessments, and they completed the Adult Self-Report measure (ASR; Achenbach 2003) at the 32-year assessment. Targets also rated themselves, their feelings, and their behavior during the past 6 months on self-report scales at ages 23 and 26 years.

Attachment Relationships Across the Lifespan: Recent MLSRA Findings

Findings from the MLSRA illustrate how social experiences earlier in life are systematically tied to attachment representations and relationship outcomes at multiple time-points of social development, culminating with romantic relationships in early adulthood. In this section, we describe five recent studies that each address at least one of the four normative principles of our organizational-development framework. Together, the studies exemplify the relevance of this perspective to questions about the normative maintenance and dissolution of adult attachments.

Direct Links Between Infant Attachment and Adult Romantic Attachment

The question of whether attachment security early in life is linked to romantic attachment security years later is fundamental and longstanding. Roisman et al. (2005) addressed this question with the MLSRA data when targets were 20–21 years old. As discussed previously, in addition to assessing the attachment security of targets when they were 12–18 months old in the Strange Situation, targets also completed the CRI to index their attachment status with their current romantic partners at age 20–21.

Individuals who were rated as secure on the CRI had higher quality conflict interactions with their romantic partners (rated by independent coders) and also reported greater closeness and more positive perceptions of their partner and relationship. More importantly, targets who were classified as secure as infants were significantly more likely to be classified as secure on the CRI nearly 20 years later. Thus, consistent with Principle 1, young adults' states of mind with regard to their current romantic partner/relationship appear to stem, at least in part, from their attachment experiences with primary caregivers in infancy nearly 20 years earlier.

Links Between Relationship Representations and Social Behavior over Time
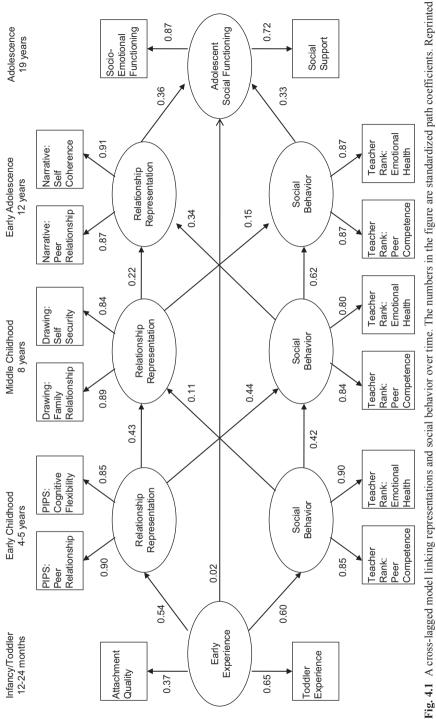
Consistent with attachment theory (Bowlby 1973), the organizational-developmental perspective regards an infant's attachment security or insecurity as the launching point of a "transactional process" between relationship representations and social experiences and behavior that occurs repeatedly across the lifespan (Principle 2; Carlson et al. 2004). The process is termed "transactional" because relationship representations and social experiences/behavior often influence one another reciprocally over time, such that relationship representations affect social experiences/behavior, which then affect representations in return, and so on. To predict an individual's future relationship outcomes from his or her interpersonal past, one needs to identify the critical developmental experiences and issues that an individual has had to negotiate at each major transitional stage of her or his life. Each developmental stage entails addressing (and hopefully resolving) certain kinds of social and emotional challenges along with developing specific skills that must be mastered for social development to proceed in a normal fashion (Erikson 1963; Sroufe et al. 1999). During infancy, for example, children must become attached to a stronger/older/wiser caregiver who potentially can help them regulate their emotions and facilitate their survival in the world. The unique importance of infant-caregiver attachment bonds begin to wane during the preschool years as children meet new peers and start interacting with them. Although caregivers remain central components of their social environments and lives, children's attention usually shifts toward peers and the opportunities afforded by these new partners and relationships.

Peers continue to play a significant role in the lives of nearly all children during middle childhood and early adolescence, but children gradually must learn to balance their involvement in friendship groups with their involvement in romantic relationships (Sroufe et al. 2005).

Carlson et al. (2004) modeled the transactional nature of targets' relationship representations and social experiences/behavior across multiple developmental periods with the MLSRA dataset. According to their model, which is shown in Fig. 4.1, the connection between early care experiences and later adolescent social behavior depends on the transactions that occur between relationship representations and social behavior at different points of each target's life. As discussed earlier, relationship representations in early childhood, middle childhood, and early adolescence were assessed by interviews and projective drawings (Carlson et al. 2004). Targets' social behavior was also assessed at each developmental period by teachers' rankings of each target's peer competence and emotional health in classroom settings.

Structural equation modeling revealed that the transactional model shown in Fig. 4.1 fit the data best. In other words, representations of relationships at earlier points in development predicted meaningful changes in social behavior/experience at later points in development, and vice versa, across time. These findings support Bowlby's (1973) premise that early experiences with initial attachment figures (parents) initiate social functioning pathways, which are then propagated by later relationship representations and social experiences at each successive developmental period.

In line with Principle 2, this model also accounts for predictable, patterned changes in representations and behavior across development. Developmental change occurs in part because the pathways from mental representations to behavior are never perfect. An individual's representations of what partners and relationships should be like, for example, guides but does not determine how his or her relationships actually function. At each developmental stage, individuals have opportunities to form new relationships with different people, which are impacted by both the skills they have learned in prior relationships as well as their current relationship representations. However, when relationship experiences deviate sharply from expected patterns (whether good or bad), this can alter an individual's representations and future behavior (e.g., Simpson et al. 2003).

These developmental findings extend our understanding of the developmental origins of close relationships during adulthood. Adult attachment relationships are not the direct product of early parent–child relationship experiences; rather, they represent an outgrowth of a continuous, transactional process that occurs across development. As such, studying experiences with parents and close others beyond infancy helps us understand adult relationships more fully. In addition, these findings suggest that individuals' romantic relationship experiences have the capacity to produce changes in subsequent relationship representations. In other words, close interpersonal experiences in adulthood are both the product of prior developmental experiences *and* a contributor to future functioning.

Fig. 4.1 A cross-lagged model linking representations and social behavior over time. The numbers in the figure are standardized path coefficients. Reprinted from Carlson et al. 2004. Copyright 2007 by Blackwell Publishing. Reprinted with permission
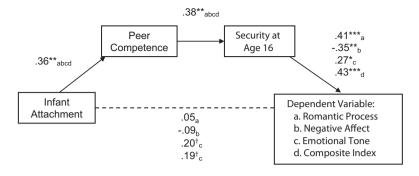
Links Between Early Relationship Representations, Romantic Relationship Quality, and Relationship Outcomes in Adulthood

As we have noted, our organizational-developmental perspective proposes that an individual's adaptation reflects the combination of his or her developmental history *in combination with* his/her current life circumstances (Principle 2; Sroufe et al. 1990). But why are some people able to form high quality, secure romantic relationships even though they received less-than-optimal parental care earlier in life? To address this question, Haydon et al. (2012) investigated the shared and distinct origins of targets' attachment representations of their early caregivers (i.e., parents) as well as their current romantic partners in early adulthood. Representations of caregiving experiences with parents and with current romantic partners were assessed by the AAI (when targets were 19 years old) and by the CRI (when targets were 20–23 years old).

The results revealed that targets' experience of early parenting quality (assessed when they were 24 months old) predicted their classifications on both the AAI and the CRI nearly 20 years later, with better early care resulting in a higher probability of being secure on both the AAI and the CRI. However, ego resiliency measured in preschool, which refers to the capacity to flexibly exert attentional and behavioral control and regulate negative affect, uniquely predicted later CRI security. These findings suggest that romantic relationship functioning might have somewhat different developmental origins than parent–child relationships functioning. Social functioning outside the family-of-origin may be another developmental pathway through which individuals who receive poorer care early in life can form and maintain more satisfying romantic relationships in adulthood and thus develop more secure representations of their adult romantic partners, all which should result in better romantic relationship functioning. It also is possible that ego resiliency helps people who have insecure attachment histories to override certain potentially maladaptive responses in adulthood (see, for example, Ayduk et al. 2008).

Links Between Infant Attachment and Emotion Regulation in Adult Romantic Relationships

Evidence shows that adult relationships are rooted in previous relationship experiences. However, which aspects of relationships are most likely to be linked over time? Given the fundamentally emotional nature of attachment bonds, Simpson et al. (2007) predicted that emotional experiences in relationships with adult romantic partners should show continuity with security in very early relationships with caregivers. Their results confirmed that targets' attachment status in the Strange Situation predicted how they regulated their emotions, both on a daily basis in their romantic relationships and when they engaged in major conflict discussions with their romantic partners at age 20–21. In particular, they found that if targets had an insecure attachment relationship with their mothers at 12 months (assessed in the

Fig. 4.2 A partial mediation model linking infant attachment security and early adulthood romantic relationship outcomes. The numbers in the figure are standardized path coefficients. Reprinted from Simpson et al. 2007. Copyright 2007 by the American Psychological Association. Reprinted with permission

Strange Situation), these targets reported and behaviorally expressed more negative than positive emotions when trying to resolve a major relationship conflict with their romantic partner in the lab approximately 20 years later. As shown in Fig. 4.2, this "early attachment effect" was partially mediated by targets' level of social competence in elementary school (rated by three of their grade-school teachers), along with the quality of their relationship with their best friend at age 16. This partial mediation pattern fit the data significantly better than did several other plausible models. These findings, which support Principle 3, illustrate one interpersonal pathway through which the degree of early attachment security is probabilistically linked to how targets regulate their emotions in the context of their adult romantic relationships.

Links Between Infant Attachment and Conflict Recovery in Adult Romantic Relationships

Salvatore et al. (2011) explored whether attachment security early in life predicts how well individuals *recover* from major romantic relationship conflicts. Conflict recovery refers to how quickly, how well, and how completely individuals are able to shift both emotionally and behaviorally from a negative state (such as discussing a major relationship problem) in order to achieve another, more positive goal (such as discussing topics on which both partners agree). Thus, conflict recovery is one type of emotion regulation skill or ability in the context of relationships. Gottman and Levenson (1999) contend that recovering from conflict entails a different set of skills, abilities, and behaviors than resolving conflicts in a fair and constructive fashion.

   Salvatore and her colleagues found that targets who were securely attached in the Strange Situation as infants rebounded from major conflict discussions with

their romantic partners significantly better than insecurely attached targets did at age 20–21, statistically controlling for how difficult each conflict discussion had been. Moreover, their romantic *partners* recovered better if targets had been securely attached as infants. In addition, having a romantic partner who displayed better conflict recovery was associated with greater relationship satisfaction and more positive daily emotions in the relationship. Finally, targets who had been insecurely attached early in life were more likely to still be involved with the same partner 2 years later (at age 23), but only if their partner had displayed better conflict recovery 2 years earlier.

Consistent with Principle 3, these findings reveal that attachment status in infancy predicts better emotion regulation (indexed by conflict recovery) with romantic partners in adulthood. In line with Principle 4, our results indicate that the way in which people behave in relationships cannot be completely understood unless one considers both the developmental histories that partners bring into their current relationships along with the social context in which they are currently interacting. Moreover, secure individuals appear to buffer their partners in conflict situations, as do partners who display better recovery following conflict. This ability is not only useful in conflict situations, but it also seems to have positive ramifications for relationship maintenance and stability over time.

Advantages of an Organizational-Developmental Perspective

Together, these studies showcase the relevance of our normative organizational-developmental perspective for addressing questions pertaining to the formation, maintenance, and dissolution of adult attachment relationships. Regarding relationship formation, our findings indicate that individuals carry forward expectations and beliefs about relationships from earlier interpersonal experiences into their current romantic relationships, which could affect processes associated with the selection of romantic partners. Once relationships are formed, individuals' cumulative histories of relationship experience continue to guide their interpersonal dynamics related to relationship maintenance, including their emotional experiences (Simpson et al. 2007), representations of their romantic partner (Haydon et al. 2012; Roisman et al. 2005), and emotion regulation abilities (Salvatore et al. 2011). In short, the likelihood of maintaining attachment-based relationships in adulthood is partly affected by the quality of earlier experiences with previous relationship partners. Relationship dissolution, which results from the breakdown of these maintenance processes, is also impacted by each partner's development history. As the study by Salvatore et al. (2011) illustrates, relationship dissolution is a dyadic phenomenon that is best understood by understanding contributions from both relationship partners (see also Attridge et al. 1995). In sum, the current set of findings showcase how the normative sequence of relationship development takes place within the context

of each partner's unique developmental history, supporting the four principles of our organizational-developmental framework.

There are many advantages to adopting an organizational-developmental perspective. Perhaps the greatest advantage is that this perspective provides a basis for testing different predictions about an individual's future interpersonal functioning based on his or her current *and* past functioning with respect to salient developmental issues. As a result, individuals can arrive at the same personal or relational outcome, but from quite different beginning points. They can also arrive at very different outcomes from the same starting point. This explains why people who experience different developmental trajectories can show the same kind of adaptation at one time-point, but show different adaptations at later points in development (see Sroufe et al. 1990). According to an organizational-developmental viewpoint, these differences are predictable to the extent that an individual's current relationship functioning reflects his or her cumulative developmental history, rather than being completely governed by either his or her past or current life circumstances.

To make this important point clearer, consider two people—Tom and John—who have been happily married to their wives for many years. Each of them recently learned that their partners had extra-marital affairs in the recent past, which are now over. Tom and John both decide to try to repair their damaged relationships, and they both enter couples therapy. The powerful emotional strain and difficulties of the betrayals have led both men to experience and express a great deal of anger, negative affect, and hostility toward their wives in recent months. When their current "emotional profiles" are viewed cross-sectionally, Tom and John appear to be very similar. On the basis of this limited cross-sectional information, one might expect both men to have similar relationship trajectories and outcomes with respect to satisfaction, conflict, and stability in the not-too-distant future. However, different predictions are derived when Tom and John's current levels of emotional adaptation are viewed in relation to each man's distinctive developmental history. If Tom's therapy is successful and his issues of broken trust can eventually be resolved, Tom, with his secure attachment history, is likely to experience better relationship functioning and outcomes in the future, given the benevolent nature of his working models and his more constructive efforts to mend his damaged marriage. On the other hand, John, with his insecure attachment history, may not be able to rebound from the betrayal in his marriage nearly as well over time given his more negative working models and history of being "burned" in past relationships. According to an organizational perspective on social development, romantic relationship functioning and outcomes are a product of *both* an individual's relationship history as well as his or her current relationship circumstances.

New Research Directions and Conclusions

One particularly promising area for future research on the development of adult attachment relationships is the integration of biological perspectives and measures. The inclusion of molecular genetic measures is one approach that has become

increasingly popular in recent investigations of adult attachment. For example, common genetic variants have been associated with several indicators of adult relationship functioning, ranging from empathy to attachment orientations to marital relationship quality (see Ebstein et al. 2010 for a review). Some of these findings have been interpreted as supporting the view that attachment security in infancy and adulthood is largely attributable to genetic factors, and that associations between early caregiving experiences and attachment-relevant adult outcomes may reflect genetic rather than environmental effects (see Harris 1998). In contrast to this position, we have argued that attachment security is largely a relationship phenomenon and, as such, it emerges from partners' histories of interaction (Collins et al. 2000).

We recently collected genetic information from our longitudinal participants (targets) to test these competing ideas about genetic contributions to attachment. In an initial investigation, we found that targets' genotypes were an important factor in predicting their emotional reactivity to a distressing event early in their lives (encountering the Strange Situation). However, target infants' attachment security assessed in the Strange Situation at 12 and 18 months was uniquely predicted by their *caregivers'* sensitivity during interactions with them (see Raby et al. 2012). These findings support theoretical predictions regarding the "relationship basis" of early attachment security, but they also indicate that genetic variation makes important contributions to early emotional development. We anticipate that attachment security during later developmental periods will be shaped by increasingly complex interactions between relationship and genetically based influences. Thus, the most fruitful future investigations are likely to be those that examine how genetic and relationship factors work together to support the development of adult attachment security and the functioning of adult attachment relationships, perhaps including close friendships.

A second area worthy of additional empirical attention is how early attachment experiences may "tune" certain biological systems within people. One straightforward hypothesis is that individuals who have a history of insecure attachments may show heightened activation of stress-regulatory systems, especially during emotionally salient interpersonal events. In line with this view, psychophysiological studies of adult attachment in both social and developmental psychology have demonstrated that insecurely attached individuals show elevated activation of the sympathetic nervous system and greater down regulation of the parasympathetic system during stressful situations (e.g., Diamond and Hicks 2005; Roisman 2007). Most of these investigations have used cross-sectional or short-term longitudinal designs, however. Long-term longitudinal studies investigating the developmental antecedents of these differences in psychophysiological regulation are needed. This is an important area for future research for many reasons, one of which is the potential implications for understanding the etiology of health problems. In the MLSRA study, for example, we have also found that adult targets' health problems are uniquely related to their histories of infant attachment security, with individuals who were insecurely attached as children reporting more physical health problems at age 32 (Puig et al. 2013). We suspect that differences in psychophysiological regulation may, at least in part, account for these developmental effects. However, complete tests of this question await future longitudinal research.

In conclusion, an organizational-developmental perspective focuses on the coherence of behavior in different types of relationships across the life-course. The manner in which relationship-relevant thoughts, feelings, and actions are patterned is what links individuals' early experiences with caregivers to their later experiences with peers and eventually romantic partners in adulthood. These experiences prior to adulthood shape and channel specific patterns of relating to others. Although competence in relationships may be expressed somewhat differently at each developmental stage, the latent meaning of competent and incompetent behavior remains the same across different developmental stages. As the findings of our research from the MLSRA demonstrate, relationship outcomes in adulthood *are* meaningfully tied to relationship experiences encountered much earlier in life. In fact, for many relationships, the past is an integral part of the present and the future.

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