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## An Evolutionary, Life History Theory Perspective on Relationship Maintenance

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Relationship maintenance is a central topic within relationship science. It is addressed in numerous theories (e.g., Levinger, 1983; Rusbult, 1980; Thibaut & Kelley, 1959), in several literature reviews (e.g., Agnew & VanderDrift, 2015; Lydon & Quinn, 2013), and in all contemporary relationship textbooks. The reason is straightforward: individuals often invest a great deal of time, effort, and resources in their closest relationships, so they should be motivated to protect and sustain them when threats emerge. To date, most research on relationship maintenance has been inspired by theories (e.g., Interdependence Theory; Kelley & Thibaut, 1978; Thibaut & Kelley, 1959) or models (e.g., the Investment Model; Rusbult, 1980) that focus on proximate causation – how and why current partner or relationship variables, such as commitment and satisfaction, influence the enactment of certain relationship maintenance tendencies or behaviors (see Chapter 2). Far less attention has been granted to distal factors, such as each partner’s developmental history (i.e., ontogeny) or the possible evolutionary origins of relationship maintenance tendencies (i.e., ultimate causation). The primary goal of this chapter is to shed clarifying light on these understudied levels of analysis by viewing relationship maintenance processes from an evolutionary-developmental perspective couched within Life History Theory (LHT).

The chapter is organized around five sections. In the first section, we define relationship maintenance and discuss how it has been studied by prior scholars, most of whom have examined proximate-level variables (such as immediate threats to a relationship or an individual’s degree of commitment to his/her partner or relationship) that typically elicit the motivation to maintain one’s current romantic relationship. While doing so, we review four common threats to romantic relationships, along with research that has documented some of the key relationship maintenance processes and

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the cognitive, emotional, and behavioral responses associated with each type of threat. In the second section, we discuss the central tenets of LHT. After doing so, we describe two major models of human mating – the Evolutionary Model of Social Development, which highlights the events and pathways through which socialization unfolds in children raised in different environments (Belsky, 1997; Belsky, Steinberg, & Draper, 1991), and the Strategic Pluralism Model (Gangestad & Simpson, 2000), which identifies some of the factors in adulthood that should shape an individual's motivation to maintain or dissolve romantic relationships. In the third section, we blend these ideas and introduce the Developmental Strategic Pluralism Model, which articulates why certain developmental events presumed to shape whether an individual adopts a faster or a slower mating strategy should statistically interact with an individual's current environmental conditions. As such, the model explains how one's developmental history and current situational circumstances (e.g., whether threatening or nonthreatening) should work together to determine whether one is more versus less motivated to enact relationship maintenance tactics. The fourth section lays out a series of testable predictions derived from this model, including the conditions under which sex differences might emerge. The final section summarizes the key points in the chapter and offers some takeaway conclusions.

#### RELATIONSHIP MAINTENANCE PROCESSES: AN OVERVIEW

Partners in practically all close romantic relationships – even very happy and stable ones – occasionally encounter events that could threaten and destabilize their bond. Thus, the manner in which partners manage and react to these events is critical to the sustained longevity and well-being of virtually all intimate relationships (Rusbult & Buunk, 1993). Relationship maintenance processes reflect the specific perceptions, feelings, thoughts, and/or behaviors that allow romantic partners to avoid, reduce, or eliminate events that could or do threaten their existing relationship (Lydon & Quinn, 2013).

The vast majority of prior research has investigated how relationship partners deal with four broad types of relationship threat: the presence of attractive alternatives to the current partner/relationship, the enactment of partner transgressions, the occurrence of goal conflict between relationship partners, and how an individual's often ordinary (average) attributes are perceived by their partners. Each type of threat tends to be associated with a basic relationship maintenance process along with specific relationship maintenance responses or reactions. For example, individuals involved in happy, well-functioning, and committed relationships frequently fail to notice (Miller, 1997), pay less visual attention to (Maner, Rouby, & Gonzaga, 2008), consciously devalue (Johnson & Rusbult, 1989), or more effectively suppress (Gonzaga, Haselton, Smurda, Davies, & Poore, 2008) attraction to alternatives.

These effects usually operate via attentional processes that involve inattention to, or derogation of, potentially alluring alternatives to the current partner/relationship.

Other research has explored threats posed by partner transgressions (e.g., inconsiderate behavior or minor betrayals), which also can destabilize and undercut relationships (Holmes & Rempel, 1989). Individuals in happy, well-functioning, and committed relationships, for instance, frequently fail to notice minor partner transgressions (Fletcher & Fincham, 1991), do not make negative “responsibility attributions” for their partner’s transgressions (Bradbury & Fincham, 1990), are more likely to accommodate when their partners transgress (Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991), or tend to forgive their partners for most transgressions over time (Karremans & Van Lange, 2008). These effects are often driven by the benevolent attributions that individuals in stable, committed relationships usually make in the aftermath of minor – and sometimes more severe – partner transgressions.

Additional research has addressed how dealing with goal conflicts with one’s romantic partner is related to relationship maintenance processes and outcomes. For example, individuals in happy, well-functioning, and committed relationships are more willing to – and actually do – sacrifice their own personal goals for what is best for their partner or relationship in the long run, which promotes more stable relationships characterized by higher levels of commitment (Van Lange et al., 1997). These effects are more pronounced when individuals make personal sacrifices based on positively framed approach motives rather than negatively framed avoidance motives (Impett, Gable, & Peplau, 2005). Most goal conflict effects, therefore, occur in response to enacted behaviors, such as when one partner gladly moves to a new city so that his/her partner can pursue a “dream job.”

A fourth common threat to relationships centers on the “ordinariness” of one’s partner relative to other available (or possible) romantic partners and relationships. To guard against such threats, individuals in happy, well-functioning, and committed relationships typically idealize their current partner’s attributes and display relationship illusions, perceiving their partners and relationships as slightly better than other people do, including the partner. These perceptual biases sustain relationship satisfaction and stability at higher levels than is true of individuals who do not harbor these biases (Murray, Holmes, & Griffin, 1996). These effects, which operate primarily through partner and relationship evaluations, keep most established relationships from falling below partner or relationship “nonacceptability” thresholds.

All four of these threats and relationship maintenance processes typically operate in synchrony in individuals who are involved in happy, well-functioning, and committed relationships. For example, greater partner/relationship idealization often motivates individuals to ignore or downplay attractive alternatives, experience fewer goal conflicts with their partners

(and behave in a more accommodating manner when they arise), and arrive at more benign attributions when their partners transgress. Each of these variables, however, is proximal in nature, focusing almost exclusively on proximate causation processes. Little if any attention has been paid to whether or how an individual's early developmental experiences might have shaped his/her motivation and inclination to enact relationship maintenance behaviors in adulthood, especially from an evolutionary perspective. We now turn to this significant, unaddressed topic in the relationship maintenance literature.

#### EVOLUTIONARY PERSPECTIVES ON RELATIONSHIP MAINTENANCE PROCESSES

Despite the fact that relationship maintenance processes have been widely studied within relationship science, three fundamental questions remain largely answered: (1) from the standpoint of ultimate causation, *why* do people engage in relationship maintenance?; (2) why is there so much variation between people in the motivation and extent to which they enact relationship maintenance strategies and tactics?; and (3) when (under which circumstances) do certain people engage in – or not engage in – relationship maintenance strategies/tactics?

From an evolutionary perspective, the motivation and tendency to maintain relationships should have been shaped by the costs and benefits associated with doing so, which would have been tied to the survival and reproductive success – the *reproductive fitness* – of our ancestors. It is well documented that, on average, relationship partners involved in happier, better-functioning, and more committed relationships tend to provide higher-quality parental care (Belsky & Jaffee, 2006), which should have conferred better reproductive fitness to both parents and their offspring (Geary, 2005). Regularly engaging in relationship maintenance behaviors, therefore, is likely to have served an important evolutionary function – keeping mates together long enough to ensure sufficiently high levels of parental investment in current (or future) offspring. However, there is a trade-off between investing time and effort in parenting and in mating. Engaging in high levels of parenting effort (i.e., devoting time, effort, and resources to current or future children) limits the amount of mating effort (i.e., devoting time, effort, and resources to finding, attracting, and retaining mates) in which an individual can engage. Indeed, in certain instances, allotting greater effort to mating than to parenting could have increased reproductive fitness, such as when the local environment was harsh or uncertain, which would have rendered additional investments of time, effort, and/or resources less valuable (Ellis, Figueredo, Brumbach, & Schlomer, 2009).

To understand how costs and benefits may have been traded off by our ancestors, we turn to two evolutionary models relevant to mating and

parenting: the Evolutionary Model of Social Development (Belsky, 1997; Belsky, Steinberg, & Draper, 1991) and the Strategic Pluralism Model (Gangestad & Simpson, 2000). These models, both of which exist within the broader meta-theory known as Life History Theory (Kaplan & Gangestad, 2005; Del Giudice, Gangestad, & Kaplan, 2016), explain how an individual's general reproductive strategy, which entails his or her orientation toward both mating and parenting, should be influenced by certain types of environmental conditions.

The Evolutionary Model of Social Development addresses why and how relationship maintenance tendencies witnessed in adult romantic relationships could have been shaped by exposure to specific early childhood environments. The Strategic Pluralism Model, on the other hand, suggests how these tendencies might also be impacted by current environmental conditions. After reviewing each model, we blend them to propose a new Developmental Strategic Pluralism Model and then derive novel predictions regarding how an individual's early developmental history, in combination with his/her current environment, ought to interact to influence the extent to which s/he is motivated to engage in relationship maintenance behaviors in adult romantic relationships.

#### LIFE HISTORY THEORY AND SOCIAL DEVELOPMENT

Broadly speaking, LHT focuses on why certain clusters of traits and behaviors, which typically characterize specific reproductive strategies, develop across the lifespan. LHT is organized around the notion that time, effort, and resources are inherently limited, so individuals cannot simultaneously maximize all of the components that could contribute to their reproductive fitness. Individuals, for example, cannot devote the same amount of time, effort, or resources to survival, reproduction, and caring for offspring, at least at the same point in time during their development. As a result, they must make trade-offs in how they allocate their limited time, effort, and resources to certain components rather than others throughout their lives.

Three primary trade-off decisions, which often are made unconsciously (outside awareness), influence how individuals partition their limited time, energy, and resources (Kaplan & Gangestad, 2005). The first is whether to invest more in current (immediate) reproduction or in future (delayed) reproduction. The second is whether to invest more in a higher quantity of offspring or in higher-quality offspring. The third is whether to invest more in mating effort or in parenting effort. Greater investment in either side of each trade-off precludes an equally high investment in the other side. For example, investing more in current reproduction (i.e., by reproducing now) means that a person cannot invest as much in future reproduction. Indeed, in most Western societies, individuals who have children when they are very young (as teenagers) usually do not have the capacity to provide their children with

higher levels of education than those who wait to have children later in life, when their lives and careers are better established.

During development, these trade-off decisions affect the traits and behaviors known to facilitate the enactment of specific reproductive strategies. At the most global level, reproductive strategies exist on a fast-slow continuum (Griskevicius et al., 2013). At one end of this continuum, a *faster strategy* is characterized by more investment in current (immediate) reproduction, having more offspring, and engaging in greater mating effort. Individuals who adopt a faster strategy should remain more open to alternative partners and relationships and, in general, should be less inclined to maintain most of their current romantic relationships. This strategy is akin to bet hedging (Promislow & Harvey, 1990), which allows individuals to diversify their reproductive portfolio. At the other end of this continuum, a *slower strategy* is defined by greater investment in future (delayed) reproduction, having fewer but higher-quality offspring, and engaging in greater parenting effort. Individuals pursuing a slower strategy tend to be less open to alternative partners/relationships and, on average, should be more motivated to maintain most of their current relationships. Supporting these claims, faster strategists often view their romantic relationships as short-term opportunities, which results in less stable pair-bonds and unstable relationships characterized by lower parental investment (Simpson & Belsky, 2016; Szepeswol, Simpson, Griskevicius, & Raby, 2015). Conversely, slower strategists usually form more enduring, committed long-term relationships characterized by higher levels of parental investment (Simpson & Belsky, 2016; Szepeswol et al., 2015). Table 3.1 shows how faster and slower individuals ought to differ in their general motivation and inclination to engage in relationship maintenance in response to the four major types of relationship threats discussed earlier.

The extent to which an individual adopts a faster versus slower strategy should depend on the type of environment to which s/he was exposed early in life. The two most important ecological conditions believed to affect the adaptive value of faster versus slower reproductive strategies are environmental harshness (i.e., the overall level of morbidity and mortality in the local environment) and unpredictability (i.e., the size of fluctuations in mortality rates across space and time in the local environment; Ellis et al., 2009). Harsh and/or unpredictable environments should shift individuals toward a faster reproductive strategy in adulthood, because future investments are less likely to pay off in highly dangerous, unstable, and unpredictable environments. Harsh and/or unpredictable environments may contain high levels of parental conflict, harsh parenting, lack of resources, violence in the neighborhood, and/or erratic daily routines in the home, whereas less harsh and/or more predictable environments tend to have the opposite features. In such rearing environments, it is more adaptive for individuals who have a fast reproductive strategy to hedge their bets against early death by diversifying reproductively, such as by investing (not

TABLE 3.1 *Major types of relationship maintenance and destabilizing processes*

Type of threat	Psychological process	Maintenance: slow response	Destabilizing: fast response
Attractive alternatives	Attention	Inattention to or devaluation of alternatives	Attention to or valuation of alternatives
Partner transgressions	Attributions	Benign attributions or accommodation	Hostile or threatening attributions and lack of accommodation
Partner goal conflicts	Behavior	Sacrifice	Manipulation, coercion, or engagement in conflict
Partner ordinariness	Evaluation	Idealization and affirmation	Heightened judgment, resentment, or disinterest

Adapted from Lydon & Quinn (2013).

*Note:* Highly committed individuals tend to engage in most or perhaps all of these relationship-maintenance processes/responses across time in different relationship-threatening contexts. Some individuals, however, react to relationship threats by engaging in destabilizing processes/responses. The extent to which individuals enact maintenance or destabilizing responses should depend on their reproductive strategy. Slow strategists should be more motivated to maintain their relationships, whereas fast strategists should be more likely to display destabilizing responses.

necessarily consciously) in multiple relationships in the hope that some will result in children who survive and eventually reproduce. On the other hand, safe, stable, and predictable environments should shunt individuals toward a slower adult reproductive strategy. Although harshness and unpredictability can at times impact children directly, very young children are not fully aware of the environmental conditions surrounding them. Thus, the behavior of their parents tends to be the conduit through which young children assess the conditions in their early life environments, which gradually shapes the reproductive strategy they adopt. On the basis of this logic, a central prediction follows: harsh and/or unpredictable environments should reduce the quality of care that children receive, leading them to enact a faster reproductive strategy in adulthood characterized by greater mating effort, less parenting effort, and lower likelihood of engaging in relationship maintenance behaviors in their adult romantic relationships.

#### STRATEGIC PLURALISM

Whereas the Evolutionary Model of Social Development focuses on the developmental context in which faster and slower reproductive strategies emerge, the Strategic Pluralism Model highlights how current environmental

circumstances can influence this process. Gangestad and Simpson (2000) suggest that humans evolved to enact *conditional reproductive strategies* that are affected by features in their immediate local environment. According to the model, ancestral women may have evolved to make trade-offs between a potential mate's willingness to invest in her and her offspring and evidence of a mate's genetic viability (e.g., the quality of his health, attractiveness, and social dominance). The Strategic Pluralism Model further proposes that women evolved to prefer men who displayed greater ability and willingness to invest in them and their children when biparental care was required in the local environment – that is, when higher levels of parental investment had a positive effect on the reproductive fitness of parents and their offspring. Conversely, women may have evolved to prefer evidence of higher genetic quality in mates when the local environment contained many pathogens or was highly unpredictable, environments in which biparental care would have been less necessary and less effective in increasing reproductive fitness.

The Strategic Pluralism Model also claims that the reproductive strategies of women might have been more sensitive to the local environment (e.g., pathogen levels and the degree of environmental harshness), whereas the reproductive strategies of men may have been sensitive to what most women wanted in a mate in the local environment. If, for example, most women desired higher levels of investment in long-term relationships, most (but not all) men should have invested more heavily in longer-term mateships. When pathogens were prevalent, however, women should have placed greater emphasis on mates who displayed evidence of higher genetic quality, enabling such men to pursue short-term relationships or extra-pair matings more successfully.

With respect to relationship maintenance motives and behaviors, the Strategic Pluralism Model can be extrapolated to hypothesize that certain environmental conditions should modulate (shift) an individual's motivation and tendency to engage in – or not engage in – relationship maintenance. For example, in environments where biparental care can improve a child's long-term socialization and development, both sexes should engage in relationship maintenance behaviors to sustain their pair-bonds, which should facilitate better coparenting. However, in environments that nullify the importance of biparental care but elevate the importance of acquiring high-viability mates, relationship maintenance behaviors should decrease in both sexes. We now describe how these two evolutionary models can be integrated, yielding a new model that leads to the derivation of several novel predictions regarding relationship-maintenance tendencies.

#### DEVELOPMENTAL STRATEGIC PLURALISM

From an evolutionary developmental perspective, reproductive strategies should be shaped by the early environment to the extent that early

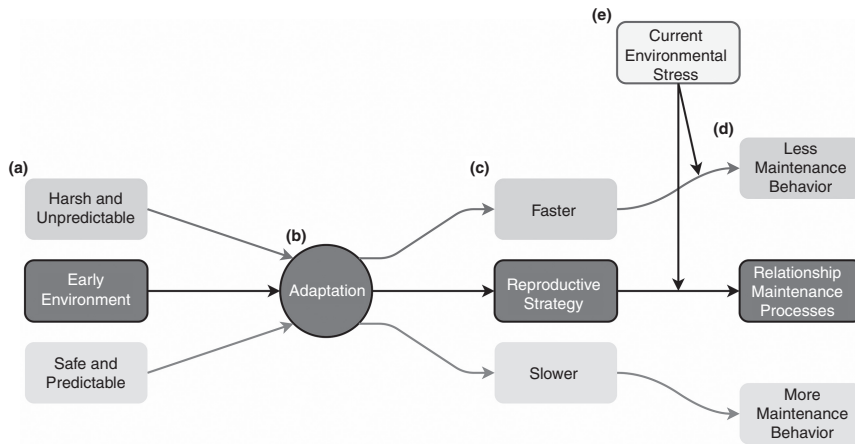


environments are representative of what future environments will generally be like during one's lifetime (Simpson & Belsky, 2016). Several recent studies involving animals and humans, however, have discovered that behaviors associated with the enactment of faster and slower reproductive strategies are more strongly elicited when the environment in adulthood is similar to the childhood environment (Ellis, Bianchi, Griskevicius, & Frankenhuis, 2017). If, for example, an individual's early environment was harsh and/or unpredictable, s/he should engage in behaviors indicative of a faster reproductive strategy (e.g., by pursuing short-term mating, being less committed to the current partner, or attending to alternative mates), but primarily when the *current* environment is harsh and/or unpredictable. This concept, termed "sensitization," represents the intersection of the Evolutionary Model of Social Development and the Strategic Pluralism Model, forming what we call the *Developmental Strategic Pluralism Model*.

This model and its various stages are described in Figure 3.1. At its core, the model proposes that mating-relevant behaviors, including relationship maintenance tendencies, cannot be fully understood unless one has information on *both* an individual's early life environment (i.e., the degree to which it was harsh and/or unpredictable versus benign and predictable) and the current environment (i.e., the degree to which it is harsh and/or unpredictable versus benign and predictable). Humans are a moderately sexually dimorphic, K-selected species (Stearns, 1992). Thus, we typically enact slower reproductive strategies unless environments (1) reduce the value of biparental care or (2) increase the value of obtaining genetically fit mates. Most individuals, therefore, should enact a slower reproductive strategy in better environments but should shift toward a faster reproductive strategy when environments are harsh and/or unpredictable due to unforeseeable dangers, food shortages, predators, aggressive people, and so on. Framed another way, when environments become difficult and unpredictable, individuals should revert to a "secondary" reproductive strategy as a backup plan to promote their reproductive fitness as best they can under difficult circumstances.

One novel prediction of the Developmental Strategic Pluralism Model is that exposure to harsh and/or unpredictable environments in childhood may affect the flexibility and variability of the reproductive strategies an individual enacts across his or her lifetime. Exposure to highly harsh and/or unpredictable environments early in life, for example, should motivate most individuals to enact a faster reproductive strategy, improving the odds that they will reproduce before dying in such arduous environments.

According to the Developmental Strategic Pluralism Model, however, the behaviors that are the hallmark of a faster strategy – being opportunistic, seeking immediate rewards, having poorer emotion regulation, and keeping mating options open – should be most strongly evoked when the current environment is harsh and/or unpredictable. When it is predictable and



**FIGURE 3.1 The Developmental Strategic Pluralism Model and relationship maintenance processes.** (a) Early environmental circumstances, which can range from safe and predictable to harsh and unpredictable, influence which developmental trajectory is most adaptive. (b) The developing person detects signals in the early environment directly and/or indirectly (via parenting quality), which initiates the development of an appropriate reproductive strategy. (c) In adulthood, individuals express their reproductive strategy, which can range from fast to slow. Faster strategies allocate more effort toward current reproduction, quantity of offspring, and mating effort. Slower strategies allocate more effort toward future reproduction, quality of offspring, and parenting effort. (d) The particular reproductive strategy an individual adopts influences his/her general relationship maintenance behaviors. Fast strategists should engage in lower levels of maintenance behavior on average, whereas slow strategists should engage in higher levels of maintenance behavior on average. (e) Although an individual's reproductive strategy should influence his/her maintenance behavior directly, the current environment should elicit destabilizing behaviors associated with faster reproductive strategies. When the current environment is safe and predictable, most individuals should remain motivated to maintain their relationships. When the current environment becomes unpredictable, however, fast strategists should enact more relationship-destabilizing behaviors, whereas slow strategists should continue to enact more relationship maintenance behaviors.

resources are plentiful, faster strategists should be less motivated to engage in fast mating-relevant behaviors. This explains why individuals who adopt faster reproductive strategies are likely to display a wider range of different mating strategies during their lives; their specific strategy at a given point in time depends to a greater extent on what their current environment is like (i.e., whether it is unpredictable or predictable). In contrast, individuals raised in safe, predictable childhood environments with abundant resources should enact less variable reproductive strategies across their lives. For these individuals, their early life environment was less challenging, more predictable, and most likely more controllable (Mittal & Griskevicius, 2014). As a result, even

when unpredictable events arise in adulthood, returns on their long-term investments (including children) are less likely to be viewed as threatened or outside their control. This is one of the main reasons why individuals who adopt a slower reproductive strategy also engage in greater parenting effort independently of current environmental circumstances (at least until they become too harsh and/or unpredictable).

#### DEVELOPMENTAL STRATEGIC PLURALISM AND RELATIONSHIP MAINTENANCE PROCESSES

According to the Developmental Strategic Pluralism Model, specific conditions should facilitate or impede relationship maintenance motives and behaviors. The most basic prediction is that prolonged exposure to harsh and/or unpredictable environments in childhood should lead individuals to adopt a faster reproductive strategy and be less motivated and willing to engage in relationship maintenance behaviors in other relationships later in life. This tendency, however, should be moderated by the degree of predictability versus unpredictability in the current environment, which should elicit (turn on) the characteristic behavioral tendencies of the individual's developmentally calibrated reproductive strategy.

One important question that flows from this model is "What are the environmental cues that activate and regulate an individual's reproductive strategy?" One approach might be to examine whether and how harsh, unpredictable stressors (e.g., unexpectedly losing a job or having to move, suddenly losing income, having unfamiliar people move in and out of one's house) impact relationship maintenance outcomes in different types of couples. These types of stressors may signal that one's investments in long-term relationships (including children), accrued resources, and other valued commodities could be at risk of being diminished or lost. By assessing the extent to which each romantic partner in a given relationship experienced a harsh and/or unpredictable childhood environment, one can test several novel predictions from the Developmental Strategic Pluralism Model. For instance, partners who are developmentally calibrated to enact a faster reproductive strategy should, on average, react to current unpredictable events – especially more severe and chronic ones – by disengaging from relationship maintenance and looking for better options, which should destabilize their current relationships. If, for example, an individual's income unexpectedly declines a great deal, his or her partner may start paying more attention to attractive alternatives (thereby destabilizing the relationship), particularly if the partner is pursuing a faster reproductive strategy. In contrast, those who grew up in predictable, plentiful conditions should double down and engage in more relationship-maintenance behaviors in order to protect their long-term

investments (at least until their current environments become too difficult and unpredictable). In this scenario, a partner who has a slower strategy should respond to the sudden loss of income by *devaluing* attractive alternatives in order to bolster commitment and maintain the relationship.

#### PARTNERS AS CURRENT ENVIRONMENTAL CUES

According to the Developmental Strategic Pluralism Model, each relationship partner's reproductive strategy may also affect his/her *partner's* reproductive strategy and relationship maintenance tendencies. For instance, if both partners are enacting faster reproductive strategies, relationship maintenance motivations and behavior should be lower in both partners unless their levels of commitment are, for some reason, very high. Conversely, if both partners are enacting a slower reproductive strategy, the relationship maintenance motivations and behaviors of both partners should typically be higher, generating greater relationship stability.

More nuanced patterns might emerge when one partner adopts a faster strategy and the other partner adopts a slower one. For example, the reproductive strategy of individuals who grew up in harsh and/or unpredictable environments may be more environmentally contingent – and, thus, more changeable – in adulthood. When living in predictable current environments, for instance, such individuals should engage in more relationship maintenance behaviors, though not to the same extent as individuals who grew up in predictable childhood environments. Under harsh and/or unpredictable current conditions, however, individuals raised in harsh and/or unpredictable childhood environments should shift toward an even faster reproductive strategy, including even more reduced relationship maintenance tendencies and potentially more destabilizing behaviors. When partners have different reproductive strategies and the current environment is *not* harsh and/or unpredictable, both partners should remain relatively motivated to maintain their relationship. But if the current environment suddenly becomes unpredictable, the partner with the faster strategy may start to behave in a more “short-term” manner and become less inclined to enact relationship maintenance behaviors. The partner who adopts the slower strategy, on the other hand, should continue to engage in relationship maintenance behaviors (up to a point), partly in an attempt to salvage long-term investments.

Current environmental threats can also be signaled directly by partners themselves. Consider the “partner transgression” relationship threat in Table 3.1. Such transgressions might signal to “fast” partners that the current environment is harsh (e.g., people in the environment are not trustworthy or supportive). Instead of responding by becoming more accommodating or making benign attributions for their partner's behavior, partners enacting a faster strategy may make hostile attributions, which ought to destabilize the

relationship. Moreover, if a couple's goals become misaligned, partners who adopt a faster reproductive strategy are likely to sacrifice less, especially if making sacrifices is viewed as futile given current uncertainties. For example, if a partner wishes to pursue a dream job in another city, the partner adopting a fast strategy may view the situation as uncertain or unlikely to work out and, thus, may respond by making fewer sacrifices. In sum, people who adopt a faster reproductive strategy are likely to respond to potential threats in relationships with destabilizing thoughts, feelings, and behaviors, which should facilitate the enactment of a mating strategy designed to hedge one's bets against an uncertain future.

#### SEX DIFFERENCES

The Developmental Strategic Pluralism Model anticipates that both sexes should behave fairly similarly in reaction to the same early life experiences. That is, men and women who grow up in predictable environments should typically adopt slower reproductive strategies. However, parental investment theory (Trivers, 1972) predicts that males and females should adopt somewhat different reproductive strategies. Specifically, the sex that has the highest obligatory initial investment in offspring (such as the time and energy associated with gestation and lactation in mammals) should invest more in parenting effort. In humans, females have a higher initial obligatory investment in reproduction and, therefore, they typically adopt somewhat slower reproductive strategies than most males. In contrast, because initial obligatory investment is somewhat lower for males, men tend to pursue somewhat faster reproductive strategies than women in general. A considerable body of research has documented these sex differences (see Buss & Schmitt, 1993), even though there is much more variability in reproductive strategies within each sex than between them, on average (Gangestad & Simpson, 2000).

The Developmental Strategic Pluralism Model proposes that the early environment, perhaps in combination with biological sex (including sex differences in initial obligatory investment in reproduction), should shape the adoption of faster versus slower reproductive strategies. For example, men who grew up in harsh and/or unpredictable environments should pursue the fastest reproductive strategies, given both the nature of their early environment and their lower obligatory investment in reproduction. In contrast, women who grew up in plentiful, predictable environments should adopt the slowest reproductive strategies. For these women, future investments are more likely to pay off, and the cost of raising offspring without a partner is likely to be high (which may be true of many women).

In summary, an individual's developmental history should influence his or her perceptions of the degree to which long-term investments are likely to "pay off" over time. Moreover, an individual's biological sex also affects

mating effort, given that males have no limit on the number of children they can conceive, whereas females are limited by both time and the finite number of children they can bear during their lives. Despite the implications of parental investment theory, however, both men and women should (and do) engage in the full gamut of reproductive behaviors, ranging from those that reflect high mating effort to those that reflect high parenting effort (Gangestad & Simpson, 2000). As a result, the early environment should play an important role in calibrating faster and slower reproductive strategies, not only within each sex, but also between them.

#### SUMMARY AND CONCLUSION

Relationship maintenance processes have been studied mostly from a proximate causation perspective, shedding light on how different kinds of relationship threats tend to elicit relationship maintenance behaviors. There are good reasons to believe, however, that more distal evolutionary perspectives can add to our understanding of relationship maintenance processes and outcomes. In this chapter, we have proposed that the tendency to engage in maintenance behaviors should depend on the adoption of specific reproductive strategies defined by LHT and Belsky and colleagues' (1991) Evolutionary Model of Social Development.

The central claim of these evolutionary models is that exposure to specific kinds of environments in childhood should shape which type of reproductive strategy an individual adopts. The childhood environment can directly or indirectly (via parenting) signal to young children what kinds of threats and opportunities they might expect in adulthood and, therefore, which reproductive strategy might be most adaptive. Early environments characterized by unpredictability in particular should lead to the adoption of faster reproductive strategies with an associated decrease in motivation to maintain relationships in adulthood. In contrast, safe, predictable environments should typically result in slower strategies characterized by higher levels of maintenance behaviors in adulthood.

The Strategic Pluralism Model, on the other hand, specifies which features of the *current* environment are likely to impact relationship maintenance processes. In environments where biparental care can significantly increase the reproductive fitness of parents and their children, individuals should invest more heavily in their romantic relationships. However, when the current environment renders biparental care less effective at improving fitness, individuals should invest relatively more in short-term mating opportunities.

In this chapter, we have suggested that the Developmental Strategic Pluralism model, which merges key features of these models, generates more precise predictions regarding who should be motivated to engage in more versus fewer relationship maintenance behaviors in adulthood. Our

argument centers on the idea that the early environment often calibrates the specific reproductive strategy that an individual adopts. Because humans are a K-selected species, we tend to adopt slower reproductive strategies focused on investing higher amounts of time, effort, and resources in close relationships and parenting effort. However, exposure to dangerous and/or unpredictable early life environments should generate greater *flexibility* in reproductive strategies. This is because such environments encourage individuals to pursue a secondary (faster) reproductive strategy when environments become unpredictable or unsafe. The Developmental Strategic Pluralism Model, therefore, anticipates that behaviors associated with faster strategies – such as being opportunistic, seeking immediate rewards, having poor impulse control, and keeping mating opportunities open – should be witnessed primarily when the current environment is harsh and/or unpredictable. When it is safe and predictable, however, faster strategists may be somewhat more inclined to maintain their romantic relationships. Conversely, individuals raised in safe, predictable childhood environments might exhibit somewhat less flexibility in their reproductive strategies throughout their lives, because, even when unpredictable events arise, returns on their long-term investments (including children) are less likely to be perceived as threatened or beyond their control.

In terms of relationship maintenance processes, the Developmental Strategic Pluralism Model identifies both the developmental antecedents and the current environmental circumstances that should trigger relationship maintenance and destabilizing behaviors. Couples who are currently in safe, predictable environments should be motivated to engage in maintenance behaviors in most circumstances. However, when environments become harsh and/or unpredictable, partners who are developmentally calibrated to enact faster reproductive strategies should experience more destabilizing thoughts, feelings, and behaviors to hedge their bets against looming uncertainty. Partners raised in safe, predictable childhood environments, on the other hand, should engage in stronger or more relationship maintenance behaviors until such efforts prove futile.

In addition, sex differences might play a role in these processes. For example, men who grew up in highly unpredictable environments should exhibit the fastest reproductive strategies and display the most relationship-destabilizing behaviors, on average. Conversely, women who grew up in safe, predictable environments are likely to develop the slowest reproductive strategies and enact the most relationship maintenance behaviors, on average.

To test the key predictions of this model, relationship researchers should include measures of childhood experiences, current life stressors, and relationship maintenance behaviors in their studies. Ideally, childhood measures would be collected using prospective longitudinal research designs through childhood into adulthood to measure environmental stressors in real time.

Such designs, however, are both expensive and time-consuming. A more feasible approach is to employ retrospective reports of childhood experiences and environments using interview or questionnaire measures. Current life stressors could also be acquired with interviews or questionnaires. Another possibility is to induce stress in the laboratory by using a stressful paradigm (e.g., discussing a major relationship conflict) or an experimental manipulation in which participants are randomly assigned to either a “stress” or a “no stress” condition. After inducing stress, researchers could then measure the typical relationship maintenance responses of interest. The critical idea is that one’s developmental history (assessed by retrospective reports) should modulate how either a laboratory stressor or self-reported currently stressful circumstances affect relationship maintenance outcomes.

In conclusion, the Developmental Strategic Pluralism Model recasts relationship-maintenance processes as an important set of behaviors tied to global reproductive strategies. In doing so, it addresses not only when individuals are more likely to maintain their relationships, but also when they should be motivated to perhaps destabilize them. The model also highlights the importance of considering trade-offs that shape different reproductive strategies and how these strategies may affect relationship maintenance behaviors in turn. We propose that the adaptive value of maintenance behaviors should depend on both a person’s developmental history *and* his/her current environment. Our ultimate hope is that the Developmental Strategic Pluralism framework will allow researchers to think more deeply and clearly about both relationship maintenance and destabilizing behaviors at different levels of analysis, ranging from proximate causation, to ontogeny, to ultimate causation.

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