

**I** Intriguing issues pertaining to normative changes in attachment in adolescence are addressed, integrating psychoanalytical thinking, developmental and attachment theory, and research.

## Putting Eggs in More Than One Basket: A New Look at Developmental Processes of Attachment in Adolescence

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“In some ways we know a great deal about attachment in adolescence, yet in other respects we know disconcertingly little. . . . Attempts to assess attachment in adolescence inevitably must confront the questions of what attachment becomes and what function it serves during this stage of the lifespan” (Allen & Land, 1999, p. 331). This concluding remark of the integrative chapter on attachment in adolescence in the *Handbook of Attachment* is the opening point of this chapter and volume.

In recent years the number of empirical studies examining attachment in adolescence has grown. Most of the research has focused on individual differences in attachment security. This chapter seeks to extend previous research and theorizing on attachment in adolescence by elaborating on what might be considered the normative, universal developmental processes of the behavioral system of attachment during adolescence. To this end we use the notion of developmental tasks, which have been defined as socially, psychologically, and biologically determined activities or goals that individuals are expected to accomplish at certain ages or stages of life. The content and timing of such tasks are expected to be a function of biological capabilities and socially constructed norms and expectations (Schulenberg, Bryant, & O'Malley, 2004). We discuss four developmental tasks that adolescents

commonly face concerning expected changes in the structure and operation of their attachment behavioral system: changes in the way attachment is expressed, changes in the targets of attachment behaviors, changes in the composition and structure of network of attachment figures, and changes in attachment internalized models.

We follow the ideas set forth by Bowlby and later developed by Ainsworth and adopt the ethological and evolutionary perspectives regarding the primacy, universality, and biological basis of attachment. We also build on a large group of researchers and scholars who have suggested various ideas and models. We further rely on two additional bodies of research: the research literature on developmental changes in adolescence and psychoanalytically oriented conceptualizations and observations. Our analysis is not intended to be a state-of-the-art review but as a somewhat speculative, and we hope challenging proposal that raises new research questions and opens up fruitful arenas for research. We address intriguing issues pertaining to normative changes in attachment in adolescence:

1. *Turning away from parents.* How can we explain the seemingly universal tendency of adolescents (even those who enjoy secure relationships with their parents) to distance themselves from their parents, and even deliberately refrain from turning to them in times of distress?
2. *Turning to others (not parents).* Why do we see strong investment in relations with peers that seem to acquire partial properties of attachment relationships? Are these really attachment relationships? How can we explain other emotional and social investments characteristic of this period, in the self and in distant others?
3. *Forming pair-bonds.* Where does all this lead? Is the end point of this ontogenetic developmental trajectory the creation of an attachment pair-bond with a sexual mate that assumes primacy in the attachment hierarchy?
4. *Convergence and diversity in working models of attachment.* How can we explain the convergence of one overarching style or state of mind coexisting with many different, alternative and competing submodels?
5. *Individual differences.* How do adolescents with different attachment models navigate the developmental tasks of attachment in adolescence?

## Turning Away from Parents

There are clear indications in the developmental literature that in adolescence, the reliance on parents as exclusive attachment figures decreases (Allen & Land, 1999). Adolescents spend less time with parents and family and more time with peers (Larson, Richards, Moneta, Holmbeck, & Duckett, 1996; Youniss & Smollar, 1989). There is a decline in shared activities and in the extent of physical affection between adolescents and parents (Conger & Ge, 1999; Salt, 1991) and an increased need for privacy (Josselson, 1980; Steinberg & Silk, 2002).

Furthermore, bickering and disagreements over everyday issues characterize parent-adolescent relationships, particularly during early adolescence (Collins & Laursen, 2004). Although conflicts normally provide adolescents with arenas for improving negotiation skills, conflicts with parents during adolescence are generally resolved through disengagement or giving in to parents. Conflict frequency peaks in early adolescence, while conflict intensity increases from early to middle adolescence (Collins & Steinberg, 2006).

Other indications of this distancing between adolescents and parents were found in studies that specifically examined attachment processes. For example, Ammaniti, van IJzendoorn, Speranza, and Tambelli (2000) followed participants from ages ten to fourteen using the Adult Attachment Interview (AAI). With age, the adolescents increased their tendencies of derogation of parents and lack of recall, and they perceived their parents as more rejecting. Similarly, in Scharf (2001) and in Scharf, Mayseless, and Kivenson-Baron (2004), many of the adolescents categorized as autonomous in the AAI were characterized by restriction in expression of attachment sentiments even when talking coherently about their relationships.

In line with this tendency of distancing, Hazan, Hutt, Sturgeon, and Bricker (1991), who asked children and adolescents to name people they would choose for different attachment functions, found that at age seventeen, 75 percent preferred peers to parents in the functions of proximity seeking and separation protest. Even in the function of secure base, parents were only somewhat favored over peers (55 percent versus 45 percent).

How do we account for these processes? According to psychoanalytical thinking (Freud, 1958), the physical changes of puberty play a central role in triggering parent-adolescent distancing. The reawakening of oedipal emotions and sexual drives is expressed in internal conflicts between the id and the superego, and externally in bickering and distancing between adolescents and their parents. It has been argued that emotional detachment from parents is needed to allow investment in extrafamilial relationships.

From a sociobiological viewpoint (Steinberg, 1990), bickering between parents and adolescents has been interpreted as ensuring that adolescents will spend time away from their families. This behavior serves to prevent incest and guarantee investment in relationships with nonkin. Such distancing between youngsters and parents is almost universally observed in non-human primates, and it serves to minimize inbreeding and enhance reproductive fitness. This need is exacerbated by psychosocial historical changes. Over the past century, the amount of time that physically mature youngsters and their parents live in close contact has increased, thus threatening the genetic integrity of the species and enhancing the need to actively use various means to distance from parents (Steinberg, 1987).

The distancing and the weakening of emotional investment in parents may serve yet another evolutionary purpose: promoting self-reliance and individuation. Enduring dependency on parents might jeopardize

youngsters in the long run. To increase survival fitness, the young need to be self-reliant and fend for themselves. Adolescents should be prepared to function independently to ensure their survival should their parents not be around, a likely occurrence. These processes refer to psychological and instrumental separation from the actual parent, expressed in the need to obtain and manifest to oneself and to others that one has the capacity to solve problems and face challenging and stressful situations by oneself and survive. This demand is prominent in many rites of passage in various cultures (Ford & Beach, 1951).

The processes of establishing self-reliance involve a less overt part too: individuation from the introjected parent of infancy (Josselson, 1980). Josselson (1980, p. 193) provides a compelling description:

In large part, the early adolescent attempts to feel separate and distinct from his parents by finding ways of irritating them. This is a way of flexing the will, of proving to oneself that one is taken seriously as a separate person. . . . In order to deal more effectively with the introjects, the adolescent may project them back into the reality parents and, for example, fly into a rage when his mother asks, where are you going? For a moment the reality mother is experienced as controlling, over powerful mother of early childhood. This interaction, although it takes place in reality, has its meaning vis-à-vis the internal world.

The actual separation and the disengagement from internalized models reflect the individuation process (Blos, 1962). In the words of Blos (1967, p. 168), "Individuation implies that the growing person takes increasing responsibility for what he does and what he is, rather than depositing this responsibility on the shoulders of those under whose influence and tutelage he has grown up."

Frequently adolescents were described as striving for such autonomy and self-reliance, while parents were described as having difficulties in letting go and trying to preserve the dependencies of their offspring (Stierlin, 1981). From the perspective of attachment theory, there is no reason to assume that the developmental tasks of parents and adolescents are incompatible. On the contrary, from a parental perspective, there is an evolutionary advantage for raising an autonomous offspring who can function and survive on his or her own (Youniss & Smollar 1989). Only in cases where relationships are entangled and insecure would we expect considerable difficulties.

The processes of distancing and weakening of emotional investment and dependency on parents are reminiscent of the process described in psychoanalytical writings as *decathexis* (Rycroft, 1995). *Cathexis* represents the binding of emotional feeling and significance to an idea or a person. *Decathexis* refers to unbinding of interest, attention, emotional involvement, or energy (libido) from one person or issue so that it can be reinvested in oneself or in another person or area. We suggest that a process reminiscent of *decathexis* occurs in adolescence and can be construed as a developmen-

tal task. This process involves reducing emotional investment in parents and refocusing and redirecting some of this investment to relationships with peers or nonfamily members.

Interestingly these processes of individuation and distancing seem to be accompanied by connectedness with parents (Youniss & Smollar, 1989; Bloss, 1967). Although adolescents deidealize their parents and at times avoid their parents, particularly when they are stressed (Allen & Land, 1999), this temporary distancing does not imply cessation of attachment to parents (Ainsworth, 1989). In general most adolescents enjoy warm and close relationships with their parents, need their validation and respect, consult with them, and turn to them when distressed (Steinberg, 1990), and most adults continue to have meaningful and close relationships with their parents (Zarit & Eggebeen, 2002).

Thus, adolescents appear to invest emotionally less in their relationships with parents, so that these relationships “penetrate fewer aspects of their lives than they did before” (Ainsworth, 1989, p. 36). They further appear to redefine the quality of the relationship with their parents as more equal and mutual, but they do not relinquish their parents as attachment figures. Unlike most primates, which leave their parents for good following puberty (Fraleigh, Brumbaugh, & Marks, 2005) and thus can and should disengage completely from their parents, this is not the normative trajectory of attachment relationships for humans. After adolescents succeed in decreasing emotional investment in parents, succeed in forming relationships outside the family of origin, and prove to themselves that they can manage and function independently, they seem willing and able to rely on their parents once more. As a result, adolescence does not involve permanently severing ties with parents, but rather decreasing their importance and intensity. The extent to which this importance and intensity decrease, as well as the extent to which late adolescents or young adults go back to relying on their parents, is quite varied. It depends on individual differences but is also considerably influenced by the cultural, ecological, and historical context (Belsky, 1999; Scharf & Mayseless, 2004).

## Turning to Others

The literature on relationships with peers in adolescence underscores their importance and unique role. Empirical research suggests that during adolescence, perception of parents as the primary sources of support declines, and perceived support from friends increases (Hazan & Zeifman, 1994; Collins & Steinberg, 2006). Furthermore, friends are perceived as providing similar (Scholte, Van Lieshout, & Van Aken, 2001) or even greater support than parents do (Furman & Buhrmester, 1992). At least some adolescent friendships are characterized by loyalty, intimacy, and disclosure; hence, they evince some of the characteristics of attachment relationships (Furman & Buhrmester, 1992).

In adolescence, peers play a much larger role in providing felt security in times of need and in helping to regulate distress in alarming and fear-inducing situations. Furthermore, proximity seeking and separation distress, which help maintain the availability and exclusivity of the specific relationship with a preferred peer, are observed. In addition, adolescents feel more secure and confident to explore the world, in particular the interpersonal world of sexual relationships in the company and proximity of a good friend.

Yet the commitment and strong emotional investment that include a sense of being able to trust the other forever and for “real” survival issues, which characterize most relationships with parents, are in most cases lacking in relationships with peers. There is substantial instability in friendships during adolescence (Hardy, Bukowski, & Sippola, 2002). Moreover, the belief that most adolescents have a special and exclusive close friendship in which attachment qualities are common is not necessarily true and should be examined more systematically. Probably most adolescents have a preferred peer; however, these relationships are not always mutual and not necessarily intensive in nature (Brown & Klute, 2003).

Consistent with these findings, Ainsworth (1989) argued that some friendships have an attachment component and some, but not all, constitute enduring affectional bonds. However, she suggests that whereas close friends may drift apart as their interests change and their friendship becomes less satisfying, bonds with kin tend to be more persistent, even if more ambivalent. The explanation offered is rooted in evolution and notions of the importance of gene survival (Ainsworth, 1989). Whereas stable relationships with kin serve a gene survival function, those with friends do not. Together the lack of long-term commitment in most friendships, as well as their negotiable and transitory nature, and the lack of mourning reactions to termination of most friendships, raise doubts about the extent to which most friendships are real attachment bonds.

What is the meaning and significance of these processes in terms of normative and ontogenetic development of attachment in adolescence? First, investing emotionally in friendships and relying on peers’ support allows the adolescent to distance and lessen investment in relationships with parents and find another interpersonal avenue in which to monitor and regulate his or her distress feelings.

Second, experiencing some attachment functions in relationships with peers paves the way to learning more mutual and egalitarian attachment relationships in which both parties provide and receive care and protection. Reciprocal relationships are essential for mating and survival, and they promote the development of adult-like attachment relationships (Allen & Land, 1999), as well as caregiving capacities. The relationships with peers enable practicing and scaffolding and lay the foundation for developing future mature romantic relationships. Thus, relationships with peers may be seen as the training ground for the formation of egalitarian attachment relation-

ships, which cannot in principle be learned within the hierarchical attachment relationships with parents.

Third, the incorporation into one's attachment network of new and often diverse figures with whom adolescents practice attachment behaviors and sentiments enables much higher flexibility in times of stress. Adults in the making who need more autonomy and space might find it wiser to distribute the emotional investment across several figures. Instead of a moderately centralized investment that characterizes the attachment relationship and attachment network in infancy and childhood, adolescents spread their now-freed emotional investments in relationships among several figures. In such diversification, the availability of one figure is less important if other figures are around. Furthermore, adolescents might not yet be mature enough to make a final choice of a full-fledged attachment figure with long-term commitment. Therefore, in such an unstable context, it is better to decentralize emotional investments.

This diversification takes several interesting forms, all discussed (albeit not in an attachment context) in the developmental research on adolescence. For example, the tendency to diversify and decentralize emotional investments might explain adolescents' affiliation with clique members (Brown, 2004) and the importance of friends for the felt security of the adolescent. Furthermore, adolescents might sometimes develop secondary or supplementary attachments to mentors, instructors, and other less authoritative adult figures. These relationships may differ from primary attachments in their lower levels of commitment, yet they may serve several attachment functions, in particular, assistance in regulating negative emotions and the provision of a secure base from which to explore (Ainsworth, 1989).

Even distant or symbolic relationships with idols may serve some of the functions of diversification of emotional investment. The deidealization of parents paves the way for idealization of such figures (Giles & Maltby, 2004). In these actual or symbolic relationships, adolescents are able to learn through emulating new and diverse models of being and succeeding in life. Highlighting the attachment aspect in such symbolic relationships, scholars have suggested that strong "relationships" with celebrities might develop during times of stress or for individuals with less positive peer relationships (Giles & Maltby, 2004). Specifically, when adolescents do not want to, or cannot, rely on parents, or when reliance on peers is partly compromised, turning to idols even in a symbolic way may serve the regulation of self-worth and emotional distress. The transitory role of such emotional investments is nicely illustrated in the words of Blos (1967, pp. 166–167): "It should not surprise us that the bedroom walls, plastered with the collective idols, become bare as soon as object libido is engaged in genuine relationships. Then, the pictorial flock of transient gods and goddesses is rendered dispensable almost overnight."

Another observed propensity related to the decathexis process and diversification in the service of higher self-sufficiency is adolescents' heightened investment in the self, which is expressed in intensive self-absorption. As Blos (1967, p. 173) pointed out, "We observe in adolescence that object libido—in various degrees, to be sure—is withdrawn from outer and inner objects and is converted into narcissistic libido by being deflected onto the self. This shift from object to self results in the proverbial self-centeredness and self absorption of the adolescent who fancies himself to be independent from the love and hate objects of his childhood." This investment in the self might be expressed in the phenomenon of the imaginary audience, adolescents' tendency to see themselves at the center of others' attention, and in the personal fable phenomenon: adolescents' belief in their uniqueness, invulnerability, and omnipotence. These experiences too facilitate the individuation process in that they allow the decrease in emotional investment in parents (Lapsley, 1993). Belief in the imaginary audience makes possible continuing connectedness, while the personal fable facilitates the strivings for increased uniqueness and separateness.

In sum, the weakening of investment in parents does not normatively lead to investment in peers as full-blown attachment figures. Rather it appears to lead to a diversification of emotional investment to various sources: the self as source of security, relationships with friends with some attachment properties, actual or symbolic relationships with nonparental adults such as a coach or an idol, and relationships with romantic partners. These processes are construed here as developmental tasks of adolescence with regard to the attachment system.

### **Forming Pair-Bonds**

From research conducted mostly in Western and industrialized cultures (Collins & Steinberg, 2006), it is quite clear that in adolescence, relationships with romantic partners change considerably with age in terms of frequency, importance, and quality. For example, in a representative sample in the United States, about 25 percent of twelve year olds reported having had a "special romantic relationship" in the previous eighteen months; these numbers increased to about 50 percent in fifteen year olds and to 70 percent by age eighteen (Carver, Joyner, & Udry, 2003). By age seventeen to eighteen, 60 percent reported being in a relationship that persisted eleven months or more. Thus, stable romantic relationships become prevalent only in late adolescence.

Furthermore, the evidence so far indicates that early adolescents perceive their romantic relations in an idealized and stereotypical way, tend to choose partners mostly following expectations of their social networks and in the service of status attainment, and emphasize superficial features of potential partners such as fashionable clothes (Zani, 1993). Thus, needs for status attainment, sexual experimentation, and recreation reflecting the affiliative and sexual and reproduction behavioral systems are the most salient in romantic relationships in early adolescence (Furman & Wehner, 1997;

Shulman & Scharf, 2000). During late adolescence and early adulthood, the attachment and caregiving systems become more prominent in romantic relationships. Older adolescents tend to choose romantic partners based on intimacy and compatibility (Zani, 1993), and romantic relationships begin to fulfill needs for support and caregiving (Furman & Wehner 1997; Scharf & Maysless, 2001).

Ainsworth (1989) argued that “the hormonal, neurophysiological, and cognitive changes lead the young person to begin a search for a partnership with an age peer, usually of the opposite sex—a relationship in which the reproductive and caregiving systems, as well as the attachment system, are involved” (p. 710). In line with this depiction, attachment researchers have argued that adolescence and young adulthood involve a transfer of attachment functions from parents to peers, and eventually to a romantic partner. Some scholars (Hazan & Zeifman, 1994) have suggested a gradual transfer that starts with changes in the figures to whom proximity maintenance and separation distress are directed, continues with changes in the safe haven function (to whom do individuals turn when they are distressed), and is finalized with changes in the secure base function (the person whose availability allows individuals to feel bolder to explore the world). This transfer is mostly to peers, though other adult figures may also be involved.

In the previous section we suggested that although reorienting emotional investment toward friends serves attachment functions, relationships with them normatively do not replace parents and in most cases do not become full-fledged committed attachment bonds. These relationships might serve as a transitory stage in the process of transfer of attachment and emotional investment from parents to a romantic partner. According to this view, the end point of the developmental trajectory of the attachment behavioral system is the creation of a full-fledged committed attachment pair-bond with a sexual mate who replaces the primary caregivers, mostly parents, at the head of the attachment hierarchy.

What is the current evidence regarding the place of romantic relationships as attachment bonds in adolescence? Do they indeed function as attachment relationships, or at least acquire attachment functions? And do they normatively replace parents as primary attachment figures?

The evidence so far seems to suggest that this trajectory is apparent in some individuals and in some cultures but is not universal; in particular, it is far less universal than the attachment to a caregiver in infancy that characterizes primates and even mammals. Although a discussion of this perspective would direct us to consider attachment processes in adulthood, knowing where the developmental trajectory leads might prove highly valuable in understanding attachment processes in adolescence.

Bowlby (1973) referred to the attachment behavioral system as biologically prewired and evolutionarily chosen, based on ethological observations that reflected the universality of attachment behaviors in most mammals, and in particular in primates and the human species. Furthermore, his

suggestion that the quite helpless offspring of primates cannot survive on their own without the protection of an older, wiser, and stronger ally was so compelling that the universality postulation was clearly invoked. Thus, the formation of the attachment bond was accepted as evolutionarily chosen and necessary for survival in infancy. However, the necessity of attachment relationships to survival in older children and still more in adulthood is not as clear. In fact, with age, the importance and centrality of attachment in one's life diminish, though this function remains to receive protection and get help with emotional and behavioral regulation during distress.

The literature on close relationships (Diamond & Hicks, 2004) documents that people in close relationships, particularly those who enjoy a unique close relationship, probably an attachment one, live longer and enjoy better well-being. Thus, the protective function of a close relationship, especially an attachment relationship, remains operative even in adolescence and adulthood. However, its essentiality for survival is much reduced compared with infancy and early childhood. Adolescents and adults are much better at protecting themselves and mobilizing other sources besides their attachment figures to receive protection. In fact, their survival is largely not dependent on their attachment figures, so we would argue that the natural selection processes that promoted the continuing operation of this behavioral system in adulthood are much elastic and less restrictive.

Accordingly it has been observed (Fraley et al., 2005) that whereas attachment processes in infancy and early childhood (before puberty) are fairly universal among primates and humans, the formation of a committed, moderately stable sexual pair-bond is not. Very few mammals and primates form such pair-bonds, and in fact the formation of committed, stable sexual pair-bonds is the exception, not the rule, in primates. Even in the human species, it is not clear whether committed pair-bonds are the rule. Examination of various cultures and subcultures in the present as well as throughout recorded history depicts a variable set of social bondings in which stable pair-bonds are but one arrangement. For example, ethnographic reports of contemporary hunter-gatherer tribes demonstrate that in such tribes, though pair-bonds are formed by most men and women, they are not universal. Pair-bonds do not seem to be stable, and pair-bonding may be mostly described as a serial monogamy. The stable constellation of bonding in the social group is with age-mates who grew up together (Caporael, 2001) or kin from the larger family, including parents and siblings. Other constellations in which attachment bonds seem to operate in adulthood may include a gender division in which men bond with other men, mostly kin, and women with other women, again mostly kin.

It has been suggested (Hazan, Gur-Yaish, & Campa, 2004) that the human species, unlike other primates, has evolved uniquely to develop attachment pair-bonds to promote paternal investment in the offspring, necessary because of the longer duration of the infant's dependency on the mother. However, recent evolutionary analyses (Fraley et al., 2005) have demonstrated that paternal involvement is much more prevalent, and prob-

ably started far earlier in evolutionary history than pair-bonding. If anything, paternal investment led in some cultures to pair-bonding rather than the reverse.

In line with these observations, examination of adults' networks of attachment relationships (Doherty & Feeney, 2004; Trinke & Bartholomew, 1997) revealed that these tend to include several figures (the mean seems to revolve around five) and that although romantic partners are central, there are other figures that are perceived as primary, such as parents, peers, or siblings. In particular, for most participants, parents were still part of the attachment network, often occupying a central position.

Together these different sources suggest that the transfer of attachment functions from parents to peers, and eventually the creation of an attachment romantic pair-bond, cannot be conceived as the ontological and developmental end point of the attachment system. Instead, the current observations seem to suggest that the main normative developmental trajectory involves two major processes: (1) attenuation in the importance of attachment relationships for the survival of the individual and (2) diversification of emotional investments. Adolescents partially transfer emotional investment from parents to peers and romantic partners, yet not to replace them fully as attachment figures but to diversify. This diversification, construed here as a developmental task, is manifested in the increase in number of attachment figures to whom one is attached, the lower levels of centrality accorded to each figure, and specialization of different figures in different situations or conditions (for example, turning to Mom when in physical pain and to best friend when emotionally hurt).

## **Convergence and Diversity in Working Models of Attachment**

How do these processes affect adolescents' internal working models of attachment? Research on infancy and early childhood attachment patterns demonstrated that children form specific relationships with each attachment figure and that these relationships are quite independent in their quality. Some of these relationships may be more central than others in terms of their effects on child's outcomes, yet each may have distinct effects (Cassidy, 1999).

Interestingly, in late adolescence, the application of the Adult Attachment Interview resulted in the assignment of a classification into one overarching state of mind with respect to attachment, reflecting one central way in which this individual deals with attachment-related emotions, cognitions, and behaviors. Thus, children start by having several somewhat independent attachment models; by late adolescence, these seem to converge into a general model or state of mind with regard to attachment that guides relationships with new people as well as one's parenting (Allen & Land, 1999). This results in the attachment model becoming more a property of the individual: a personality attribute that individuals carry with them to other

circumstances, other encounters, and other roles rather than a property of the specific relationships.

By contrast, several recent studies have demonstrated that in late adolescence, individuals still hold different and somewhat independent models of attachment. For example, in a study administering the AAI to adolescents separately with regard to mothers and fathers, Furman and Simon (2004) found that states of mind with regard to each figure, though quite highly correlated, were still distinct. Similar findings were reported in relationships with parents, friends, and romantic partners (Furman, Simon, Shaffer, & Bouchev, 2002). Although classifications based on interviews modeled after the AAI were generally alike, a moderate degree of dissimilarity existed among the models. This dissimilarity was mostly apparent when comparing internal models of attachment relationships with parents and romantic partners. Similarly, only a moderate level of similarity was reported in adulthood when relationships with parents and romantic partner in a committed relationship were assessed (Owens, Crowell, Pan, & Treboux, 1995).

These findings suggest that in late adolescence and young adulthood, individuals hold a general overarching model that reflects in general their personality in terms of regulating attachment-related emotions, cognitions and behaviors, and a large number of specific models. These specific models can reflect relationships with specific people, different levels of consciousness, and also different roles—offspring, friend, romantic partner. (For a full discussion, see Bretherton & Munholland, 1999; Chen, Boucher, & Tapias, 2006.)

Thus, two developmental processes occur in the period from infancy to adolescence: convergence of attachment models, on the one hand, and an increase in diversity, variety, and heterogeneity, on the other. How do these two processes co-occur? We believe that the process of convergence and the emergence of a general dominant way of addressing attachment issues are still apparent prior to adolescence, probably already in early childhood. The seeming emergence of consolidation in adolescence may be a result of the tool used to assess individual differences at this age, the AAI. In fact, assessment of attachment models with fathers and mothers in middle childhood already shows moderately high convergence (Kerns, Tomich, & Kim, 2006). We suggest that although further convergence of models occurs in adolescence, the major developmental process of adolescence with regard to internal models is a leap in complexity, flexibility, and sophistication.

First, the adolescent's cognitive and emotional capacity to reflect on the various relationships, augmented by emotional distancing from parents, fosters a process of change and flexibility as opposed to automatic activation of various cognitive, emotional, and behavioral tendencies. Second, diversification in attachment relationships, and the addition of different figures with whom attachment functions are experienced, opens the way for a diversity in the adolescent's attachment models and possible change in the dominant model if the adolescent has one. Experimentation with various relationships extends the repertoire of perceptions, emotions, and behaviors

regarding attachment and promotes flexibility of working models. Finally, the capacity of adolescents more freely to choose with whom they want to form a relationship facilitates a process of compensation and a change in earlier models.

These developmental processes result in an intricate network of models that exist at varying levels of specificity and awareness and allow high flexibility in activation, as well as open the way to changes in dominant models.

## Individual Differences

State of mind with regard to attachment reflects differences in capacity for flexibility of attentional processes pertaining to attachment (Main, 1991; Maier et al., 2004). Previous conceptualizations also suggested that it entails generalized expectations regarding the self and close relationships and various emotion-regulation and social competencies (Kobak, Cole, Ferenz-Gillies, Fleming, & Gamble, 1993). As such, it is implicated in affecting the way adolescents meet the developmental tasks of adolescence.

In general, an autonomous state of mind equips adolescents with the optimal resources, competencies, and familial contexts for coping with the developmental tasks of adolescence. Autonomous adolescents should cope more easily with the ontogenetic tasks of distancing from parents, demonstrating autonomous self-reliance, forging close relations with peers and romantic partners, and diversifying emotional investments. Attachment security has been associated with the capacity to balance autonomy and relatedness in the relationship with parents (Allen, Hauser, Bell, & O'Connor, 1994; Allen et al., 2003; Kobak et al., 1993). Furthermore, adolescent attachment security was positively associated with adolescent deidealization of mother and with maternal attunement and support (Allen et al., 2003). It might be easier and safer to argue with your parents when their consistent secure base is guaranteed.

Security of attachment was also associated with positive qualities of friendships such as closeness, an elaborate concept of friendship, and good emotional regulation abilities in times of conflict with best friends (Zimmermann, 2004), as well as with having secure working models of relationships with friends (Furman et al., 2002). Moreover it was associated with integration in the peer group and social acceptance (Allen, Moore, Kuperminc, & Bell, 1998; Zimmermann, 2004), positive dyadic interactions with the romantic partner (Roisman, Madsen, Hennighausen, Sroufe, & Collins, 2001), and higher capacity for mature intimacy in friendships and romantic relationships (Scharf et al., 2004). Among at-risk sixteen year olds, security was related to having first intercourse at a later age (O'Beirne & Allen, 1996) and with having fewer sexual partners and greater use of contraception (Moore, 1997). This might imply a "quality-versus-quantity" approach to sexual relationships (Allen & Land, 1999, p. 327; Belsky, 1999).

With regard to the capacity for autonomous and self-reliant functioning, autonomous individuals were rated by others (observers or peers) as more ego resilient, less anxious, and less hostile than insecure individuals, and security was associated with increases in social skills from ages sixteen to eighteen (Allen et al., 2002; Kobak & Sceery, 1988; Zimmermann, 1999).

Coping with the demands of military basic training (the normative home-leaving experience for compulsory military service for Israeli men at age eighteen), autonomous individuals reported using more problem-focused coping than did dismissing individuals, and their peers in basic training perceived them to cope instrumentally and socially better than their dismissing counterparts. During this stressful transition, they also perceived their parents as more sensitively responsive to them than did dismissing individuals (Scharf et al., 2004). In a different context Larose, Bernier, and Tarabulsky (2005) found that autonomous individuals showed better learning dispositions throughout the college transition. Seiffge-Krenke and Beyers (2005) found that secure individuals became more competent in dealing with different stressors from early adolescence to young adulthood. In sum, compared with others, autonomous adolescents probably find the developmental path of adolescence smoother and more gradual, and they cope better with its tasks.

Coping with the challenges of the developmental tasks of adolescence is less optimal for insecure adolescents. The trajectories might be different for preoccupied and dismissing individuals. Generally the evidence so far suggests that preoccupied individuals find the developmental tasks of adolescence more challenging than dismissing individuals do.

Preoccupation was associated with depression (Kobak et al., 1991; Allen et al., 1998) and thoughts of suicide (Adam, Sheldon, Adrienne, & West, 1996), more interpersonal difficulties, and more symptoms than in others (Brown & Wright, 2003). Preoccupation was further linked to an increase in delinquency from ages sixteen to eighteen (Allen et al., 2002). Preoccupied students who left home and moved to college experienced more stress over their family and reported more negative relationships with both parents, yet they had more contact with parents than autonomous individuals did (Bernier, Larose, & Whipple, 2005). Throughout the college transition, preoccupied individuals reported more fear of failure during the first semester, felt less comfortable seeking help from their teachers, and gave lower priority to their studies (Larose et al., 2005). Finally, compared with others, preoccupied individuals were viewed as less ego resilient and more anxious by peers and reported high levels of personal distress, while viewing their family as more supportive than the dismissing group did (Kobak & Sceery, 1988).

The lower functioning of preoccupied girls compared with others, especially across the transition away from home to compulsory military service, was underscored in another study (Scharf & Mayseless, 2005). Preoccupied girls evinced the worst adjustment and coping, as reported by them, their mothers, and their peers. They reported the highest levels of distress and lowest levels of well-being, emotional adjustment, and commitment to the

service. Their mothers viewed them as sad, stressed, and malfunctioning and with the highest level of social problems. Their peers similarly viewed them as the saddest.

The findings on dismissing individuals are less clear. In general, dismissing adolescents were more likely to evince substance abuse and conduct disorders (Brown & Wright, 2003) and were less likely to adjust well to the transition away from home. For example, dismissing individuals reported less preparation for examinations and diminished attention throughout the transition to college (Larose et al., 2005), were rated higher on hostility by peers, and reported more distant relationships in terms of more loneliness and low levels of social support from family (Kobak & Sceery, 1988). They (only boys) further evinced lower levels of intimacy in relations with friends and romantic partners and lower levels of coping with compulsory military service (Scharf et al., 2004).

However, in several studies, dismissing individuals proved quite similar to autonomous ones in their functioning. For example, dismissing girls were not different from autonomous girls in their coping and adjustment to compulsory military service in their self-reports and in the reports by mothers and friends (Scharf & Mayseless, 2005). And dismissing boys were similar to autonomous ones on indicators of individuation (Scharf et al., 2004). Some of the developmental tasks of adolescence, in particular distancing from parents, developing autonomous self-reliance, and diversifying emotional investments, perhaps do not pose such a difficult challenge to dismissing adolescents as they do to preoccupied ones. By contrast, forging intimate relations that evince attachment functions with peers may be a more challenging task for dismissing than for preoccupied individuals (Scharf et al., 2004).

Most of the studies described here did not examine ontogenetic developmental processes even when they employed a longitudinal design. For example, data on how adolescents with different states of mind cope with the developmental expectation to decrease emotional investment in parents, or evidence whether or how internal models of different kinds become more flexible and sophisticated, is scarce. In the context of individual differences in attachment, there is also very little indication regarding the longitudinal process of diversification and the question of whether close relationships with peers or investment in self-reliance serve as compensation for decreased investment in parents.

As a preliminary examination of this direction, Freeman and Brown (2001) found that secure adolescents (identified using a projective measure) favored mothers over best friends, romantic partners, and fathers as attachment figures, whereas insecure adolescents indicated a strong preference for boyfriend or girlfriend as their primary target for attachment, and nearly a third of dismissing individuals identified themselves as their primary attachment figure. These interesting findings, as well as other questions related to the way adolescents with different attachment models traverse the developmental tasks of adolescence, await examination in future research.

## Discussion

Four developmental tasks of adolescence were described here as involved in the ontogenetic developmental processes that characterize attachment in adolescence: weakening of emotional investment in relationships with parents, developing autonomous self reliance—individuation, forging close relations with peers and romantic partners in which reciprocity is apparent, and diversifying emotional investments. Some of these tasks, in particular the achievement of autonomy and independence from parents and the formation of close relationships with peers, are central tasks in most conceptualizations regarding developmental tasks in adolescence (Schoeppe & Havighurst, 1952). One of the contributions of this chapter is embedding them as part of an expected ontogenetic developmental process of the behavioral system of attachment, thus suggesting a conceptual integration of psychoanalytical thinking with the general literature on developmental processes in adolescence and attachment.

This transitional period might be hazardous for adolescents. The figures to whom attachment needs are directed are often less stable and are less committed to the adolescents in the long run. They are not equipped with evolutionary tendencies to protect the adolescent, and they themselves (in case of peers) may be simultaneously in need. Turning away from parents in the service of promoting adolescents' individuation, self-reliance, maturity, and finding a sex mate outside one's gene pool may leave adolescents more vulnerable and may lead to increased feelings of anxiety and loneliness (Blos, 1967; Youniss & Smollar, 1989).

Together, these changes expose and instigate vulnerabilities, as well as open up possibilities of change and flexibility in individuals' attachment models as the network of attachment strategies or models becomes more complex and elaborate. These developmental tasks are postulated to occur in order to allow diversion of sexual drives away from parents and outside the individual's gene pool to nonkin and to promote the higher self-reliance and flexibility needed for survival in adulthood.

The research literature on adolescence provides some empirical support for these postulations; however, much is still open. Let us illuminate several such future research avenues. First, there is a need for longitudinal studies that document and highlight the developmental processes described here. Attachment researchers have often examined continuity of individual differences, but for most cases, they have not investigated general universal developmental processes. For example, does increased emotional investment in peers come as compensation for decreased investment in parents? How do distancing from parents and investment in peers relate to investment in self to enhance self-reliance and autonomy? Do identification with idols and membership in actual and symbolic groups serve the same functions of emotional investment? Are all these channels of investment complementary?

It is important to note that in most previous studies, researchers who examined several relationships concurrently investigated the quality of the

different relationships and examined similarity among them; here we suggest examining the level of emotional investment in each relationship. This is similar to the idea of cathexis and the notion discussed by Ainsworth (1989) and then by Berlin and Cassidy (1999), regarding the extent that a relationship “penetrates one’s different aspects of life” (Ainsworth, 1989, p. 36). Researchers might need to find ways to assess this aspect. One possibility is to employ or develop sophisticated tools, such as the ones used by cognitive and social psychologists that include priming and reaction times.

Another research question is related to the place of puberty. Are these developmental processes related to puberty, and if so, in what ways? Are they related to the onset of puberty? Or might we be able to observe a continual synchrony between the physical and hormonal changes and these social and emotional changes by employing dynamic systems’ approaches?

Thus far we know very little about these longitudinal processes of change in the context of individual differences in models of attachment. This is clearly different from concurrent, cross-sectional comparisons of individuals with different attachment patterns. For example, do secure individuals also distance from their parents? How can we assess their expected continual trust and closeness with their parents while also examining such distancing? What characterizes dismissing and preoccupied adolescents in this regard?

Another issue to address is gender differences. In general, researchers have claimed that girls mature and define their identity through connectedness, whereas boys mature and define their identity through separation and autonomy (Josselson, 1996). Historically, attachment quality and attachment processes were seen as similar for the two genders. However, there are some indications that by middle childhood, various gender differences have emerged (Kerns, Schlegelmilch, Morgan, & Abraham, 2005). Such differences in the normative trajectory of development might be even more pronounced in adolescence and need to be addressed in future research. For example, if adolescent girls tend to define their identity and individuation through connectedness, they might evince less of a need to distance from, and decrease emotional investment in, parents, and they may find it more difficult than boys to address this challenge.

In this chapter, we borrowed freely from the psychoanalytical literature and its insights, disregarding to some extent the important differences between these notions and attachment theory. For example, earlier psychoanalytical writers focused on internalized fantasy objects and stressed the need of adolescents to completely disengage from them and fight what they saw as infantile dependencies. This is clearly not our view here. We do not contend that relinquishing parents as attachment figures is desirable or normative. Still, it seems that in the efforts of attachment theory to counter psychoanalytical notions, attachment theory has played down the importance of the normative (evolutionary-based) processes of diminished emotional and behavioral investment in primary caregivers and the diversification of investment. The current approach that involves an attempt to apply insights

from psychoanalytical conceptualizations to attachment processes accords with recent calls and attempts (Steele & Steele, 1998; Mayseless, 2005) to advance a cautious and thoughtful consideration of the merits and insights gained by the two paradigms—attachment and psychoanalysis—to developmental and clinical processes. Future research may need to address some of the speculative and challenging postulations discussed in this chapter.

The next five chapters in this volume similarly address central issues of attachment in adolescence. In Chapter Two, Allen and Manning address the changing nature and function of the attachment system and contend that in adolescence, the frequency of true survival threats diminishes greatly, but the importance of regulating affect through social interactions is maintained. In line with this observation, they suggest that it is possible to view attachment behavior as distinct from but also as a precursor to broader patterns of social affect regulation.

Dykas and Cassidy focus in Chapter Three on processes of social information that characterize various internal working models. They review the links between attachment and attachment-relevant social information processing and discuss how it is expressed during adolescence in memory, feedback seeking, perceptions of others, and secure base scripts.

In Chapter Four, Kobak, Rosenthal, Zajac, and Madsen discuss the formation of hierarchies of attachment relationships in adolescence in which peers play an important role. The authors underscore the importance of addressing who is identified as an attachment figure, how these bonds are organized in hierarchies of relationships, and how and when peer relationships are transformed to attachment bonds, and they suggest various future directions for research.

Kiang and Furman discuss in Chapter Five the issue of concordance of representations of attachment to parents in adolescent siblings raised in the same family. They argue that a simple conceptual model leading us to expect concordant adolescent siblings' representations is not confirmed. They thus suggest explanations for the modest degree of childhood and adolescent siblings' similarity and its implications for attachment theory.

Finally, in Chapter Six, Carlivati and Collins focus on issues of continuity and change in attachment representations in adolescence in a sample at risk because of early poverty. They highlight the empirical evidence regarding attachment stability and change in a risk sample and discuss the reasons that adolescence may be a period of attachment security change in this population.

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Perhaps the most famous play Kate has worked on recently was called Noises Off. She taught the cast how to fall down stairs without breaking any bones. I feel much prouder of the recycling symbol now than I used to, probably because it's so widely seen. Maybe this design has been more important to me than I'd thought. There's more to me than the recycling symbol. Turn over a page. Adolescence is a developmental period rife with physical, social, and cognitive changes, but how the links between discrimination and well-being shift with advances in thinking and identity development is unclear. Advances in formal operational thought, deductive and inductive reasoning, and abstract thinking are all part of this. Parallel to this, the effects of perceived discrimination may also vary based on the referenced time. Some measures of perceived racial/ethnic discrimination either specify lifetime experiences or are nonspecific in their designation of time, whereas other studies ask adolescents to reflect on their experiences in a more time-limited way (i.e., last 2 weeks, last 6 months). Adolescents are vulnerable to emotional and physical issues. Learn the common problems during adolescence and how parents can help their children solve them. Identifying symptoms of psychological problems in adolescence is not easy and needs the eye of an expert. Most of the time, talking about the problems and maintaining a healthy lifestyle can prevent the onset of depression. If your child is overly moody and cynical, it is time to intervene and seek professional help if necessary.

Start studying Chapter 1 Adolescence. Learn vocabulary, terms and more with flashcards, games and other study tools. The adolescent reasons in more abstract, idealistic, and logical ways, 11 yrs of age to adulthood. Lev Vygotsky emphasized that individuals actively construct their knowledge. A forebrain structure that processes sensory information for all senses, except smell, and relays it to the cerebral cortex. Hippocampus. A neural center located in the limbic system that helps process explicit memories for storage. Amygdala. A limbic system structure involved in memory and emotion, particularly fear and aggression. The development of color film production required the Max Factor company to develop a new line of products. The existing make-up reflected surrounding colors. As a result of how bad they looked, many actors and actresses refused to appear in color films. At this time Frank Factor, Max's son, took the lead and developed a suitable product. Soon actresses and other women working on movies sets were stealing new make-up to use in their personal lives. Its only disadvantage for everyday use was that it made the skin too dark under regular lights, having been designed for the powerful lights used in film studios. Frank Factor began developing lighter shades. In 1937, new "Pan-Cake" make-up was released to the public and it became one of the fastest selling cosmetic items.

5. Attachment Theory is a psychological model describing the stages of attachment of the close relationships we form in early childhood and as adults. However, Erikson placed more importance on context from culture and society than on Freud's focus on the conflict between the id and the superego. In addition, his stages of development are based on how children socialize and how it affects their sense of self rather than on sexual development.

Adolescence "Identity vs. Role Confusion: The adolescent is reaching new heights of independence and is beginning to experiment and put together his or her identity. Problems with communication and sudden emotional and physical changes are common at this stage (Wells, Sueskind, & Alcamo, 2017).