

Social Cognitive Development in Emerging Adulthood

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Abstract

This chapter focuses on social cognitive constructs that emphasize self–other constructions in emerging adulthood. The authors first take up classic social cognitive stage theories, including the development of perspective-taking, interpersonal understanding, and interpersonal negotiation strategies and the development of self-understanding. They note that the upper boundary of structural stage development stretches well into emerging adulthood: the period from 18 to 25 sees a mélange of social cognitive developmental capacities with significant overlap across stages. The authors then introduce individuation and dyadic attachment as new categories of social cognition. Both constructs describe the recalibration of self–other perspectives that will be crucial for navigating the challenges of emerging adulthood. They conclude with an examination of recent neuroscience research on the social cognitive brain, with a particular focus on perspective-taking and mentalizing, and they draw implications for future research.

Key Words: emerging adulthood, social cognitive development, perspective-taking, interpersonal understanding, interpersonal negotiation, individuation

Background and Boundaries

The “Sovereignty of Social Cognition” was the title of the lead chapter in the first edition of the influential *Handbook of Social Cognition* (Ostrom, 1984). Social cognition was a relatively recent addition to psychology in those days and yet somehow already an omnipresent feature of discourse in social, clinical, personality, developmental, and cognitive psychology. Although there was still a felt need to push back against a weakened behavioral paradigm to carve out space for academic legitimacy (Fiske & Taylor, 1984), the rapidity of social cognition’s ascendance was so striking that it seemed to have all the markings of a Kuhnian revolution that raged across the many fields of psychology. Ostrom (1994 p. vii) would later call this first Handbook a “revolutionary manifesto.”

Ostrom (1984) noted several reasons for the sovereignty of social cognition. One was that the theories and constructs of memory and cognition,

particularly information-processing models, provided a better conceptual language for capturing the mental activity that attends social behavior than was possible with stimulus–response behavioral alternatives. Another was the sheer ubiquity of this conceptual language across the terrain of psychology. He writes “Social cognition is not a remote province neglected by all but social and cognitive psychologists” (Ostrom, 1984, p. 31). Moreover, social cognition was held to be fundamental and developmentally prior to nonsocial cognition; indeed, much effort was expended articulating the differences between social and nonsocial knowledge and also the interdependencies of social cognition and emotion. Finally, Ostrom (1984) argued that the constructs of social cognition had strong potential for being linked to the work of the brain and central nervous system. He writes “I have no doubt that a good integration of the psychological with the physiological is

in the far distant future, but like a true sovereign the field of social cognition has boundless aspirations” (p. 32).

On this latter point, Ostrom (1984) was prophetic for the “far distant future” has certainly arrived. In an essay written 10 years later to launch the second edition of the Handbook, Ostrom (1994) not only affirmed the sovereignty of social cognition, he held out the possibility that it would absorb completely the field of social psychology (Ostrom, 1994). It is indeed difficult to imagine a social psychology that is not infused with cognitive constructs, and certainly the Ostrom Prophecy has been fulfilled with the emergence of a field of social neuroscience that links social cognition to biological mechanisms and structures of the brain (Cacioppo, Berntson, Sheridan, & McClintock, 2000; Frith & Frith, 2012).

Developmental Science

The 1970s and 1980s also saw the emergence of social cognition as a field of study within developmental psychology (Flavell & Miller, 1988; Selman, 1980; Shantz, 1975). In contrast to social psychology, the intellectual source of this interest was less the theories of memory and cognition and more the cognitive developmental paradigm associated with Jean Piaget. The active developmental mind that constructs the relationship between beakers and volume in conservation tasks also discerns the relationship between self and others. Knowledge of the properties of objects and of relationships are structured by the same mental operations, change in accordance with the same orthogenetic principles, and are described with the same developmental constructs, such as egocentrism and decentration. This perspective was also of use to social psychologists who adopted readily the Piagetian stricture that action is the root of knowledge and that coordinating interactions with others (and things) puts cognition in the service of successful adaptation in relationships (Ostrom, 1994).

So, for a time, there was a discernible field of social cognitive development that was cognitive-structural, stage-developmental, and Piagetian. Its target of study was typically moral judgment, perspective-taking, and interpersonal and self-understanding, as represented in the seminal work of Kohlberg (1969), Selman (1980), Damon and Hart (1982), and others (e.g., Broughton, 1981; Kegan, 1982; Guardo & Bohan, 1971). Much of this research tracked

the stage-developmental capacities of youngsters across a wide expanse of age, from early childhood to emerging adulthood. Moreover, stage developmental theory offered attractive models for intervention to build interpersonal competence or to remediate troubling social behavior (Selman, 1977, 1980).

But Piaget’s theory was not the only approach to studying social cognitive development. Research on attribution theory and theory-of-mind (ToM) also opened new avenues of investigation in social cognitive development (Flavell & Miller, 1988). For example, attribution theory inspired research on children’s inferences about the causes of their own and others behavior. Is it due to internal or external causes? Does it involve effort, ability, or luck? Are attributes fixed or changeable? Implicit theories about the attributes of self and others influence the judgments we make about social behavior (Dweck, Chiu, & Hong, 1995). Although much of this work focused initially on academic motivation and achievement-related outcomes (e.g., Dweck & Elliott, 1983; Dweck & Master, 2009; Nicholls, 1984; Weiner, 1974), the study of attribution “mindsets” has emerged as a powerful framework for understanding a wider range of phenomena, including personality, resilience, bullying, conflict resolution, prejudice, and willpower (Dweck, 2006, 2012; Dweck & Leggett, 1988; Yeager & Dweck, 2012) and is held out as a model for framing integrative theories of social cognitive development (Olson & Dweck, 2008).

ToM is another approach to social cognitive development that focuses on the emerging understanding of other minds in the first years of life (Flavell & Miller, 1988; Wellman, 1990). An individual has a ToM if he imputes mental states to self and others. ToM refers to the ability to recognize the existence of mental states, to understand the self and others as intentional agents with perceptions, beliefs, and desires—capable of feigning, pretense, and false belief—and using this knowledge to predict and explain social behavior (Astington, 1993; Miller, 2012). There is impressive development over the course of infancy and early childhood in the ability to read minds (Wellman, Cross, & Watson, 2001), and large literatures track parental and family variables that optimize its development (e.g., Meins et al., 2002, Ontai & Thompson, 2008) and also the social deficits that result when mind-reading is impaired (e.g., Frith, Happe, & Siddons, 1994; Tager-Flusberg, 2007; Yirmiya, Osnat, Shaked, & Solomonica-Levi, 1998).

Social Cognition in Emerging Adulthood

Hence, three major strands of research have contributed to social cognitive development. There is the (1) stage-and-sequence approach associated with the cognitive-structural Piagetian tradition, (2) attribution theory, and (3) ToM. Attribution theory emerged over the years into a “mindsets” approach to social cognition and is invoked to account for a wide swath of social behavior. ToM is distinctive in that its chief developmental claims are bound up with the social cognitive achievements of early life, but ToM has been increasingly the target of social neuroscience investigations of “mentalizing” in emerging adulthood, and so there is much recent interest in mapping the social cognitive brain. The stage-and-sequence approach has fallen on hard times, mostly because of the decline in authority and influence of the Piagetian paradigm more generally (Lapsley, 2006). Yet these theories, too, provide significant insight into the social cognitive capacities of emerging adults and cannot be ignored.

There are additional social cognitive constructs of particular relevance to emerging adulthood, in addition to mindsets (attribution theory), mentalizing (ToM), and the constructs of social cognitive development. Social cognition is not only sovereign but hegemonic as well. Virtually any theory that invokes mental constructs in the service of meaningful interpersonal transactions or to explain social behavior is fair game for annexation. Indeed, quite a few topics covered in the present handbook could reasonably be considered instances of social cognition. But such imperialism is a problem. At some point, an expansion of the social cognitive domain to include any theory or construct that implicates the interpenetration of cognitive with social functioning risks losing the distinctive contours of a reasonably delimited field of study. Moreover, insofar as emerging adulthood is a developmental phase of the life course, it should be possible to identify social cognitive variables that seem crucial for its successful navigation.

In this chapter, we focus on social cognitive constructs that emphasize self–other constructions in the service of adaptive relational functioning, and we nominate two additional constructs to the social cognitive domain of interest in emerging adulthood. One construct is individuation and the second is dyadic attachment. In our view, individuation is the heartbeat of development in adolescence, and it is hardly completed by emerging adulthood. It requires a young person to recalibrate conceptions

of self and other in a way that permits autonomous functioning in the context of ongoing relational commitments. Similarly, dyadic attachment invokes the notion of internal working models of self-in-relationship to account for emotional security and adaptive relational functioning in emerging adulthood. In our view, emerging adulthood is the epigenetic moment when issues of individuation and attachment security are fundamentally salient and crucial to any social cognitive developmental account of this phase of the life course.

Plan for the Chapter

We first take up traditional developmental stage theories of social cognitive development. This includes developmental accounts of perspective taking, but with a special focus on Robert Selman’s (1980) seminal work on interpersonal understanding and negotiation strategies and Damon and Hart’s (1982) now classic take on the development of self-understanding. As we will see, the latter stages of these sequences are relevant for understanding the social cognitive capacities of emerging adults, and there may be a sense in which young adults do not completely outgrow more “childish” modes of social cognitive thinking (e.g., Epley, Morewedge, & Keysar, 2004).

We then discuss categories of social cognition relevant to the phase of emerging adulthood: individuation and attachment representations. First, we examine the large literature on internal working models of adult attachment. We then discuss recent findings concerning separation-individuation as an important social cognitive challenge of emerging adults, with particular attention to the conditions of adaptation and dysfunction. Finally, we take up the topic of perspective taking and mentalizing in emerging adulthood in the context of recent work in neuroscience that attempts to map the social cognitive brain, and we draw conclusions about the possibility of integrative lines of future research.

Social Cognitive Development: Stage Theories

Perspective Taking

In a landmark work, Selman (1980) constructed a theory of interpersonal understanding that is widely considered the foundation of the field of social cognitive development. It falls squarely in the cognitive developmental tradition in the sense that understanding of self and others is a cognitive structure that shows increasing articulation, differentiation, and hierarchical integration across

several stages from early childhood to emerging adulthood. In Selman's (1980) theory, interpersonal understanding comprises a related family of stage sequences in several domains, such as children's understanding of self and subjectivity, of friendship and peer group relations, and of parents.

But the engine that drives stage development in these domains is an expanding capacity to assume and coordinate social perspectives. The development of perspective taking, then, is foundational to social cognitive development across several crucial domains, and it undergoes stage-development itself (Selman, 1971*a*, 1971*b*). For example, the young child beset by egocentrism is unable to infer another's perspective (Level 0); then, at the next stage, she is able to infer another's perspective but is unable to reflect upon the self from the other's perspective (Level 1: one-way perspective taking). At Level 2, the school-aged child can reciprocally assume self–other perspectives and engage in reciprocal and mutual role taking (“I think that you think that I think . . .”). At Level 3, the young adolescent can assume the third-party perspective of the “self-observing ego” on ongoing dyadic interaction. By emerging adulthood, one can assume the perspective of the social system as a whole and be aware that others also have self-observing egos that require coordination (Level 4 “systems perspective”). Put differently, at Level 4 one can coordinate the social perspectives of multiple individuals, including how things must seem from their perspectives. This is sometimes called a *societal perspective* in the sense that an individual can articulate broader points of view that transcend the perspectives of those with whom one is in close relationship. These perspective-taking themes are evident in all stages of social cognitive development.

Interpersonal Understanding and Negotiation Strategies

Selman (1980; Guracharri & Selman, 1982) charted interpersonal understanding through four levels of development that align with the four levels of perspective taking just described. For illustrative purposes, we focus on two domains—subjectivity and friendship—because these domains are fundamental to social cognitive constructions of self and other, and on Levels 3 and 4 because these are most relevant to emerging adulthood.

With respect to subjectivity, the self is defined at Level 0 in a physicalistic way, that is, in terms of one's physical features and possessions. For the toddler, there is no distinction between the outer

physical and the inner psychological. At Level 1, the inner subjective and outer physical are distinguished but are held to be consistent (a person smiling must be happy). At Level 2, the child realizes that inner subjective and outer physical need not align. It is possible to say that one is happy but not feel happy. Moreover, the child realizes that the self has privileged access to his or her inner psychological experience and so it is possible to put up a false front to others, although the inner self is understood to be the true self.

Level 3 emerges in early adolescence, when the young teen is self-aware of his or her self-awareness. Young adolescents enact, think, and emote under the gaze of their self-observing ego, which in turn fuels self-consciousness, introspection, and a sense of personal agency. The adolescent is aware, for example, that she can consciously monitor her own self-experience and so comes to think of the mind as an active manipulator of experience (“I can fool myself into not wanting . . .”). Hence, the mental power of self-reflective self-awareness establishes a new mode of personal control. Still, there is also a dim awareness that there are certain mental experiences that intrude, are unwanted, or are else beyond one's volitional self-control.

This contradiction is not resolved until Level 4 in emerging adulthood. Here, the emerging adult constructs notions of conscious and unconscious levels of experience with the attendant notion that some mental experiences are beyond volitional control. The self is a unified system of levels, a system of distinct elements, sometimes operating cohesively, sometimes divided, but with a decided tendency toward conceptual integration of diverse aspects of the self into a unified self-system (e.g., Broughton, 1981; Damon & Hart, 1982).

Similar themes are evident in a parallel sequence describing the development of notions of friendship. At Level 0, a friend is a temporary and current playmate or is someone in close proximity. What is absent is a sense of friendship as an enduring relational bond. At Level 1, a friend is someone who does nice things for you or someone you know better than others. At Level 2, there is a new awareness of interpersonal relationships grounded by a sense of reciprocity, although the friendships are fragile and easily broken by specific disagreements or conflict. At Level 3, in early adolescence, there is a strong sense of mutuality and intimacy within an enduring friendship bond that transcends occasional conflict or disagreement, although at times this bond can be felt as smothering in its exclusivity,

and attempts to forge new friendships outside of the tightly bound clique could be resented or experienced as betrayal by friends. The network of relationships is better coordinated at Level 4, where there is a “systems” understanding of friendship that allows a greater appreciation of the fact that we require friendships of various kinds and at different levels, given the variety and complexity of our interpersonal needs.

Of course, the complicated network of interpersonal relationships common in emerging adulthood sometimes falls into disrepair. Relational conflict must be negotiated so that the relational system is restored to equilibrium. Selman and his colleagues developed a social cognitive developmental model of how strategies are deployed to manage interpersonal negotiation of conflict (Selman, 1981; Selman & Demorest, 1984). This model of interpersonal negotiation strategies (INS) is also driven by levels of perspective taking and interpersonal understanding but with several additional considerations that makes it a more general model of social cognitive development. As such, the development of INS is considered both a model of interpersonal competence and a theoretically informed strategy for clinical assessment and intervention (LaRusso & Selman, 2011; Selman, 1977, 1981; Schultz, Selman, & LaRusso, 2003; Yeates & Selman, 1989; Yeates, Schultz, & Selman, 1990).

The INS at each level is defined by four component factors that operate in the moment of interaction: self-other construal, the primary purpose of the interaction, the way affect is expressed or controlled, and the action orientation that would return the relationship to equilibrium (Selman & Demorest, 1984). How each factor works in the moment of interpersonal negotiation is linked to levels of perspective taking and interpersonal understanding. Self-other construal, for example, moves from the lowest level where self and other are understood physicalistically, as nonpsychological objects, to the highest level, where there is appreciation of the thoughts, feelings, and wishes of both self and other. With respect to purpose, at the lower level, the motivation for pursuing interpersonal negotiation is to secure immediate physical goods, but at the highest level there is a commitment to both relational, shared goods and a focus on process as well as outcome in negotiation. Affect is experienced as diffuse, all-encompassing and externally caused at the lower levels, and it is acted upon impulsively and with little control by an active agent; but, at the highest level, affect is brought under regulative

control by putting affective states into perspective (Selman & Demorest, 1984).

The active orientation is of developmental interest because it follows either other-transforming or self-transforming tracks at each level of social cognitive development until the final stage in emerging adulthood, when self-other transformation takes on a mutual, collaborative stance. The other-transforming orientation attempts to alter the thoughts, feelings, and actions of the other, whereas a self-transforming orientation changes the self to restore relational equilibrium. For example, at Level 0 (Undifferentiated-Egocentric), one prefers strategies that use unreflective, impulsive force to secure the self’s goals (other-transforming) or else unreflective, impulsive withdrawal to protect the self (self-transforming). At Level 1 (Differentiated-Subjective), there is a preference for willful, one-way orders to compel the other to meet the self’s needs or else strategies that use “will-less” submission to the wishes of the other. At Level 2 (Self-Reflective-Reciprocal), the other-transforming strategy is to use psychological influence to change the other’s mind; the self-transforming strategy is psychological compliance to give priority to the other’s perspective. Finally, at Level 3, the self-and-other transforming orientations converge. Here, there is both self and shared reflection to collaboratively change self-and-other’s wishes in pursuit of mutual goals.

The I-and-Me of Self-Understanding

The coordination of self-and-other perspectives is at the core of the stages of interpersonal understanding and negotiation. Indeed, it is a strong assumption of the social cognitive developmental tradition that self- and other-understanding is structured in accordance with the same processes. Baldwin (1895) argued, for example, that both self and other are discovered simultaneously through the process of imitation and ejection. Through imitation, one takes on the features of the other, and through ejection, one endows the other with characteristics that one observes in the self. Perhaps this explains why we seek out friends or partners in our own image or why there is a tendency to overestimate the normative behavior of peers (as we project our own preferences onto them).

But the self and the other are not strictly identical, and there are important literatures in social cognitive development that track the emergence, functioning, and development of the self (Damon & Hart, 1982; Harter, 2012). Virtually

all self-researchers follow William James's (1892) distinction between the I-self and the Me-self (e.g., Harter, 2012). The I-self is the thinker, knower, and subject of thought. The Me-self is the known and object of thought. The I-self has properties of continuity, distinctiveness, volition, and self-reflection. The Me-self is the self-concept. It includes categories and features that define "me"—the physical, active, social, and psychological self (Damon & Hart, 1982).

According to Damon and Hart (1982), the physical, active, social, and psychological self are not only categories of the Me-self, the self-as-object, but the developmental steps in the development of the self-concept. At Level 1, the Me-self is defined as a physical self in terms of bodily properties or possessions. At Level 2, the Me-self is the active self that is defined in term of capabilities relative to others. At Level 3, the Me-self is defined in terms of social personality traits. Finally, at Level 4, as one enters emerging adulthood, the Me-self is defined in terms of belief systems and a personal philosophy.

There does not seem to be general stage development with respect to the I-self, although there are broad qualitative shifts that reveal distinctive features of the self-as-agent in emerging adulthood (Damon & Hart, 1982). For example, with respect to continuity, in early development self-continuity is equivalent to an unchanging physical body, but, in emerging adulthood, self-continuity is attributed to psychological and physical processes through which the self continues to evolve. In early development, distinctiveness depends on bodily or other external attributes, but in later development it arises from subjectivity and the privacy of the self's experiences. Volition in early development is a matter of one body part commanding another body part what to do, but in later development it is the active self that initiates modification of conscious experience. Finally, in early development, self-reflection is an awareness of body features, typical activity and talents, but in later development self-reflection is the recognition of conscious and unconscious psychological processes.

Summary

What then, is the nature of social cognition in emerging adulthood, according to stage developmental theory? Structural developmental theory in the Piagetian tradition posits an endpoint in development. The endpoint is simply the final stage of development, which traditionally was located at the end of adolescence. The stages of perspective taking,

interpersonal understanding, and interpersonal negotiation strategies are of this tradition, as is the development of self-understanding. Yet the upper boundary of structural stage development stretches well into emerging adulthood, and the period from 18 to 25 will see a *mélange* of social cognitive developmental capacities with significant overlap across stages.

Although not everyone will reach the final levels in the social cognitive developmental stages considered here, even well into adulthood, the modal expectation is that emerging adults will be able to coordinate social perspectives at the systems and in-depth Level 4, with parallel capacities for interpersonal understanding in several domains, including friendship, and be capable of advanced interpersonal negotiation when romantic and peer relationships go awry. Emerging adults will understand the self in a rich multidimensional way, as a system with levels and with content not always available for conscious introspection.

One important feature of the social cognitive developmental stage theories for emerging adulthood is that it yokes social cognitive capacities of this period to a developmental history. The existence of stages, particularly a final stage, provides the basis for rendering a developmental explanation for what is observed in the emerging adult's understanding of selfhood, friendship, subjectivity, conflict, and self–other relationships of all kinds. This is worth mentioning, given the widespread impression that stage theories have fallen out of fashion. It is a useful reminder that any account of social cognition in emerging adulthood will eventually require a developmental story that yields adult forms as an outcome.

New Social Cognitive Constructs for Emerging Adulthood: Working Models and Individuation

Many of the important developmental achievements of interpersonal and self-understanding are not completely mature until emerging adulthood, as we have seen. Indeed, the development of social cognition is one of smooth transition and gradual attainment from childhood to emerging adulthood (Lapsley, 1990). Yet the transition to emerging adulthood will pose new challenges to successful adaptation, and how well one navigates this terrain will depend critically on the social cognitive ability to forge new, stable, and workable understandings of self and other in a relational world that is increasingly mobile, fleeting, and changeable.

For example, emerging adults face phase-specific challenges that both challenge and push internal working models of what the self is like and what can be expected of relationships. Emerging adults often physically separate from the natal home, either to attend college or simply to be independent, and they confront identity issues and career options with some urgency. The transition to college itself has been likened to a naturally occurring “strange situation” (Kenny, 1987; Lapsley, Varshney, & Aalsma, 2000) that is analogous to the well-known paradigm for assessing infant attachment: there is separation from attachment figures, one is required to negotiate novel physical and social environments in the presence of strangers and initiate and maintain social and romantic attachments in a way that does not engender excessive anxiety. On top of this, the emerging adult must become a psychologically individuated self in a way that reflects a healthy balance between agency, independence, and autonomy, on the one hand, and communion, attachment, and connection, on the other (Lapsley, 2010).

Two related social cognitive processes, then, are crucial for successfully navigating the strange situation of emerging adulthood. One is internal working models of the attachment system; the second is separation-individuation. These constructs hail from somewhat different theoretical traditions but share the same task of constructing workable conceptions of self and other in a way that underwrites the capacity for autonomy, identity, and intimacy, which makes this challenge one of the most daunting of emerging adulthood (Koepke & Denissen, 2012). Moreover, both constructs are fundamentally social cognitive in the sense that working models drive perception of the social landscape and underwrite the cognitive-affective appraisal of social experience and interpretation of daily social interactions (Collins & Feeney, 2004; Pietromonaco & Barrett, 1997; Ruvolo & Fabian, 1999). Indeed, emerging adults are likely to interpret ambiguous events in ways consistent with their internal working model of attachment (Scharfe & Cole, 2006).

Attachment Representations

The attachment styles of emerging adults have a developmental source in the pattern of relationships established with primary caregivers. According to attachment theory, the felt security of relationship with a responsive, reliable, and sensitive caregiver encourages the child to explore the social and physical environment with confidence and to find the relationship a safe haven when alarmed or frustrated

(Bowlby, 1958, 1960). The interactions of securely attached infants and caregivers are characterized as a goal-directed partnership that calibrates the child’s proximity-seeking and proximity-avoidance behavior when faced with affective distress, fatigue, novelty, and other challenges to a felt sense of security. Over time and on the basis of secure attachment, the child comes to adopt an interpersonal orientation that flexibly balances exploration and distance, and he develops positive internal working models of the self (“I’m lovable”) and of relationships (“Others can be trusted”).

Various kinds of anxious attachment result if parents are unresponsive, insensitive, or unreliable. In this case, children come to develop very different relational orientations that range from an excessive preoccupation with others or a hyperactivation of proximity seeking to avoidance of closeness, enforcement of relational distance, and a deactivation of proximity seeking (Lopez & Brennan, 2000). Internal working models of the self-in-relationship that are carried forward drive anxious relational closeness and distance from early life into new relational contexts. Indeed, internal working models are assumed to exhibit considerable developmental continuity and serve as the basis for recapitulating certain patterns of interaction that are habitual, automatic, and hard to change (Bowlby, 1980; Bretherton & Munholland, 2008; Zayas, Mischel, Shoda, & Aber, 2011). Consequently, there has been much interest in documenting the influence of attachment orientations across a variety of outcomes crucial for successful navigation of emerging adulthood, including friendship, romantic attachment, coping, altruism, identity, and college adjustment (e.g., Avila, Cabral, & Matos, 2012; Fraley & Davis, 1997; Kerpelman, Pittman, Cadely, Tuggle, Harrell-Levy, & Adler-Baeder, 2012; Lapsley & Edgerton, 2002; Lopez & Gormley, 2002; Mikulincer, Shaver, Gillath, & Nitzberg, 2005).

One dominant approach to assessment identifies four styles of adult attachment on the basis of positive or negative attachment representations of self and of others (Bartholomew & Horowitz, 1991). Individuals with a secure attachment style flexibly balance autonomy and intimacy and hold positive conceptions of self and other. The dismissing style has positive conception of self but a negative view of others. Even under duress, the dismissive emerging adult is more likely to cope by distancing the self from others rather than seeking support. Individuals with preoccupied attachment hold a negative view of self but a positive view of others.

These emerging adults are consumed with thoughts of securing access to partners and regularly seek support from partners, often more than others can give, which only compounds their sense of abandonment. Finally, emerging adults with a fearful attachment orientation hold negative views of both self and others. They report a great deal of emotional distress but are unwilling or unable to seek support from others (unlike the preoccupied style). Other assessment strategies measure attachment “states of mind” (e.g., Main, Kaplan, & Cassidy, 1985; van IJzendoorn, 1995) and pathological adult attachment (West & Sheldon, 1988).

A recent meta-analysis showed that many young people enter emerging adulthood with insecure attachment patterns at rates higher than 23 years ago (Konrath, Chopik, Hsing, & O’Brien, 2014). Focusing on college students, the meta-analysis found that there has been a 14.44% rise in the proportion of emerging adults with insecure attachment (dismissing, fearful, preoccupied) since the 1980s and a corresponding drop of 15% in the proportion of youth with secure attachment. The attachment styles with negative views of other drive most of the relational insecurity in the present generation. For example, the dismissing attachment style rose 56%, indicating that many more emerging adults today than in the past are “comfortable without close emotional relationships.” Similarly, the proportion of emerging adults with fearful attachment has risen almost 18% over a 23-year period. Interestingly, the only anxious attachment style with a positive view of others (preoccupied) showed a 19% decline.

These data are alarming insofar as attachment styles are consistently linked to successful adaptation and mental health outcomes in emerging adulthood (Lopez & Brennan, 2000). For example, emerging adults with secure attachment show greater social competence, better self-esteem and self-confidence, more emotional stability, higher relationship satisfaction, better problem-solving abilities, and higher friendship quality than do emerging adults with insecure attachment (Bartholomew & Horowitz, 1991; Collins & Read, 1990; DiTommaso, Brannen-McNulty, Ross, & Burgess, 2003; Laible, 2007; Saferstein, Neimeyer, & Hagans, 2005).

The relationship between attachment style and personal relationships in emerging adulthood has drawn particular research interest. One study showed that individuals with a preoccupied style of attachment as emerging adults were more likely to be single in adulthood and also to have shorter romantic attachments and lower levels of intimacy

(Tarabulsy et al., 2012). Insecure attachment is associated with lower levels of companionship and higher levels of conflict in friendship compared to emerging adults with secure attachment (Saferstein et al., 2005). Similarly low-quality relationships among dating couples is linked over time to greater attachment anxiety (Holland, Fraley, & Roisman, 2012). Insecure attachment is associated with courtship violence (Maysseles, 1991), a greater number of hookup partners among college students (Garnau, Olstead, Pasley, & Fincham, 2013), and alcohol abuse among males (Reis, Curtis, & Reid, 2012), which are probably related problems. It is associated with compulsive caregiving, compulsive self-reliance, and a range of psychological symptoms (Lapsley et al., 2000).

Attachment predicts how well emerging adults bounce back from a relational breakup—individuals with secure parental attachment report less distress (Gilbert & Sifers, 2011), whereas individuals with greater attachment anxiety do much less well (Fagundes, 2012), and there is evidence that the link between psychological symptoms and friendship problems or interpersonal conflict is mediated by attachment styles (Chow & Ruhl, 2014; Cusimano & Riggs, 2013). Even the use of social media is not exempt from the reach of attachment orientations. Attachment styles predict how emerging adults use texting and social networking sites. For example, emerging adults with anxious attachment tend to use social networking sites to avoid personal contact and keep relational distance (Nitzburg & Farber, 2013), whereas attachment to partners predicts whether texting is used to express affection or inflict hurt, especially for males (Schade, Sandberg, Bean, Busby, & Coyne, 2013).

The attachment styles of emerging adults show important continuities with internal working models of attachments with parents. Indeed, parental attachment continues to exert an important influence on the successful adaptation of emerging adults (Lapsley, Rice & Shadid, 1989). In a meta-analysis of 156 studies, Mattanah, Lopez, and Govern (2011) report a small to medium effect size ($r = .23$) between quality of attachment to parents and college student development and adjustment. Interestingly, the strongest association between parental attachment and adjustment was found for emerging adults who did not reside with their parents while attending college, compared to those students who did. And the romantic life of emerging adults is also linked to the quality of parental attachment.

In one study, 17-year-olds who reported more secure and less avoidant attachment to parents produced more “true love” romantic narratives at age 26 (Nosko, Thanh-Thanh, Lawford, & Pratt, 2011). The authors write “while parenting during the adolescent years is very important to healthy development, the ensuing adult attachment may lie at the core of an individual’s relational development as well as the acquisition and consolidation of the romantic self” (Nosko et al., 2011, p. 655).

Separation-Individuation

In very general terms, separation-individuation is a process whereby the self becomes differentiated from a past or present relationship experience (Karpel, 1976). Mature differentiation requires resolving the tension between maintaining attachment and connection to others—children and parents, mentors and protégés, friendship dyads, romantic partners, and spouses—but without enmeshment and fusion with them (Lapsley, 2010). The goal is to be an individuated self who *has* relationships rather than a self who *becomes* the relationship (Kegan, 1982). Of course, detachment and isolation are not desirable either. What is required is a healthy balance between agency and communion (Bakan, 1966), closeness and distance (Kins, Soenens, & Beyers, 2012). The goal is to achieve capacity for autonomous functioning but in the context of ongoing relational commitments. These themes are also prominent in attachment theory, and, indeed, it has been argued that separation-individuation can be conceptualized as a process whereby internal working models of the self-in-relationship are updated and reconceptualized in light of new experiences of separation and connection (Lapsley & Edgerton, 2002; Lopez & Gover, 1993).

In a narrow sense, separation-individuation refers to specific developmental theories that describe the individuation process in early childhood and adolescence (Blos, 1979; Mahler, Pine, & Bergman, 1975). Indeed, adolescence is sometimes referred to as the “second phase” of separation-individuation, although any resolution of this task during adolescence, if there is resolution at all, will be tested by the normative challenges of emerging adulthood.

The task of the emerging adult is to disengage from or transcend internalized representations of caregivers and establish a sense of self that is distinct and individuated, thereby reducing psychological dependence on parental introjects for approval and self-esteem regulation. Put differently, the emerging

adult must challenge the self-boundaries set by parents and construct a sense of self-identity that has room to breathe within the nexus of relational expectations that has built up around it. One’s self-perception must not depend too much on the parental view as a frame of reference (Beyers & Goossens, 2003). Moreover, the hierarchical relationships with parents during adolescence must give way to relationships of increasing balance, mutuality, and reciprocity in emerging adulthood (Collins, Laursen, Mortensen, Luebker, & Ferreira, 1997; Mazor & Enright, 1988). Hence, separation-individuation must be fought on two fronts: on the intrapsychic front by reordering internalized representations of parents and on the reality front by renegotiating the power dynamics of family relationships (Josselson, 1980; Smollar & Youniss, 1989).

Josselson (1980) argues that Mahler’s infancy phases of separation-individuation are recapitulated during the second phase, particularly the rapprochement crisis and its ambivalence over autonomy. Typical affective reactions during this phase include a sense of “mourning” over the loss of childhood identifications and a surge of narcissism to sustain the impoverished ego until self-esteem can be effectively regulated from internal sources. Indeed, there is a strong theoretical basis for thinking that some forms of “adaptive narcissism” are deployed for good developmental reasons—to provide, for example, the psychological alimony to support separation-individuation (Hill & Lapsley, 2010; Lapsley & Stey, 2011)—although most of the interest in narcissism starts from its association with personality disorder and psychopathology.

How well emerging adults manage the individuation process has been linked to parenting and other family variables. On the positive side, there is evidence that individuation goes well when parents emphasize both individuality and connectedness (Grotevant & Cooper, 1986). Healthy individuation is fostered by family relationships that encourage autonomy and emotional closeness (Allen, Hauser, O’Connor, Bell, & Eickholdt, 1996; Bomar & Sabatelli, 1996; McElhaney, Allen, Stephenson, & Hare, 2009). Themes of autonomy and connectedness are rife in narratives of late adolescent boys (McLean, Breen, & Fournier, 2010), and, among college students, well-being is predicted by a profile of emotional connection and functional independence from parents (Yelle, Kenyan & Koerner, 2009). Optimal individuation from parents may even predict the healthy adjustment of couples

newly married in emerging adulthood (Haws & Mallinckrodt, 1998).

On the other hand, families differ in their tolerance for individuation. In poorly differentiated families, parents come to resent the emerging individuation of children, viewing it as a betrayal that a child should have different points of view, different preferences, avocations, identity, and lifestyles (Sabatelli, 1985). Similarly, intrusive, overprotective, and psychologically controlling parents make it difficult for emerging adults to individuate (Kins et al., 2012; Soenens et al., 2007). Separation-individuation issues are associated with a range of adjustment issues including poor college adjustment, eating disorders, and an elevated risk of psychiatric symptoms (Barth, 2003; Rhodes & Kroger, 1992; Holmbeck & Leake, 1999; Lapsley, Rice, & Shadid, 1989; Mattanah et al., 2011; Quintana & Lapsley, 1990; Rice, Cole, & Lapsley, 1990; Rhodes & Kroger, 1992).

It is plausible to assume a cultural aspect to the tolerance that families exhibit for the individuation of emerging adults. For example, the press toward individuation may be more keenly felt in so-called individualistic cultures than in collectivist cultures. Individualistic cultures are said to favor self-reliance, personal freedom, and pursuit of individual interests. They place a premium on self-actualization and the construction of a distinct and unique personal identity (Markus & Kitayama, 1991; Sampson, 1988; Triandis, 1995). Collectivist societies emphasize, in contrast, group membership as a central aspect of identity, the value of carrying out social roles and communal obligations, and the interdependence of relational bonds (Schwartz, 1990; Triandis, 1995). The internalization of these cultural norms would certainly influence the tolerance afforded emerging adults for separation-individuation.

Some researchers argue that collectivism and individualism are plural and possibly “overfreighted constructs” that may be too broad to be of much use for psychological analysis (Bond, 2002, p. 76). In an influential paper, Oyserman, Coon, and Kimmelmeier (2002) concluded that “the current evidence cannot shed light on the quality or nature of the distinction between country-level individualism-collectivism, individual level idiocentrism-allocentrism, and situationally-elicited independence-interdependence” (p. 43). Indeed, independence and interdependence can take numerous forms and be manifested in different ways even within the same culture (Fiske, 2002; Kagitcibasi, 2012). In a recent study of 21 cultural groups across

four continents, Becker and collaborators (2012) reported that respondents gave priority to those aspects of their identity that provided greater feelings of distinctiveness, a finding consistent with the view that establishing a sense of distinctiveness is a precondition for the construction of a coherent sense of self in any culture, although it may be manifested in different ways in individualistic and collectivist societies (e.g., Vignoles, 2009, 2011).

How individuation plays out in different ethnoracial groups, in different cultural settings, and within national boundaries or in cross-national samples, are all matters of empirical inquiry. But the tension between agency and communion is a *basic duality* of human existence (Bakan, 1966) in our view. How it is calibrated may well show variability across cultures. Some societies may prioritize communion, but agency is not thereby neglected. Other societies may prioritize agency, but the yearning for attachment, communion, and bonding is never absent. Moreover, how agency–communion is manifested will vary within the life course of the self-same individual, depending on relational status, developmental priorities, or life circumstances. However the compromise is struck between agency and communion, emerging adulthood is the developmental period during which the hard bargaining will have to take place, with important implications for later adjustment in adulthood.

What happens when individuation goes awry? Our lab has refined a measure of dysfunctional individuation first developed by Christensen and Wilson (1985). The original measure purported to assess the pathology of individuation derived from consideration of Mahler’s theory. According to Pine (1979, 1987), the clinical manifestations of individuation gone wrong can take the form of lower order and higher order symptoms that reflect borderline personality organization. Lower order symptoms include unclear self–other boundaries, the experience of merger with another, and the loss of the existential self. Higher order symptoms include an inability to tolerate aloneness, a desire to establish omnipotent control over others, and deficits in object constancy.

On this basis, Christensen and Wilson (1985) generated a 39-item, one-factor scale that measured differentiation problems (“Often, when I am in a close relationship, I find my sense of self gets lost”), splitting (“I find that either I like someone or I can’t stand them”), and relationship disturbances, such as coercion (“I am tempted to control other people to keep them close to me”), object constancy

(“I find that people begin to change once I get to know them”), and aloneness tolerance (“When I am away from family, I feel very uneasy”). The pathology of individuation scale was able to discriminate psychiatric patients diagnosed with borderline personality from a community sample (Christensen & Wilson, 1985).

The original 39-item scale has shown strong evidence of construct validity (e.g., Kins et al., 2012; Lapsley & Edgerton, 2002; Lapsley et al., 2000). Recently, we successfully revised the scale to a 10-item version (with a somewhat different response format) that we call the Dysfunctional Individuation Scale (DIS), insofar as we make no claim (as yet) that the DIS is picking up clinically significant psychopathology (Stey, Hill, & Lapsley, 2014). Across three studies, we showed that the DIS is a strong one-factor scale with excellent psychometric properties, including a pattern of convergent and discriminant validity with other measures of individuation; concurrent validity with a variety of measures of adjustment, psychiatric symptoms, and depression; and incremental validity over dispositional neuroticism.

The DIS holds promise for future investigations of what happens when social cognitive development goes off track in emerging adulthood. Disturbances in separation-individuation result in broadband personality and relational dysfunction, and pervasive difficulty in regulating social distance and managing the tension between agency and communion is at the heart of personality disorders (Holmbeck & Leake, 1999; Tackett, Baliss, Oltmanns, & Krueger, 2009). Hence, much is at stake in getting this right in emerging adulthood. Separation-individuation is a fluid, dynamic developmental process that interacts in complex ways with changing ecological settings, so no one is destined for any developmental outcome no matter the travail of early life experience. But emerging adulthood might be ground zero for activating the attachment system and motivating the struggle for the sort of relational autonomy that will equip the emerging adult for the next transition in the life course.

The Social Cognitive Brain

The neuroscience of social cognition in emerging adulthood is a relatively recent field of study made possible by the proliferation of neuroimaging methodologies (Saxe & Pelphrey, 2009). Two sets of findings are of interest. First, there is now considerable evidence that during adolescence there is significant reorganization of the brain, which is not

fully mature until emerging adulthood (e.g., Spear, 2010). Second, neuroimaging studies are identifying specific neuroanatomical regions of the brain that underwrite social functions (Frith & Frith, 2012). Consequently, there is surging interest in mapping the cortical regions associated with social cognitive functioning in emerging adulthood, with particular emphasis on venerable constructs such as perspective taking and mentalizing (Blakemore & Choudhury, 2006). As Choudhury et al. (2006) put it, “The brain regions that undergo the most significant development during adolescence overlap with those that have been linked to the ability to take other perspectives and to infer mental states” (p. 168).

For example, the medial prefrontal cortex (mPFC) is associated with the ability to differentiate the self from unknown others and close friends (Kelley et al., 2002; Heatherton et al., 2006) and is widely associated with the mentalizing network that underwrites the ability to make inferences about other people’s intentions, beliefs, and desires (Amodio & Frith, 2006; Frith & Frith, 2006). In addition to the mPFC, the mentalizing network includes the superior temporal sulcus (STS), the temporal parietal junction (TPJ), and the temporal poles adjacent to the amygdala (Castelli et al., 2000; Gallagher et al., 2000).

Research has attempted to document the conditions that activate the mentalizing network and possible sources of variation. For example, Contreras and colleagues showed that the mentalizing network fires during inferences about the mental states of groups in addition to inferences about the mental states of individuals, indicating that ToM inferences are applicable to wider social nets at the level of neural activity (Contreras, Schirmer, Banaji, & Mitchell, 2013). Moreover, although ToM tasks are typically solved by age 5, ToM use improves between adolescence and emerging adulthood insofar as the mentalizing network interacts with developing executive functions to drive decisions and actions in everyday life (Dumantheil, Apperly, & Blakemore, 2010).

Indeed, some researchers endorse a dual-process model of brain systems underlying social cognition, linking the mentalizing network to controlled, inferential processing and the mirror neuron system to automatic processing (Spunt & Lieberman, 2013; Keysers & Gazzola, 2007). In a meta-analysis of more than 200 functional magnetic resonance imaging (fMRI) studies, Overwalle and Baetens (2009) showed that the mirror system (anterior

intraparietal sulcus and premotor cortex) is engaged when one perceives the motion of body parts and whole-body motion and gaze (posterior STS), whereas the mentalizing system (TPJ, the medial PFC, and precuneus) is activated to infer the goals, beliefs, or values of others, particularly when presented in abstract terms (i.e., verbal stories). But the two systems are rarely concurrently active, and, instead of subservience of one to the other, the mirror and mentalizing systems operate in a complementary fashion.

In one study, Blakemore et al. (2007) showed that adolescents and emerging adults recruited the same mentalizing network on an intentional causality task (e.g., medial PFC, STS, temporal poles, and precuneus), although adolescents (vs. emerging adults) activated the medial PFC to a greater extent during intentional causality tasks than physical causality tasks, whereas emerging adults activated part of the STS more than did adolescents. These results suggest that the neural strategy for thinking about intentions changes between adolescence and emerging adulthood and that there are continued refinements in the mentalizing network beyond early childhood. Similarly, Gweon et al. (2012) showed that the same brain regions implicated in ToM in emerging adults are also found in children aged 5–11. This includes the TPJ, the mPFC, and precuneus. However, there was increased selectivity to mental state inferences (vs. physical state inferences) with age in the right and left TPJ. For example, in young children, the right and left TPJ respond equally to stories that describe mental states and nonmental states. But in adolescents and emerging adults, these regions are highly responsive to mental state content.

This research hints at an emerging theme in studies of the social cognitive brain. Although the mentalizing system appears to engage similarly on ToM tasks for emerging adults as for young individuals, there appears to be greater differentiation or selectivity of response as one gets older. In a meta-analysis of 107 neuroimaging studies of self–other judgments, Denny and colleagues (2012) showed that mentalizing judgments about self and about other are associated with activity in the medial PFC, as well as with common activation of the left TPJ and posterior cingulate. But there was also differentiation of brain activity. For example, self-judgments more frequently activated the ventral medial PFC, the left ventral lateral PFC, and the left insula. Judgments about others more frequently activated the dorsal PFC, the bilateral TPS, and the cuneus.

In the authors' view, these results support a distributional rather than a localization account of medial PFC organization and its functional heterogeneity (Denny et al., 2012), suggesting that the PFC plays a role in a variety of social cognitive functions and does so in different ways.

Of course, judgments about self and other go to the very core of social cognition, as we have seen. Successful navigation of the social landscape requires decentering (to use a Piagetian term) from one's own perspective to consider the perspective of others. Earlier in this chapter, we reviewed several developmental accounts of perspective taking and interpersonal understanding. How perspective taking works at the neural level has also been taken up by neuroimaging research. The main goal of this work is to identify the cortical regions that underwrite the ability to switch from a first-person (1PP) to a third-person (3PP) perspective (Choudhury et al., 2006).

According to simulation theory, we adopt the model of self-perception as the default mode when we attempt to access another's state of mind. Put differently, social cognition is grounded in an egocentric bias or 1PP that has to be suppressed in order to assume the 3PP of the other (Gilovich, Medvec, & Savitsky, 2000; Vorauer & Ross, 1999). Here, egocentrism is not the differentiation failure much pitied in Piagetian developmental theory but rather an attempt to use the psychological resources of one's own perspective to simulate the behavior of others. We project ourselves into the situation faced by the other and attempt to construct the other's perspective inductively, as it were, from the vantage point of our own experience. On this view, our self-awareness of our mental states enables us to read the minds of others.

Evidence in favor of simulation theory includes neurophysiological studies that show that 1PP and 3PP activate the same neural networks. Common brain regions are recruited when we execute an action, mentally represent the action, and witness another person performing it (Decety & Grezes, 2006; Grezes & Decety, 2001). Of course, mentally simulating the actions of others could misfire. Confusion would abound, for example, if the same neural networks are used to represent one's own intentions, beliefs, and desires and those of others, unless there was a way for the neural systems to differentiate the two perspectives (Decety & Sommerville, 2003).

Neuroimaging studies have attempted to document the neural mechanism that differentiates

self–other perspectives. For example, across three studies, participants were instructed to adopt their own (1PP) or another’s (3PP) perspective in the motor-action (Ruby & Decety, 2001), conceptual (Ruby & Decety, 2003), and social emotional (Ruby & Decety, 2004) domains. There was strong convergence of findings across these domains. The comparison of 3PP with 1PP was associated with activation in the right inferior parietal cortex and the ventromedial prefrontal cortex, including the frontopolar cortex. The comparison of 1PP with 3PP was associated, in turn, with the somatosensory cortex, which is involved in the construction of self-representations.

Hence, these cortical regions appear crucial for registering the distinction between 1PP and 3PP. Activation in regions similar to those activated in ToM, for example, the mPFC, the left temporoparietal-occipital junction, and left temporal pole, have also been reported, indicating that part of the mentalizing network is recruited when evaluating what another person knows or feels (Ruby & Decety, 2004; but see Nicole et al., 2008). Moreover, there is evidence that the frontopolar cortex may exert inhibitory control in suppressing the egocentric 1PP in both perspective taking and ToM (Brass, Zysset, & Van Cramon, 2001; Ruby & Decety, 2004). Clearly, attempts to understand the neuroscience of the social cognitive brain are just now getting on track. There are calls, for example, to augment social neuroscience models to understand the neural basis of more complex motivations for social cognition, such as self-enhancement and other motivated self- and other-perception (Beer, 2012).

Conclusion

Social cognition is an expansive, possibly hegemonic, field of study that folds a number of psychological disciplines within its imperial reach. In this chapter, we focused attention on social cognitive constructs that (1) have implications for understanding the evolving and constructive nature of self–other understanding and (2) seem crucial for understanding the social cognition of emerging adults. As a transition phase in the life course, emerging adulthood entails novel developmental challenges, to be sure, and how well this terrain is navigated will have profound implications for the way the rest of one’s life goes. But adolescents do not enter emerging adulthood as blank slates. They bring with them important developmental acquisitions that moderate their experience of this

transition. One lesson of developmental science is that, for all the brassy noise that accompanies great transitions in the life course, most developmental change is gradual, transitional, and happens without notice and without a sound.

So it is with social cognitive development. We focused initially on the great developmental stage sequences that describe perspective taking, interpersonal understanding, and interpersonal negotiation strategies. We took up the development of self-understanding. These are the classic domains of social cognitive development. Although there is not much interest these days in the mechanics of stage development, the latter stages in these sequences still have considerable heuristic value for understanding the nature of social cognition in emerging adulthood. Moreover, the importance of these constructs is underscored by the fact that cognitive neuroscience cannot dispense with them. Perspective taking and mentalizing, switching from 1PP to 3PP and reading other minds, is at the forefront of neuroscience research on the social cognitive brain.

Of course, there are unmistakable differences in the way perspective taking is understood by neuroscience and by developmental psychology. For the neuroscientist, perspective taking and ToM are matters of neural simulation. They are understood in terms of neural networks. It is a matter of perspective switching and perspective suppression as played out in cortical activation. This conception of perspective taking seems rather thin from stage-developmental perspectives that emphasizes the coordinated intersubjectivity of agents at multiple levels, from interior self-consciousness to the level of systems. Perspective taking is deeply embedded in social relationships, drives interpersonal understanding, and creates the conditions for self-understanding. This seems quite different from the neuroscience emphasis on simply switching from a 1PP to a 3PP. Perhaps Martin and colleagues put it best:

For us, the development of our abilities to work with and through perspectives is not an instantiation or stimulation of preexisting mental concepts and structures. It is a situated, embodied dynamic and coordinated way of being and conducting ourselves with others and things that move from a social interactive to a psychological, intersubjective footing during ontogenesis. (Martin, Sokol, & Elfers, 2008, p. 295)

This is not a criticism of neuroscience but rather an acknowledgment that psychological and neuroscience models operate at different levels of

organization or at opposite ends of a continuum and that molar and molecular approaches to important constructs like perspective taking and ToM must necessarily be held in creative tension as research seeks more powerful explanations of social cognition (Cacioppo, 2002).

In addition to classic social cognitive constructs, such as perspective taking, interpersonal and self-understanding, and mentalizing, we introduced attachment representations and separation-individuation as social cognitive constructs that are particularly salient in emerging adulthood. In our view, internal working models of attachment and the recalibration of object relational identifications during separation-individuation are both utterly social cognitive processes. Both involve a certain stance on self–other perspectives in the service of larger developmental goals. Both have important implications for how emerging adults understand their interpersonal world, navigate the social landscape, and cope with the normative developmental challenges that attend the transition to emerging adulthood.

Indeed, the chief social cognitive developmental task of emerging adulthood is to construct a workable sense of individuation in a relational context that promotes and sustains attachment security. This is the heartbeat of emerging adulthood. Facing up to this challenge gives emerging adulthood a sense of anticipation and urgency; resolving it facilitates successful transition to adulthood.

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