ADOLESCENT DEVELOPMENT IN INTERPERSONAL AND SOCIETAL CONTEXTS

Judith G. Smetana, Nicole Campione-Barr, and Aaron Metzger
Department of Clinical & Social Sciences in Psychology, University of Rochester, Rochester, New York 14627; email: Smetana@psych.rochester.edu, campione@psych.rochester.edu, metzger@psych.rochester.edu

Key Words  adolescence, parenting, siblings, peers, romantic relationships

Abstract  In this chapter we review theoretical and empirical advances in research on adolescent development in interpersonal and societal contexts. First, we identify several trends in current research, including the current emphasis on ecological models and the focus on diversity in and relational models of adolescent development. Next, we discuss recent research on interpersonal relationships, with an eye toward identifying major research themes and findings. Research on adolescents’ relationships with parents, siblings, other relatives, peers, and romantic partners, and adolescents’ involvement in community and society is reviewed. Future directions in research on adolescent development are discussed.

CONTENTS

INTRODUCTION AND OVERVIEW ........................................... 255
Definitions of Adolescence ................................................. 258
FAMILY RELATIONSHIPS .................................................. 259
Parent-Adolescent Relationships .......................................... 259
Sibling Relationships ....................................................... 264
Grandparents and Other Relatives ....................................... 266
EXTRAFAMILY INFLUENCES .............................................. 267
Peer Relationships .......................................................... 267
Romantic Relationships ..................................................... 269
ENGAGEMENT IN COMMUNITY AND SOCIETY .................... 272
CONCLUSIONS AND FUTURE DIRECTIONS ......................... 274

INTRODUCTION AND OVERVIEW

Since the publication of the last comprehensive review of research on adolescence in this series (Steinberg & Morris 2001), which followed a 13-year lag from the previous review (Petersen 1988), the psychological study of adolescence has come

0066-4308/06/0110-0255$20.00
of age. The number of papers pertaining to adolescent development published in the major developmental sciences journals such as Child Development and Developmental Psychology has been increasing steadily, while developmental science journals focusing specifically on adolescence continue to thrive. The Society for Research in Adolescence, the professional society that provides a multidisciplinary and international home for researchers interested in adolescent development, recently celebrated its twenty-first birthday. Moreover, two major handbooks of adolescence (Adams & Berzonsky 2003, Lerner & Steinberg 2004) and several major reviews (Collins & Steinberg 2005, Steinberg & Silk 2002) have been published recently. Although there are many reasons for the increased attention to development during adolescence (Steinberg & Morris 2001), the dramatic physical growth and physiological changes that characterize adolescence, combined with the many individual, cognitive, social, and contextual transitions that occur during this period, conspire to make adolescence an ideal period of the lifespan to study the interaction of different developmental systems (Collins et al. 2000).

Several trends characterize recent research on adolescent development. In terms of meta-theoretical and theoretical considerations, ecological approaches to human development (Bronfenbrenner 1979, Bronfenbrenner & Morris 1998), which gained in prominence in the 1980s and 1990s, continue to dominate the field (Lerner & Steinberg 2004, Steinberg & Morris 2001). Ecological approaches, which focus on understanding interactions among developing persons, the contexts of development, and the processes that account for development (Bronfenbrenner & Morris 1998), have increased our understanding of adolescent development beyond the proximal influences of the family and have yielded important new insights into contextual variations in adolescent development. Moreover, during the past decade, there has been an increased emphasis on (and greater methodological sophistication in) studies that examine the multiple interactions among different contexts, such as family, schools, and neighborhoods (e.g., Cook et al. 2002). Other approaches have gained significant footholds as well. For instance, recent research informed by family systems theory (Minuchin 2002) has led to a greater awareness of the relationships and mutual influences among different subsystems in the family. The interest in extending attachment theory beyond infancy has led to research examining adolescents’ representations of relationships with parents, peers, and romantic partners, and several longitudinal studies have become available to test the crucial prediction that relationships during infancy influence the course of social relationships in adolescence and young adulthood.

Another notable trend in recent research on adolescence is the greater attention to studying diverse populations of youth. During the 1990s this research focused most heavily on studies of African American adolescents (Steinberg & Morris 2001), but as we move into the twenty-first century, several shifts are evident. First, reflecting the changing demographic landscape of the United States, research is slowly becoming more inclusive, focusing more broadly on the development of Asian, Hispanic, and occasionally, Eastern European youth (but unfortunately, almost never on Native American youth). Along with the increased inclusivity,
there is increasing recognition of the significant heterogeneity among adolescents treated as part of a single racial or ethnic group (Chao & Tseng 2002, Harwood et al. 2002, Parke & Buriel 1998). More specifically, researchers are becoming more careful about specifying the national origins or background of adolescent participants, rather than treating their racial or ethnic background in global ways (e.g., “Asian” or “Latino”). Reflecting the demographic trends, immigration has emerged as an important new topic for research, and there has been more systematic consideration of the interacting effects of ethnicity, immigration, and social class (Chao & Tseng 2002, Fuligni 1998b). In addition, research is gradually moving beyond social address models of ethnicity or race to examine the processes that account for the influence of race and ethnicity on adolescents’ values, beliefs, and behavior, including the influence of family obligations (Fuligni et al. 1999, 2002) and family interdependence (Phinney et al. 2000, 2005). Several scholars have called attention to the need to consider the adaptive (and maladaptive) strategies that ethnic minority adolescents use to cope with their status and have provided elegant integrative models for conceptualizing the potentially stressful effects of exposure to prejudice and discrimination (Garcia Coll et al. 1996, Spencer & Dupree 1996). Though still relatively scarce, empirical research employing such models is increasing (e.g., DuBois et al. 2002). There are ongoing debates about the optimal designs for studying minority youth, but changes in research emphasis have been accompanied by some shifts in research designs from comparative approaches that document group differences to within-group analyses that examine the processes that account for development and adjustment among adolescents of a single ethnic group or cultural background (Phinney & Landin 1998).

In their review, Steinberg & Morris (2001) noted that “parents, problems, and hormones” (p. 85) were among the most popular topics of recent research on adolescence. In the new millennium, research has continued to emphasize parenting and parent-adolescent relationships, although increasingly these relationships have been considered in the context of, or as linked with, other relationships, contexts (for instance, parent influences on peer relationships or the interactions among parents, peers, and neighborhoods), or biological or hereditary influences (see Collins et al. 2000 for an elaboration of current integrative models and research designs that address these issues). The problematic outcomes of adolescence also have continued to dominate research, although this emphasis has been accompanied by a dramatic increase in interest in positive youth development (Larson 2000, Lerner et al. 2000). The impact of the biological changes of puberty has been a longstanding and enduring topic for research, but interest in this topic has waned in the past few years, although attention to the biological changes of adolescence has not. Technical and methodological advances, particularly in the use of neural imaging techniques such as functional magnetic resonance imaging, as well as the increased prominence of the developmental neurosciences, have led to increased interest in and understanding of structural and functional changes in the adolescent brain. While discussion of this research is beyond the scope of this chapter, the research indicates that changes in the prefrontal cortex (increases in myelination
and synaptic pruning) and the limbic system continue well into the twenties and appear to be related to cognitive functioning and self-regulation (Keating 2004, Spear 2000).

Another robust trend is that the study of adolescence has become more relational. This is evident in the greater focus on adolescents’ relationships beyond the family, in the tendency to view other social relationships as complementary to rather than supplanting relationships with parents, and in the reconceptualization of major developmental processes of adolescence such as autonomy in more relational terms (Collins & Steinberg 2005). Consistent with this emphasis, we focus our review on adolescents’ interpersonal relationships, broadly construed. We review progress and trends in several areas of ongoing and recent interest, including family relationships (relationships with parents, siblings, and other relatives), extrafamilial relationships (peer and romantic relationships), and adolescents’ relationships to their communities and broader society, as conceptualized within the emerging area of civic engagement. We cannot hope to review all the available literature here. Rather, this chapter builds on previous reviews and focuses on trends, new findings, and potential avenues for further research. Furthermore, our focus here is primarily on adolescence as it is experienced in contemporary U.S. society. Future trends in research on adolescence, including topics or issues in need of further attention, are noted at the conclusion of the chapter.

Definitions of Adolescence

Most researchers have parsed adolescence into three developmental periods, entailing early adolescence (typically ages 10–13), middle adolescence (ages 14–17), and late adolescence (18 until the early twenties). It is commonly said that adolescence begins in biology and ends in culture, because the transition into adolescence is marked by the dramatic biological changes of puberty, while the transition to adulthood is less clearly marked. Transitions to adulthood have been defined sociologically in terms of marriage and family formation, completion of education, and entrance into the labor force. As these transitions are occurring at later ages in contemporary society, Arnett (2000, 2004) has proposed that the period between ages 18 and 25 should be treated as a separate developmental period, which he labels emerging adulthood. Arnett’s claim rests on the significant demographic diversity (and instability) of this period, as well as the increases in identity exploration that typically occur at this time. Until recently, however, most of the research on adolescent development has focused on early and middle adolescence, with less research focusing on transitions out of adolescence. Thus, the utility of distinguishing between late adolescence and emerging adulthood remains to be empirically determined. The research on adolescent brain development, which shows that brain maturation is not complete, and new research demonstrating that mature decision making does not emerge until the middle twenties (Cauffman & Steinberg 2000), also has the potential to reshape our definitions of adolescence and the transitions to young adulthood.
FAMILY RELATIONSHIPS

Parent-Adolescent Relationships

The nature and quality of adolescents’ relationships with parents continues to be one of the most heavily researched topics on adolescence. Despite decades of psychological research to the contrary, the persistent perception in the popular culture is that adolescence is a difficult period entailing significant moodiness, storm and stress, and willful disobedience toward parents. Yet, overwhelming evidence from the past 30 years indicates that extreme alienation from parents, active rejection of adult values and authority, and youthful rebellion are the exception, not the norm, that only a small proportion of adolescents (from 5%–15%, depending on the sample) experience emotional turmoil and extremely conflicted relations with parents, and that extreme difficulties typically have their origins prior to adolescence (Collins & Laursen 2004, Steinberg 1990).

Nevertheless, adolescent-parent relationships do go through significant transformations during adolescence, and parents perceive adolescence as the most challenging and difficult stage of childrearing (Buchanan et al. 1990). During adolescence, European American and European youth spend progressively less time with parents and family and more time with peers (Larson et al. 1996), although decreases in shared time depend to some extent on the type of activity considered (Dubas & Gerris 2002). Longitudinal research using the experience sampling method to examine adolescents’ daily moods indicates that adolescents’ negative emotional states increase as they transition into and move through adolescence, although the downward trend stops (but does not reverse) in late adolescence (Larson et al. 2002). Family relationships are transformed from more hierarchical relationships at the outset of adolescence to more egalitarian relationships by late adolescence (Youniss & Smollar 1985).

CONFLICT, DISTANCING, AND SEPARATION

Bickering, squabbling, and disagreements over everyday issues characterize parent-adolescent relationships, particularly during early adolescence (Collins & Laursen 2004, Holmbeck 1996, Smetana 1996). Although high levels of conflict during adolescence are deleterious for adolescent development, relationships, and future adjustment (Laursen & Collins 1994), researchers now agree that conflict in early adolescence is a normative and temporary perturbation that is functional in transforming family relationships. Moreover, moderate conflict with parents is associated with better adjustment than either no conflict or frequent conflict (Adams & Laursen 2001) and does not influence the subsequent quality of parent-adolescent relationships (as assessed longitudinally), although closeness and support are highly stable over time (Smetana et al. 2004b). A longstanding assumption was that conflict with parents follows a U-shaped trajectory across adolescence, with conflict peaking in middle adolescence and then declining. A recent meta-analysis (Laursen et al. 1998) has demonstrated, however, that the trajectory depends on how conflict is assessed. The rate (number
of conflicts and their frequency of occurrence) peaks in early adolescence and then declines, while conflict intensity increases from early to middle adolescence, with mother-daughter dyads experiencing more conflicts than other parent-child configurations.

Reflecting the available research, Laursen et al’s (1998) meta-analysis included studies of primarily white, middle-class families. Since then, research has emphasized ethnic, racial, and cultural variations in conflict expression and resolution and has been guided by the cultural psychology assumption that conflict in interpersonal relationships is more characteristic of individualistic cultures than cultures (or ethnic groups) that espouse more interdependent, familistic, or collectivist values (Markus et al. 1997, Rothbaum et al. 2000). Yet, age-related increases in parent-adolescent disagreements consistently have been found in studies examining American families of varying cultural and ethnic backgrounds (Fuligni 1998a, Phinney et al. 2005, Smetana & Gaines 1999) and among adolescents in Asian cultures (Yau & Smetana 1996, 2003), although perhaps at a lower frequency than among European American youth (Fuligni 1998a). Increases in conflict in early adolescence have been explained within evolutionary (Steinberg 1989), psychoanalytic (Holmbeck 1996), social-psychological (Laursen 1995), and social-cognitive (Collins 1990; Smetana 1988, 2002) frameworks, but whether the theoretical lens focuses on the biological changes of puberty or advances in adolescent social cognition, all of these approaches have in common the notion that parent-adolescent conflict leads to adolescents’ greater independence from parents. Moreover, developmental issues also are salient for parents; conflict with adolescents among parents who are facing midlife issues contributes to psychological symptoms and life dissatisfaction, particularly for mothers (Silverberg & Steinberg 1990).

Most conflicts with parents during adolescence are resolved by disengaging (e.g., walking away) or giving in to parents (Montemayor 1983, Smetana et al. 1991b), but European American adolescents are less compliant with parents’ wishes than are adolescents of other ethnicities, and the more acculturated adolescents become, the more they resemble European American youth (Phinney et al. 2005). Conflict resolution has been claimed to provide adolescents with developmentally appropriate opportunities to learn negotiation skills (Grotevant & Cooper 1985), but surprisingly little research has examined this proposition.

Structural changes in the family, like divorce and remarriage, have been found to lead to a temporary disruption of adolescent-parent relationships, including increased conflict, particularly in the first two years following a divorce and with the new stepparent (Hetherington & Kelly 2002). However, some evidence suggests that adolescent-parent conflict is less frequent in stably divorced, mother-headed households than in two-parent households, perhaps because mother-adolescent relationships in stably divorced families tend to be less hierarchical (Smetana et al. 1991a). Likewise, economic strain, both chronic (Gutman & Eccles 1999, McLoyd 1998) and more sudden (for instance, among Midwestern farming families who experienced economic decline; Conger et al. 1992, 1993), is associated with
more negative parent-adolescent relationships, including greater parent-adolescent conflict and more negative emotions, as well as more harsh, punitive parenting. Indeed, a recent meta-analysis has shown that socioeconomic disadvantage is strongly and consistently related to harsh, unresponsive parenting (Grant et al. 2003).

Closeness and Warmth A well-established finding is that both adolescents’ feelings of support, closeness, and intimacy and objectively observed assessments of warmth and cohesion in adolescent-parent relationships decline during adolescence (Buhrmester & Furman 1987; Conger & Ge 1999; Furman & Buhrmester 1985, 1992), although evidence from several studies suggests that relationships improve once adolescents leave home (Dubas & Petersen 1996). Similar developmental trajectories in warmth and closeness have been found in ethnic minority youth, with some variations in the timing of when closeness declines (Fuligni 1998a), and closer, more secure attachment to parents during adolescence is associated with greater social competence and better psychosocial adjustment (Allen et al. 1998).

Relationships with mothers and fathers have been found to differ in both quality and substance. Studies consistently show that across ages, adolescents are closer (Buhrmester & Furman 1987) and spend more time in direct interaction (Larson & Richards 1994) with mothers than with fathers. Adolescents also talk more about private matters like dating and sexual attitudes and information with mothers than with fathers (Larson & Richards 1994, Noller & Callan 1990). They are equally likely to talk about more impersonal issues, such as schoolwork, future plans, and social issues with either parent. Steinberg & Silk (2002) attribute this difference to the perception that fathers provide informational and material support while mothers provide more emotional support. Given the consistent finding that adolescents’ relationships with mothers and fathers differ, surprisingly little empirical research includes fathers or examines the differential influence of mothers and fathers on adolescent development.

Parenting Styles Along with adolescent-parent relationships, the effects of parenting on adolescent development continue to be very heavily researched, although there have been significant shifts in approach over the past decade. Baumrind’s (1991) tripartite parenting typology, which has been refined to classify parenting into four categories derived from two orthogonal dimensions of demandingness and responsiveness (Maccoby & Martin 1983), continues to be the most popular approach. A well-established finding, supported by vast numbers of studies, is that adolescents raised in authoritative homes (where parents are both demanding and responsive) are more psychosocially competent as assessed on a wide array of outcomes than are adolescents raised in authoritarian, permissive, or rejecting-neglecting homes (Steinberg 2001). Furthermore, the benefits of authoritative-ness trump the benefits of consistency in parenting; adolescents reared in homes where only one parent is authoritative have been shown to be more academically
compete than adolescents reared in homes where parents are consistent but not authoritative in their parenting (Fletcher et al. 1999).

Authoritative parenting is more prevalent among European American than among ethnic minority parents and among middle- than among lower-socioeconomic-status families. Steinberg (2001) has concluded that authoritative parenting benefits youth of all ethnicities and socioeconomic statuses. Some have argued, however, that parenting should be assessed in terms of indigenous, culturally salient values. For instance, Chao (1994, 2001) has claimed that the strictness that characterizes Chinese parenting reflects a Confucian, child-centered emphasis on the importance of training (guan) rather than the more punitive, adult-centered attitudes that are reflected in authoritarian parenting. Moreover, there is some evidence that the positive effects of authoritative parenting, at least for immigrant Chinese youth, reflect the influence of greater exposure to American society (Chao 2001).

Darling & Steinberg (1993) have conceptualized parenting styles as an emotional context that changes the meaning of different parenting practices. This model recasts parenting styles as part of a reciprocal, bidirectional process between parents and adolescents (Kuczynski 2003) and highlights the importance of parenting styles as influencing adolescents’ willingness to be socialized by parents (Grusec & Goodnow 1994).

**DIMENSIONAL APPROACHES** During the past decade, there has been a shift toward more dimensional approaches to studying parenting during adolescence and particularly toward greater specificity in defining those dimensions. For instance, rather than viewing parental control as a single dimension that ranges from high to low, distinctions have been made between overly intrusive parental control (referred to as psychological control) that attempts to control adolescents’ thoughts and feelings and undermine adolescents’ psychological development (Barber 1996, 2002) and behavioral control, or parental rules, regulations, supervision, monitoring, and management of adolescents’ activities. Proactive parenting and parents’ use of harsh discipline in early childhood (Pettit et al. 2001), as well as perceptions of parental overcontrol over issues that adolescents believe should be under personal jurisdiction (Smetana & Daddis 2002), have been found to lead to adolescents’ feelings of psychological control. In turn, high levels of psychological control have been associated with both internalizing and externalizing problems (Barber 1996, 2002; Conger et al. 1997; Pettit et al. 2001).

Parental monitoring as a form of behavioral control is increasingly important in adolescence because it allows parents to keep track of their adolescents’ activities, peer associations, and whereabouts while permitting greater autonomy. Numerous studies indicate that inadequate parental monitoring is associated with externalizing problems such as drug use, truancy, and antisocial behavior (see Steinberg & Silk 2002), while greater parental monitoring is associated with higher academic achievement and better adolescent adjustment (Lamborn et al. 1996, Pettit et al. 2001). Although it has been assumed that low socioeconomic status is associated with poor monitoring and supervision, associations have been inconsistent
(Hoff et al. 2002). Interestingly, though, recent research indicates that adolescents growing up in highly affluent communities are at increased risk for substance use, anxiety, and depression due to a lack of parental monitoring and supervision as well as pressures to achieve and lack of emotional closeness with parents (Luthar 2003, Luthar & Becker 2002).

Recently, Kerr & Stattin (2000, Stattin & Kerr 2000) observed that parental monitoring and surveillance typically have been operationalized in terms of parents’ knowledge of their adolescents’ activities and whereabouts, rather than parents’ actual tracking and surveillance. In a large longitudinal study of Swedish 14-year-olds, Kerr & Stattin (2000) demonstrated that only adolescents’ willingness to disclose to parents, and not parents’ attempts to obtain information or actively control their teens’ behavior, influenced adolescents’ associations with deviant peers and problem behaviors. Furthermore, they controlled for closeness in the parent-adolescent relationship, ruling out the alternate explanation that child disclosure is a proxy for good parent-adolescent relationships. Parents appear more likely to solicit information when their adolescents are already more involved in problem behavior (Kerr & Stattin 2000, Tilton-Weaver & Galambos 2003).

Kerr & Stattin’s (2000, Stattin & Kerr 2000) findings are provocative, because they challenge the well-established conclusion that parental monitoring and control are essential for successful adolescent development; their results highlight adolescents’ agency in their own development. Although current theoretical perspectives emphasize the reciprocal interplay between parents and adolescents and the importance of adolescents’ willingness to be socialized (e.g., Darling & Steinberg 1993, Grusec & Goodnow 1994, Kuczynski 2003), the strong presumption in much research on parenting is that the direction of effects is from parents to adolescents. Thus, it is not surprising that Kerr & Stattin’s (2000) findings have been challenged. In reanalyses of longitudinal data from a large sample of youth in California and Wisconsin, Fletcher et al. (2004) found that parental control contributed significantly to both parental knowledge and reductions in juvenile delinquency. The debate about how to define parental monitoring is not yet fully resolved, but it highlights the need to better understand adolescents’ strategies for information management (Darling et al. 2000, Marshall et al. 2005) and the implications of disclosure and secrecy for parenting and adolescent development (Finkenauer et al. 2002, Smetana et al. 2005). The findings also suggest the need for greater attention to how parents acquire knowledge of adolescents’ activities and act on that knowledge (Crouter & Head 2002).

Observational studies of family interactions provide further evidence for the reciprocal nature of interactions between parents and adolescents. In both cross-sectional and longitudinal analyses, family interactions that allow adolescents the opportunity to express independent thoughts and feelings while maintaining closeness and connection to parents facilitate higher self-esteem, better psychosocial competence, less depression, greater ego and identity development, and more mature moral reasoning (Allen et al. 1994a,b; Grotevant & Cooper 1985; Hauser et al. 1991; Walker & Taylor 1991). The context of risk moderates these effects, however.
In low-risk families, undermining autonomy is associated with poorer quality adolescent-parent relationships, but in high-risk families, undermining autonomy is associated with better quality adolescent-parent relationships (McElhaney & Allen 2001). Several large-scale cross-sectional and longitudinal studies of family decision making in ethnically diverse samples likewise have shown that joint decision making between parents and adolescents is associated with better adjustment and less deviance (Dornbusch et al. 1990, Dowdy & Kliwer 1998, Fuligni & Eccles 1993, Lamborn et al. 1996, Smetana et al. 2004a), although the findings are moderated by ethnicity, community context (Lamborn et al. 1996), domain of the decision, and age (Smetana et al. 2004a). That is, while parental involvement in decision making is advantageous in early and middle adolescence, adolescents’ increased decision-making autonomy between middle and late adolescence leads to better adjustment in late adolescence (Smetana et al. 2004a).

A final note is that much of the progress in understanding parenting and parent-adolescent relationships during the past decade has come from studies utilizing adolescent informants, but agreement between parents’ and adolescents’ views of parenting or relationships typically is low to moderate. Adolescents’ and parents’ moods and emotions (Larson & Richards 1994), perceptions of relationship quality (Callan & Noller 1986), beliefs about parental authority, and reasoning about conflicts (Smetana 1988, 1989; Smetana & Gaines 1999) all increasingly diverge with age. These discrepancies may be potentially meaningful and developmentally salient because they point to areas of tension and disagreement in family life.

Sibling Relationships

Although most of the research on adolescents’ family relationships has focused on relationships with parents, interest in adolescents’ relationships with their brothers and sisters and the influence of these relationships on adolescent development has increased substantially over the past decade, due in part to the increased prominence of family systems theory (Minuchin 2002), with its focus on different subsystems of the family, and to the interest in behavioral genetics. Studying siblings offers an ideal opportunity to examine the aspects of the environment that family members share in common (e.g., shared environmental influences) and the aspects that are not shared (e.g., nonshared environmental influences). Moreover, sibling relationships are highly salient to adolescents; early adolescents have more conflicts with siblings than with anyone else (e.g., fathers, grandparents, friends, or teachers; Furman & Buhrmester 1985) except maybe mothers (Collins & Laursen 1994), but relationships with brothers and sisters are also important sources of companionship, affection, and intimacy (Buhrmester & Furman 1990, Lempers & Clark-Lempers 1992). The quality of the relationship has been found to vary by birth order. Older siblings are perceived as more domineering and more nurturing than are later-born siblings, while later-born siblings admire and feel closer to their older brothers and sisters than their brothers or sisters feel toward them (Furman & Buhrmester 1992). Like relationships with parents, relationships with siblings are
transformed during adolescence to become more egalitarian, less asymmetrical, less conflictive, and less close, most likely because siblings spend less time together as they get older (Raffaelli & Larson 1987).

The research has shown that better relationships with brothers and sisters lead to better adjustment during adolescence (Stocker et al. 2002). Even after controlling for level of parental and peer support, greater support from brothers and sisters has been associated longitudinally with lower levels of internalizing problems for both younger and older adolescents and with less externalizing behavior, particularly when girls perceive more support from an older brother (Branje et al. 2004). At the other extreme, however, sibling similarity in problem behavior, early sexual activity, and drug use suggests that older siblings’ involvement in these behaviors is a risk factor for younger siblings (Ardelt & Day 2002, East & Jacobson 2001, Slomkowski et al. 2001).

Much attention has focused on parents’ differential treatment of their offspring as an example of nonshared environmental influences. Both parents and siblings perceive parents as treating siblings differently (Daniels et al. 1985), although Kowal & Kramer (1997) found that the majority of early adolescents in their sample perceived their parents’ differential treatment as fair and justified on the basis of age, personality, and need. Nevertheless, parents’ differential treatment has been found to affect siblings’ development (Daniels et al. 1985) and adjustment (Feinberg & Hetherington 2001). The effects of parents’ differential treatment persist even after controlling for the effects of parenting, particularly when parenting is low in warmth or high in negativity (Feinberg & Hetherington 2001). Parents’ (and particularly fathers’) differential treatment has been associated with higher levels of negative behavior between siblings (Brody et al. 1992, Feinberg & Hetherington 2001).

Similarities and differences in siblings’ behavior and relationships with parents also have been of interest and have been explained within two competing theoretical frameworks. According to social learning theory, older siblings may serve as models for younger siblings; the research indicates that older siblings are seen as more effective models only if younger siblings perceive their older siblings as likable and nurturing, so that the younger sibling wants to be around and learn from them (Whiteman & Buchanan 2002). In contrast, sibling deidentification theory posits that adolescents respond to parents’ differential treatment by defining themselves as different from each other, pursuing different domains of competence and interest to avoid comparison and rivalry (Schachter 1985). Research indicates that sibling deidentification is more frequent and intense among siblings who are more similar in gender, age, and birth order (Schachter & Stone 1987) and may be especially salient during adolescence because of the developmental salience of identity development (Updegraff et al. 2000).

In addition, siblings may establish different relationships with their parents as a way to improve the quality of their relationships with each other and, perhaps, reduce sibling conflict and rivalry. Increasing differentiation in siblings’ relationships with parents during adolescence has been associated longitudinally with increased
warmth (between both siblings) and decreased conflict and competition among first- but not second-born adolescents (Feinberg et al. 2003). These effects also vary developmentally. Shanahan et al. (2005) found that regardless of birth order, maternal warmth declined when children reached early and middle adolescence, and conflict increased for both siblings when the first-born transitioned into adolescence.

Most research has focused on the effects of parent-adolescent relationships on sibling relationships, but recent research has begun to focus on sibling influences on parent-adolescent relationships. This research has demonstrated that parents’ prior childrearing experience with their first-born siblings influences their expectations, behavior, and relationships with later-born offspring when they reach adolescence. For instance, parents’ experiences with their first-born children influence their expectations for their younger child’s adolescence, even with the effects of temperament controlled (Whiteman & Buchanan 2002). Furthermore, parents have less conflict with and greater knowledge of daily activities for later-born than first-born adolescents (Whiteman et al. 2003). Longitudinal designs that examine changes in siblings’ relationships with each other and with parents at the same chronological age or developmental transition hold particular promise for unconfounding developmental and sibling effects.

Grandparents and Other Relatives

There has been surprisingly little research on adolescents’ relationships with relatives other than parents or siblings. In their primarily European American middle-class sample, Furman & Buhrmester (1992) found that relationships with grandparents become more distant (both less supportive and less conflictive) as adolescents grow older, but few studies have followed up this finding with more detailed analyses. Furthermore, the available evidence suggests that relationships with grandparents and other relatives may vary in ethnic minority families. Multi-generational families are more common among African American than among European American families (Parke & Buriel 1998), but significant increases in the number of African American children orphaned or abandoned due to parental AIDS/HIV, incarceration, and drug use has led to increasing numbers of African American grandparents assuming primary childrearing responsibilities for their grandchildren (McAdoo 2002). The implications of “off-time” parenting for grandparents have been studied (McAdoo 2002), but the implications of being raised by grandparents for adolescent development have not. Furthermore, as divorce and remarriage become increasingly normative in American society, adolescents’ relationships with multiple sets of grandparents and stepgrandparents warrant attention.

More generally, the available research indicates that ethnic minorities, especially African American and Latino families in the United States, have social networks that are more cohesive and include a larger proportion of extended family members than do European American families, and that these kin networks are important sources of emotional and instrumental support (Harwood et al.
2002, Hatchett & Jackson 1993, Taylor & Roberts 1995). Despite variability in the importance, extensiveness, fluidity, and amount of contact with kin networks, family influences on adolescent development have been limited primarily to studies of nuclear rather than extended families. More research on the distinct relationships adolescents have with different relatives and their influence on adolescent development is warranted.

EXTRAFAMILY INFLUENCES

Peer Relationships

The view that framed early research was that peer culture provides a negative and divergent source of influence from parents (Coleman 1961). An updated but similar view of peer influence has captured recent attention (Harris 1998), although the research evidence does not support this view. Rather, parents and peers have been found to be influential in different arenas of adolescents’ lives. Parents remain important sources of influence regarding long-term issues (like career choices and moral issues and values), whereas peers influence orientations to adolescent culture such as matters of taste, style, and appearances, although antisocial conformity to peers peaks around ninth grade. Moreover, Brown (2004) has pointed out that peer influence may range from direct peer pressure to much more indirect sources of influence. Ongoing concerns about the negative influence of peers have led to research examining parental influence on peer relations. Parents often serve as managers and consultants for adolescents’ peer relationships, and parental guidance (rather than direct prohibition) can effectively influence and change adolescents’ selection of friends (Mounts 2001, 2004).

Three levels of adolescents’ peer relations have been described (Brown 2004). The dyadic level includes adolescents’ friendships, which remain the most actively studied area of adolescents’ peer relations (Brown & Klute 2003), and romantic relationships (discussed in the following section). Adolescents also congregate in small groups of peers (generally 6 to 12), known as cliques, which are based on friendship and shared activities and provide contexts for interaction. Despite the popular image of adolescents as “cliquish,” research indicates that less than half of adolescents are members of cliques and that clique membership is somewhat fluid, although girls are more likely to be clique members than are boys (Ennett & Bauman 1996). Clique members are likely to be of the same age, race, socioeconomic background, and during early adolescence, the same sex. The third level of peer interaction consists of crowds, which generally emerge during early to middle adolescence. Crowds are based on shared reputations or stereotyped images (e.g., jocks, brains, nerds or geeks, stoners) among youth who may not necessarily spend much time together (Brown 2004). Crowds help to locate adolescents in the social hierarchy and channel adolescents into interactions with others who share the same reputation; therefore, they provide a context for developing identity. At each of these levels of organization, research has proceeded in a number of different directions.
Research on the quality of adolescent friendships has progressed considerably in recent years (Brown & Klute 2003). Much research has focused on changes in the positive qualities of friendship over the course of adolescence; adolescents’ friendships become closer, more intimate, more disclosing, and more supportive with age (Furman & Buhrmester 1992). Close friendships provide adolescents with developmentally salient opportunities to improve their social skills and social competence (Collins & Steinberg 2005). Adolescents’ friends are highly similar in background, values, orientations to school and peer culture, and antisocial behavior (Hartup 1996), and one of the persistent questions about adolescent friendships is whether this similarity is due to selection (choosing friends who are similar) or influence (mutual socialization), although most agree that both processes are at work (Brown 2004). Furthermore, because friendships are nested within larger peer networks, the influence of friendships may be overestimated when larger peer influences are at work (Brown 2004). Research also has looked beyond influence and selection to assess the processes of parallel events and assortative pairing on similarity.

During the past few years, some intriguing new topics focusing on the “dark side” of adolescent friendships and peer groups have emerged. At the dyadic level, research on corumination (Rose 2002) has shown that early adolescents (typically girls) may extensively discuss issues, revisit problems, and focus on negative feelings within relatively healthy and intimate relationships. Corumination may provide the link between the incongruent finding that girls have more intimate friendships but also more internalizing symptoms than do boys. Research also has explored the influence of jealousy in early adolescent friendships (Parker et al. 2005, Roth & Parker 2001), which may occur when same-sex (again, typically girls’) friends begin to develop romantic interests. Jealousy, as perceived by others, is associated with greater loneliness, aggression, and maladjustment in social relationships. Research also has examined adolescents’ reasoning about peer group exclusion based on gender and racial stereotypes (Killen et al. 2002) and as a function of adolescents’ peer group identification (e.g., cheerleaders, jocks, or preppies versus dirties, druggies, and Goths; Horn 2003); adolescents who belong to high-status crowds have been found to view exclusion as less wrong and less unfair than do adolescents who either do not belong to a group or who belong to low-status groups. But the picture is not all negative; Horn (2003) also found that overall, adolescents have a high level of respect for peers from all backgrounds, and Killen et al. (2002) found that intergroup contact increased adolescents’ thinking about fairness and equality when considering racial exclusion.

The characteristics of popular and unpopular adolescents have been an enduring topic of research (Rubin et al. 1998, Steinberg & Morris 2001). Sociometric studies have indicated that there are different subtypes of unpopular adolescents, including adolescents who are rejected and withdrawn and adolescents who are rejected and aggressive, and that these different forms of peer rejection have different correlates and developmental trajectories. Adolescents who are withdrawn tend to be lonely, suffer low self-esteem, and be at risk for internalizing disorders, whereas youth
who are rejected and aggressive are at risk for externalizing problems (Rubin et al. 1995).

Popular adolescents are well known, attractive, athletic, and accepted by other popular youth (Adler & Adler 1998), but differentiations also have been made among popular youth. Recent research indicates that popularity is associated with both prosocial and antisocial behavior (LaFontana & Cillessen 2002, Rodkin et al. 2000), although popular-aggressive adolescents may be seen as socially skilled and socially prominent but disliked by peers (Farmer et al. 2003). “Mean girls” have been a trendy topic, both in popular culture and adolescent developmental research (Underwood 2003). Consistent with the popular image, more popular early adolescent girls have been found to be more relationally aggressive, which leads to increased popularity over time (Rose et al. 2004). Relationally aggressive behaviors (like excluding, ignoring, and spreading rumors) may allow young girls to control their peers in ways that lead them to be seen as high in status and popular. Finally, popularity is associated with better social adaptation and adjustment, but it also leads to significant increases over time in peer-sanctioned, minor deviant behavior, including drug and alcohol use and minor delinquency (Allen et al. 2005).

Perhaps in response to high-profile events such as the 1999 Columbine shootings by two teenagers at a Colorado high school, there has been a striking increase in research on antipathies in adolescent peer relations, including bullying, victimization, and harassment (Juvonen & Graham 2001, Nishina & Juvonen 2005). Research on bullies and their victims has shown that up to three-quarters of young adolescents experience some type of bullying and that up to one-third of them experience more extreme forms of coercion (Juvonen et al. 2000). Bullying, which refers to repeated aggressive behavior that occurs within particular interpersonal relationships that are characterized by a power imbalance (Olweus 1999), peaks in early adolescence and then decreases in frequency (Borg 1999). Direct bullying (e.g., physical or verbal attacks) is more frequent among males, whereas indirect (e.g., relational) bullying is more frequent among females, and white and Latino adolescents are bullied more than black adolescents (Borg 1999). Research has shown that there are distinct characteristics of youth singled out as victims; they are perceived to be physically weaker and have fewer friends than nonvictims (Olweus 1993a,b; Pellegrini 1994; Perry et al. 1988). The consequences of victimization include lower self-esteem in middle adolescence and depressive symptoms in early adulthood (Olweus 1993a,b), as well as increased school-related difficulties (i.e., lower grades, disliking school, and absenteeism; Eisenberg et al. 2003). Due to the pervasiveness of bullying and its damaging effects on adolescent adjustment, school-based bullying prevention and intervention programs are on the rise (Olweus 1999, Smith et al. 2003).

**Romantic Relationships**

Although adolescents’ romantic relationships would seem like an obvious and important area of study for developmental scientists interested in adolescents’
psychological development, until recently the topic has languished, for both pernicious and benign reasons (Collins 2003). Currently, however, research on adolescents’ dating and romantic relationships is burgeoning. Dating and romantic relationships are a significant part of adolescents’ social world (Bouchey & Furman 2003, Brown 2004); current research has corrected the misperception that these relationships are fleeting and transitory, as had been presumed (Collins 2003). Instead, the research has shown that romantic relationships are normative during middle adolescence, that they are relatively stable after early adolescence, and that they influence both current functioning and later psychosocial development. By tenth grade, interactions with romantic partners are more frequent than interactions with parents, siblings, or friends (Laursen & Williams 1997) and provide as much support as relationships with mothers (Furman & Burhmester 1992). Moreover, high school students spend a great deal of time thinking about these relationships (Richards et al. 1998). By the end of high school, nearly three-fourths of all U.S. adolescents report having had a romantic relationship in the last 18 months (Bouchey & Furman 2003).

Research on dating and romantic relationships during adolescence has proceeded in several directions. One direction has been to chart normative changes in the features of romantic relationships. In very early research, Dunphy (1963) proposed that adolescents progress through a five-stage sequence of structural changes in peer relationships that entails transitions from small unisexual cliques to associations between male and female cliques, to the formation of a larger heterosexual crowd, which provides a context for dating (first among clique leaders and then later more broadly among all members), and finally, crowd dissolution in favor of a loose association of heterosexual couples. Although this account stood unexamined for nearly half a century, recent research has provided evidence for its validity among contemporary youth (although the sequence may unfold over a longer time span, as the average age of marriage moves upward to the mid-twenties). Studies have shown that early adolescents spend a great deal of time thinking about (but not actually interacting with) the opposite sex (Richards et al. 1998) and that initial interactions with the opposite sex typically occur first in mixed-sex contexts. More experience with mixed-gender friendship groups facilitates adolescents’ involvement in romantic relationships (Connolly et al. 2000, 2004).

The social context, including relationships with friends and parents, has been examined as sources of influence on the quality and progression of romantic relationships. Thus far, researchers have focused on either peer influence or parental influence or their additive effects (Collins & Steinberg 2005), but more complex models of the interactive influences of parents, friends, and peers on adolescents’ romantic relationships have been lacking. Peer relationships may influence the development of romantic relationships by providing a context for establishing romantic relationships, by influencing the nature of those relationships and the choice of romantic partners, and by influencing relationship processes (Bouchey & Furman 2003). The quality of adolescents’ friendships has been shown to be
closely associated with the quality of romantic relationships (Connolly & Johnson 1996, Furman 1999).

Likewise, researchers have examined continuity between earlier parent-child relationships and adolescents’ romantic experience and relationships. According to attachment theory, representations of attachment to caregivers formed early in life influence later romantic relationships through expectancies about closeness and intimacy (Furman et al. 2002, Furman & Wehner 1997), but some evidence suggests that attachment representations of friendships mediate the relationship between adolescents’ working models of their relationships with parents and their views of romantic relationships (Furman et al. 2002). Parental socialization practices, such as effective parental monitoring or a history of parental responsiveness and autonomy support, also may influence the development of romantic relationships, either directly or through their effect on social competence, self-esteem, and self-worth (Collins & Sroufe 1999, Gray & Steinberg 1999).

Relatively little research to date has examined the meaning of romantic interactions and relationships to adolescents, but some evidence indicates that early adolescents’ notions of romance are very idealized and stereotypic and primarily meet needs for status attainment, sexual experimentation, and recreation. Over time, as adolescents gain experience interacting with the opposite sex, romantic relationships begin to fulfill needs for support or caregiving (Connolly et al. 2000, Feiring 1999, Furman & Wehner 1997).

Another line of research has examined individual differences in dating, with the focus primarily on the consequences of early dating. Research has consistently shown that for both boys and girls early dating is associated with poorer psychosocial adjustment, including poorer self-esteem, lower academic achievement, more alcohol and substance abuse, and earlier involvement in sexual activity (Bouchey & Furman 2003, Collins & Steinberg 2005). The causal relationships are not clearly established, however, and youth who are involved in these activities may begin their involvement in dating earlier than other teens. Moreover, the desired timetable for dating, pacing of sexual intimacy, and tolerance for diversity may vary by friendship group and reputational crowds (Brown 2004), as well as by ethnicity, cultural background, and gender. Furthermore, individual differences in dating among older adolescents need further study.

Despite the rapid progress made in recent years in understanding the development, features, and significance of adolescents’ romantic relationships, research in this area has been largely focused on middle-class, European American, heterosexual youth (Bouchey & Furman 2003). More research on the normative development of romantic relationships in ethnic minority and sexual minority (e.g., gay, lesbian, or bisexual) youth is needed (but see Diamond & Savin-Williams 2003 for progress in this area). Furthermore, to date, research has focused primarily on individual self-reports rather than considering the dyad as a unit of analysis; future research should examine the perceptions and experiences of both romantic partners as well as the influence of discrepancies in their perspectives for adolescent development and adjustment.
Adolescents’ involvement in their communities and society has become a topic of intense interest in the past few years. Although civic involvement has been studied in the past as an aspect of adolescents’ political socialization, there has been a dramatic resurgence of interest in the topic (Flanagan 2004b, Sherrod et al. 2002), due in part to the more general interest in positive psychology (Seligman & Csikszentmihalyi 2000) and the more specific interest in positive youth development (Larson 2000, Lerner et al. 2000). In addition, research has been generated in response to claims from social commentators that American youth have become too self-centered and individualistic and not sufficiently concerned with community and social responsibility (Bellah et al. 1985, Putnam 2000). Finally, the interest in youth civic engagement is based on the assumption, supported by some research, that involvement in extracurricular activities at school and community-based youth organizations facilitates adolescent development in ways that will lead to greater community and civic involvement in adulthood.

The evidence suggests that involvement in community organizations and service influences the development of greater compassion and interdependence (Yates & Youniss 1996), engagement in community service (Hart & Atkins 2002), feelings of affection and attachment to the larger social order (Flanagan 2004b, Flanagan & Faison 2002), a greater understanding of democracy (Flanagan et al. 2005a), and civic or moral identity (Hart & Fegley 1995, Youniss et al. 1997, Youniss & Yates 1999), particularly when adolescents have an opportunity to reflect on their involvement (Youniss et al. 1999). Thus, civic engagement in adolescence is seen as an important pathway in training youth for future citizenship, although the evidence to date is largely correlational or based on treatment studies that do not include random assignment. Evidence for the links between adolescent involvement and adult participation is based primarily on retrospective accounts, but several short-term longitudinal studies have shown that service learning in high school does lead to a greater sense of social responsibility (Flanagan 2004b) and changes in students’ priorities (Johnson et al. 1998).

Initially, the studies in this area focused on the demographic and family factors associated with greater civic involvement and volunteer community service in adolescence. The evidence suggests that higher socioeconomic status, college attendance and higher educational aspirations, greater religiosity, greater parental involvement in civic organizations or political issues, and higher academic self-esteem are all associated with greater civic involvement and volunteering in adolescence (Johnson et al. 1998; Youniss et al. 1997, 1999; Youniss & Yates 1999). Adolescents who volunteer also tend to be more mature, more altruistic, and are more likely to be female (Eisenberg & Morris 2004). Some studies have examined ethnic disparities in civic engagement, but the available evidence suggests that socioeconomic status rather than race or ethnicity is a better predictor of civic and political participation (Flanagan 2004b).
Service learning has become normative for American youth. The results of several large-scale studies attempting to document the benefits of service learning have found inconsistent results and mostly transient positive gains (Melchior 1998). This has led researchers to investigate how specific characteristics of youth civic involvement, for instance between required school-based and voluntary community-based youth programs, influence positive developmental outcomes (Flanagan 2004a,b; Metz & Youniss 2003). Required school-based service positively impacts students’ intentions to be involved in the future, even when adolescents were less inclined to participate prior to the required service (Metz & Youniss 2005).

Recent research has examined the optimal organization or structure of organizations to facilitate engagement. A systematic review of programs indicates that organizations that allow adolescents the freedom to make real decisions and take leadership roles while adults still provide some structure help to promote positive youth outcomes (Eccles & Gootman 2002). In addition, organizations that are centered on a specific philosophy, cause, or ideology appear to infuse adolescent participation with meaning (Flanagan 2004a, Youniss et al. 1999). The informal, less hierarchically organized environment of community youth organizations fosters adolescents’ affective ties to their community (Flanagan 2004a, Flanagan & Van Horn 2003) and provides an environment where at-risk youth may feel efficacious and respected by adults (Kahne et al. 2001). This is particularly important given the disparity in civic identity and development between adolescents from affluent versus poor urban environments (Atkins & Hart 2003). Community organizations also may provide adolescents with the opportunity to interact with a heterogeneous group of individuals, which has been linked to adolescents’ social trust, tolerance, and reduction of stereotypes (Flanagan et al. 2005b). Social trust is proposed to be crucial to democratic societies because it leads to an investment in the social order and commitment to community involvement; it is also associated with a more positive belief in people and a more hopeful outlook on society (Flanagan et al. 2005b).

Much of the research in this area has been guided by applied and social policy concerns, and integrative frameworks for understanding civic engagement remain to be developed. Furthermore, and although rarely made explicit, most of the research thus far appears to be guided by the social learning assumption that adolescents’ civic beliefs and behaviors are molded by their involvement with parents, schools, or the characteristics of youth organizations, and more dynamic models of civic engagement are needed. Other research has shown, for instance, that among U.S. adolescents as well as adolescents in other cultures, basic understandings of concepts of rights, civil liberties, and democratic decision making develop in middle childhood, but that the ability to view these issues as overriding when they conflict with other concerns in complex situations increases with age (Helwig 1995, Helwig et al. 2003, Neff & Helwig 2002). Although the seeds of civic involvement are no doubt sown in childhood, very little longitudinal research has examined the mutual interactions among individual, family, and community in
childhood and early adolescence that facilitate civic participation and involvement in late adolescence and young adulthood.

CONCLUSIONS AND FUTURE DIRECTIONS

As we move into the twenty-first century, significant progress has been made in understanding adolescent development in different interpersonal and community contexts. Research on enduring topics like adolescent-parent and peer relationships has expanded to become more contextual and more inclusive, but ethnic, racial, and cultural variations are vastly understudied in newer areas of emphasis, such as sibling and romantic relationships. In general, ethnic minority adolescents remain overrepresented in studies of risk and underrepresented in research on normative development (Hagen et al. 2004).

The newly emerging research on civic engagement is part of a broader trend toward considering developmental assets and positive youth development, and this new focus is giving increased prominence to topics that have been ignored or even shunned in the past, such as adolescent well-being, religiosity and spirituality, and compassion and altruism. Likewise, new technological advances in communication, including Internet use and access to the World Wide Web, Internet chat rooms, instant messaging, and text messaging, are changing the way adolescents communicate with peers and are raising concerns about differential access among youth of different socioeconomic statuses, leading to a new “digital divide” (Pew Internet Am. Life Proj. 2004). The influence of these emerging technologies on adolescent development remains to be determined. The challenge in these emerging areas of research is to bring strong integrative, conceptual, and developmental frameworks to bear and to incorporate the findings into our existing knowledge base on adolescent development.

Another noteworthy trend has been the increased emphasis on collaboration among researchers, practitioners, and policy makers. Recent shifts in research and funding priorities challenge researchers to focus more on research that is amenable to translation into applied and policy arenas. A notable example is recent research on adolescents’ decision-making competencies and developmental maturity in the context of the legal system (Cauffman & Steinberg 2000; Steinberg 2000, 2004; Steinberg & Scott 2003). Finally, in the last review of adolescent research appearing in this series, Steinberg & Morris (2001) concluded that research on cognitive development during adolescence “has been moribund for some time” (p. 101), but new developments noted previously in the developmental neurosciences and in brain imaging along with a reinvigorated study of adolescent meta-cognition, reasoning, and consciousness (Keating 2004), as well as moral and social cognition (Smetana 2006), hold much promise for an integrative view of transformations in cognitive functioning during adolescence.

More generally, the ascendance of ecological models, which has been aided by recent innovations in statistical methods, including developments in multilevel
and growth-curve modeling, has led to a greater understanding of how contexts constrain, shape, and influence adolescent development. Despite significant gains, these advances also have led to a field that has become markedly less developmental. Over the past 30 years, the pendulum has swung from largely decontextual research focusing on intraindividual processes of development to research that is highly contextual but has little to say about intraindividual processes (Steinberg & Morris 2001). Topics such as identity, intimacy, self-understanding, and ego and moral development that formed the cornerstone of the developmental study of adolescence in earlier decades have been replaced with a focus on individual differences in adjustment. Moreover, adolescents construct, interpret, and make meaning of the social contexts they inhabit, and although it is surely the case that their active agency influences their developmental trajectory, the constructive nature of adolescent development is not readily apparent in current theorizing or empirical research. Our understanding of adolescent development would be enhanced by a renewed interest in studying longitudinal changes in intraindividual processes of development as adolescents assert choices, make decisions, and develop within different contexts and cultures.

The Annual Review of Psychology is online at http://psych.annualreviews.org

LITERATURE CITED

Baumrind D. 1991. Effective parenting during


Cauffman E, Steinberg L. 2000. (Im)maturity of judgment in adolescence: why adolescents may be less culpable than adults. Behav. Sci. Law 18:741–60


ADOLESCENT DEVELOPMENT 277

BB Brown, C Feiring, pp. 125–47. New York: Cambridge Univ. Press
Dunphy DC. 1963. The social structure of urban adolescent peer groups. *Sociometry* 26:230–46
Programs to Promote Youth Development. Washington, DC: Natl. Acad. Press
Flanagan CA. 2004b. Volunteerism, leadership, political socialization, and civic engagement. See Lerner & Steinberg 2004, pp. 721–45
adolescents from Asian, Latin American, and European backgrounds. *Child Dev.* 70:1030–44


Horn SS. 2003. Adolescents’ reasoning about exclusion from social groups. Dev. Psychol. 39:71–84
Lamborn S, Dornbusch S, Steinberg L. 1996. Ethnicity and community context as moderators of the relation between family decision-making and adolescent adjustment. Child Dev. 66:283–301
Lempers JD, Clark-Lempers DS. 1992. Young, middle, and late adolescents’ comparisons of the functional importance of five significant
relationships. *J. Youth Adolesc.* 21:53–96


Sherrod L, Flanagan C, Youniss J. 2002. Dimensions of citizenship and opportunities for youth development: the what, why, when,


Steinberg L. 2000. Should juvenile offenders be tried as adults? Poverty Res. 4:3–4
Steinberg L. 2001. We know some things: adolescent-parent relationships in retrospect and prospect. J. Res. Adolesc. 11:1–19
CONTENTS

Frontispiece—Herbert C. Kelman xvi

Prefatory

Interests, Relationships, Identities: Three Central Issues for Individuals and Groups in Negotiating Their Social Environment, Herbert C. Kelman 1

Brain Mechanisms and Behavior: Emotion and Motivation

Emotion and Cognition: Insights from Studies of the Human Amygdala, Elizabeth A. Phelps 27

Stress and Neuroendocrinology

Stressful Experience and Learning Across the Lifespan, Tracey J. Shors 55

Reward and Addiction

Behavioral Theories and the Neurophysiology of Reward, Wolfram Schultz 87

Genetics of Behavior

Genetics of Affective and Anxiety Disorders, E.D. Leonardo and René Hen 117

Sleep

Sleep, Memory, and Plasticity, Matthew P. Walker and Robert Stickgold 139

Comparative Psychology, Ethology, and Evolution

Neuroecology, David F. Sherry 167

Evolutionary Psychology

The Evolutionary Psychology of Facial Beauty, Gillian Rhodes 199

Language and Communication

Explanation and Understanding, Frank C. Keil 227

Adolescence

Adolescent Development in Interpersonal and Societal Contexts, Judith G. Smetana, Nicole Campione-Barr, and Aaron Metzger 255

Individual Treatment

Enduring Effects for Cognitive Therapy in the Treatment of Depression and Anxiety, Steven D. Hollon, Michael O. Stewart, and Daniel Strunk 285
CONTENTS

FAMILY/MARITAL THERAPY
Current Status and Future Directions in Couple Therapy,
Douglas K. Snyder, Angela M. Castellani, and Mark A. Whisman

ATTITUDE CHANGE AND PERSUASION
Attitudes and Persuasion, William D. Crano and Radmila Prislin

BARGAINING, NEGOTIATION, CONFLICT, SOCIAL JUSTICE
Psychological Perspectives on Legitimacy and Legitimation, Tom R. Tyler

INDIVIDUAL DIFFERENCES AND ASSESSMENT
Personality and the Prediction of Consequential Outcomes, Daniel J. Ozer
and Verónica Benet-Martínez

ENVIRONMENTAL PSYCHOLOGY
Child Development and the Physical Environment, Gary W. Evans

MARKETING AND CONSUMER BEHAVIOR
Consumer Psychology: Categorization, Inferences, Affect, and Persuasion,
Barbara Loken

STRUCTURES AND GOALS OF EDUCATIONAL SETTINGS
Classroom Goal Structure, Student Motivation, and Academic
Achievement, Judith L. Meece, Eric M. Anderman,
and Lynley H. Anderman

DATA ANALYSIS
Analysis of Longitudinal Data: The Integration of Theoretical Model,
Temporal Design, and Statistical Model, Linda M. Collins

TIMELY TOPICS
The Internet as Psychological Laboratory, Linda J. Skitka
and Edward G. Sarges
Family Violence, Patrick Tolan, Deborah Gorman-Smith, and David Henry
Understanding Affirmative Action, Faye J. Crosby, Aarti Iyer,
and Sirinda Sincharoen

INDEXES
Subject Index
Cumulative Index of Contributing Authors, Volumes 47–57
Cumulative Index of Chapter Titles, Volumes 47–57

ERRATA
An online log of corrections to Annual Review of Psychology chapters
may be found at http://psych.annualreviews.org/errata.shtml