# **Part I**

# Historical Overview

This section has only one chapter, but it is a chapter which sets the scene for all that is to follow. W. Andrew Collins is in an excellent position to do this. He has worked for many years at the Institute of Child Development at the University of Minnesota, which was one of the pioneering sites of study of young children in North America. Much valuable work was done there from the 1920s onwards, including Mildred Parten's famous work on social participation in preschool children, which was based on her doctoral thesis at the Institute.

While all historical starting points and divisions are arbitrary, Collins justifiably takes a span of just over a century in his account, and follows Cairns (1998) in considering three periods: the emergent period (1890–1919); the middle period (1920–1946); and the modern period (1947–present). The emergent period really marks the beginning of any systematic interest in child (social) development, with baby diaries and some early empirical studies. The middle period saw both an injection of theory (for example from behaviorism and psychoanalysis), and a great increase in research, with the founding of child study centers and institutes, normative descriptions such as those of Gesell, and the development of methodologies such as experiments, observations, and questionnaires. The modern period has seen the decline of behaviorism but the rise of other theoretical views such as those of Piaget and Kohlberg, social learning theory and attachment theory, the testing of competing theories, the development of associated methodologies, and more sophisticated views of developmental processes and their contexts, and ways of envisaging and measuring causal influences in development.

The "modern period" that Collins describes is now a long one, over half a century. It may be that recent years have seen the beginnings of what future historians of science might see as a new period of research, as researchers take a step forward in theories, analytic procedures, and methodologies. Moving away from what (with the benefit of hindsight) seem rather sterile debates about "nature or nurture," or simple causal influences, developmental researchers now almost universally acknowledge the complex interaction of genetic

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and environmental influences, the multiply determined nature of developmental processes, and the need to develop stronger analytical procedures (such as multilevel analyses and structural equation modeling) to do justice to these complexities.

When caught up in current streams of research, it is easy to ignore the past of the discipline and how we have got to where we are. But in fact, the past may exert a strong influence on the parameters of our present thinking; also, we may learn something from the successes and failures of our predecessors. This chapter frames much of the content of this *Handbook*.

# References

Cairns, R. B. (1998). The making of developmental psychology. In W. Damon (Series Ed.) & R.
 M. Lerner (Vol. Ed.), *Handbook of child psychology. Vol. 1: History and systems of developmental psychology* (pp. 25–105). New York: Wiley.

# 1

# Historical Perspectives on Contemporary Research in Social Development

# **W. Andrew Collins**

Research in social development began more than a century ago. Its roots are much older, springing from enduring philosophical traditions in Western thought, as well as from theory and research in other sciences such as biology and pedagogical studies (Cairns, 1998; Dewey, 1899; Hall, 1904). Only in the most general way, however, can these distal influences be discerned in the directions and concerns of social development research today. Much more visible are the intellectual currents within the social sciences themselves and themes arising from pressing social problems. The goal of this chapter is to detect those currents in this vital and increasingly diverse research enterprise.

The traditional purview of research in social development is "changes over time in the child's understanding of, attitudes toward, and actions with others" (Hartup, 1991, p. 253). Although the distinctness of social development as a subfield was not apparent in the early days of developmental psychology, questions of social behavior, attitudes, values, and personality have been central from the very earliest studies of psychological development. For example, Alfred Binet collaborated on early studies of physiological correlates of emotional changes, in addition to his work on perception, memory, and intellectual performance (Cairns, 1998); and G. Stanley Hall, often called the father of American psychology, studied ". . . the small child's activities and feelings, control of emotions and will . . .," as well as the development of the higher faculties, individual differences, and school processes and practices (White, 1992, p. 29).

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The vitality of the field today is evident from this handbook and from the breadth and vigor of research described in its chapters. Yet no history of social development as a coherent field of inquiry has previously appeared. A number of useful historical accounts of particular research topics in the field exist (e.g., Eisenberg, in press; Hartup & Laursen, 1999; Maccoby, 1992a, b; Modell & Elder, in press), as do analyses of the contributions of influential researchers (e.g., Cairns, 1992; Emde, 1992; Grusec, 1992; Horowitz, 1992; White, 1992). One can discern much of the history of the field from these fragmentary accounts, especially when combined with historical accounts of the field of developmental psychology (Cairns, 1998) or social psychology (e.g., Jones, 1998). In addition, historical accounts that focus on institutions and organizations (e.g., Hartup, Johnson, & Weinberg, in press; Sears, 1975; Senn, 1975) illuminate historical changes in research topics and focal variables.

This chapter aims to distill from these disparate efforts an historical perspective on contemporary research on social development. The chapter is divided into three sections. The first section is a brief overview of historical trends in the study of social development, identifying significant shifts and transitions in the history of social development. The second part deals with major historical transformations in the field during the past century. These transformations further specify the contemporary significance of the trends outlined in the first section. The third and final section is an attempt to show how methodological issues are interwoven with the substantive concerns of social development researchers.

## The Historical Flow

Few scholarly fields yield easily to simple chronological accounts. Social development is no exception. To establish some markers, however, I adopt Cairns' (1998) division of the first 100 years of developmental psychology into three periods, with slight adjustments for social development: emergence (roughly 1890 to 1919); the middle period of institutionalization and expansion (1920–1946), and the modern era (from 1947 to the present). The first part of this section characterizes advances in social development research during each of these periods. The second part deals with the impact of social and historical forces on successive eras of social development research.

## Three periods of social development research

*Emergence.* Interest in the phenomena of social development suffuses early accounts of childhood, from the writings of philosophers to the writings of diarists and social historians. So-called "baby diaries" are frequently mentioned examples (Darwin, 1877; Shinn, 1893–1899). Systematic scientific study began only in the final decade of the nineteenth century (Hartup, 1992; White, 1992). Among the early efforts were G. Stanley Hall's questionnaire studies focusing on ". . . (a) simple automatisms, instincts, and attitudes, (b) the small child's activities and feelings, (c) control of emotions and will, . . ." and the like (White, 1992, p. 29). In the same decade studies of peer collaboration (Triplett, 1897) and

similarity between friends' attitudes and values (Barnes, 1896–1897, 1902–1903; Monroe, 1899) appeared. The interests of researchers in the early period, if not their methods and interpretations, are strikingly like the topics that preoccupy researchers at the beginning of the twenty-first century.

*Middle period.* In its first three decades, the theoretical impetus in social development research was slight, at best. Researchers generally shared the view that "nascent social competences were . . . among the child's endowments, and the work of the scientist was to chart their unfolding" (Hartup, 1992, p. 107). This situation changed as views of psychological research shifted and as strong formal theories from other fields penetrated the study of social development. Virtually all of these impinging forces asserted that experience, not merely the unfolding of natural endowments, was an essential element in development. The most commanding figure in American psychology, John B. Watson, declared in "Psychology as the Behaviorist Views It" (1913) that learning alone accounted for development. Not only did this view challenge the suppositions underlying most work in the field up to that point, but Watson's insistence that psychologists must create an "objective experimental branch of natural science," characterized by "objectively collected, independently verifiable data" (Horowitz, 1992, pp. 361–362) implied considerable change in the conduct of social development research. Although much research continued in a normative-descriptive vein (e.g., Rheingold & Cook, 1975), theoretical issues were more explicit in the choice of variables and in writing in the field.

The shift from a maturationist orientation to an environmentalist one intensified as psychoanalytic propositions permeated the literature. Although of greatest interest to clinical and personality psychologists, Freud's ideas further pressed social developmentalists to consider socialization, or "... the processes through which the child is assimilated into society" (Hartup, 1992, p. 107; Maccoby, 1992a, b). Similar pressures emanated from sociological theories, such as symbolic interactionism (Cooley, 1909; Mead, 1934), that were concerned with how developmentally advanced individuals contribute to child growth and development. (Only much later did Vygotsky's ideas about the role of expert tutors in collaborative learning infiltrate Western developmental theory (Wertsch & Tulviste, 1992).) Learning theorists eventually assimilated these ideas, particularly those of Freud, into the first of a group of theories of socialization born in this period dominated social development research from the 1930s until the 1960s. Among its ramifications were an emphasis on parental influences and a relative neglect of interactions with peers, who were thought to lack the experience and authority to serve as socializing agents (Hartup, 1992).

*The modern era.* The most recent sea change occurred with the renascence of structuralist ideas in the 1960s. Piaget's theory emphasized the significance of social processes and the role of the child as an active agent (Flavell, 1963). Without denying the role of authority figures in early development, Piaget (1932/1965) took the view that children most readily experienced the cognitive conflict necessary for developmental change when interacting with peers. Kohlberg's (1969) germinal chapter on stage and sequence further developed the notion of cognitive conflict as a necessary ingredient of movement from one stage to another and peers as ideal social resources for this process. Kohlberg's essay remains the

major marker of a shift to theory encompassing both social environments and a child actively operating on those elements.

Piaget's and Kohlberg's writings gave rise to a new interest among social developmentalists in a normative-descriptive account of social-cognitive functioning (e.g., Barenboim, 1981; Selman, 1980). For many researchers, however, issues of socialization and the prediction of social behavior remained salient (e.g., Dunn, 1992; Harris, 1992). A further issue thus was to be joined: the possibility that the child's activity was central to the development of other aspects of social growth. Three current directions in the field have resulted from this impetus: (a) increasing interest in the ways in which children regulate their own behavior and emotions; (b) attention to biological processes in control and regulation; and (c) a conviction that the dyad is an essential unit of analysis in social development.

### What is social development the development of? Historical determinants

As explanatory accounts fluctuated over the first century of social development research, the answer to the question "What is social development the development of?" changed with views of optimal outcomes. Early studies of children focused on qualities of independence, intelligence, honesty, and sociability largely because "wise commentators in America were certain" that these qualities represented the ideal culmination of development (Kagan, 1992, p. 992). In an era with little theoretical commitment, social values determined the typical set of outcome variables of interest in psychological research. One latter-day example of similarly value-driven preoccupations in the field are Western concerns with the self, which is of much less popular or scientific interest in countries with a more strongly collectivistic public value system (e.g., Markus & Kitayama, 1994).

As theoretical commitments to psychoanalytic theory and its offshoots became more common, other variables joined the group of initially dominant outcomes. The classic longitudinal studies of the 1920s and 1930s, for example, focused on social and mastery variables. Among these were dependence, independence, aggression to peers and parents, achievement, anxiety, and sociability. All have demonstrable connections to Freudian theory and the related shift to primary interest in parental socialization and children's social dispositions and control of emotions (Emde, 1992; Kagan, 1992). An interesting corollary is the implication of these assumptions for the parenting variables of interest. Kagan (1992) notes that, before World War II when most mothers stayed at home, concerns about childrearing problems tended toward fears about over-protectiveness, encouragement of dependency, and discouragement of age-appropriate independence. The psychodynamically influenced concerns with independence and emotional control accorded with typical rearing circumstances for middle-class American children in this case.

By the 1960s, a driving vision of the active child brought a further change in variables of common interest. Interest grew in children's concepts of self, others, and the interrelation of the two (Kohlberg, 1969; Selman, 1980) and in constructs such as intentions and causal attributions (e.g., Dodge, 1986; Eisenberg, in press). Increasing attention to biological processes and related constructs such as temperament led to greater focus on regulatory processes, including coping, inhibition, and attention (Eisenberg, in press; Kagan, 1992;

Rothbart & Bates, 1998). Research on social behavior gradually shifted attention to dyadic interactions as regulatory contexts, and constructs of relationship became more central. Instead of a primary focus on issues of dependence and anxiety, researchers also attended to sensitive responding by parents, signs of emotional security, measures of relationship quality, and the like (Hartup & Laursen, 1999; Thompson, 1998).

Parallel to these theoretical shifts were changes in economic and social patterns with extensive implications for children and child rearing. The preoccupation with parenting that assured independence and emotional control no longer seemed as relevant when half of the mothers in the United States were in the labor force. Public concerns shifted toward the prospect that children might not experience "quality care," that is, might experience insufficient parental affection and sensitivity to the child. Moreover, the concern extended to the possible ramifications of less supervision and monitoring of children; for example, problems of poor regulation and psychopathology became more salient among the public and researchers alike. The convergence of these changes in American family life and the reorientation to attachment theory and behavioral regulation gave issues of attachment, the quality of out-of-home care, and the emotional life of the child considerable currency in social development research, as well as the public arena (Kagan, 1992).

## Transformations in Social Development Research

The breadth of social development research today cannot be subsumed easily by a few common themes. Yet most of the activity in the field reflects four intellectual and empirical transformations during its first century. These encompass increasing interest in specifying developmental processes and intra-individual processes, understanding the nature and significance of the interpersonal context of development, understanding the dynamics of interpersonal experience, and recognizing the significance of variations in social contexts beyond the family for the development of social functioning.

# Specifying developmental processes

The maturationist assumptions of researchers stemmed both from a naïve psychology of natural endowments and from an interest in the practical ramifications of "child study." Hall, though a committed scientist, believed a major value of the study of children was to gain insights that might eventually enhance their development, especially with respect to inculcating appropriate moral values (Cairns, 1998; White, 1992). Careful description was a useful first step. Despite Hall's training in experimental psychology in Germany, neither he nor any of the other early proponents of social development research investigated mechanisms of behavioral change.

Even in the middle period, researchers focused largely on description, although of a more rigorous kind than in the early period. This later work was motivated largely by substantial investment in research by funding agencies like the Laura Spelman Rockefeller Memorial and the Payne Fund, with the goal of improving the lives of children. Strong

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research contributions came from diverse sources during this period. Charlotte Bühler (1927, 1930) conducted compelling observational studies demonstrating the truly social nature of infants' behavior; Florence Goodenough (1929, 1931) studied children's emotional upset during testing and fears by children of different ages; and Mary Shirley (1931, 1933) published a three-volume report of the findings from one of the first short-term longitudinal studies of motor, intellectual, and personality development in the first two years of life.

In perhaps the most striking empirical advance of the period, two scholars of religion, Hugh Hartshorne and Mark May, working under the auspices of the Payne Fund, undertook a study of moral and ethical behavior by children. Quickly mastering the necessary methodological techniques, the two produced a mammoth series of experimental–observational studies showing that moral behavior was highly situation-specific (Hartshorne & May, 1928–1930). To the dismay of their funders, they also concluded that religious training and moral instruction made little difference in the actual behavior of children under conditions of temptation (Cairns, 1998).

These pioneering studies began to fill the need for a natural history phase of research on social behavior that the methodologically weaker studies of the early period had not provided. The newer research, however, offered few clues to developmental processes. The essential work of developing sound research methods pre-empted the energies needed for developing and testing theories (Cairns, 1998; White, in press). Bühler's (1931) survey of studies of social behavior in children, barely 35 years after the first published efforts, carried her judgment that these early studies failed because of "the lack of a systematic point of view" (1931, p. 392).

The search for developmental processes. In neglecting theoretical development, social development researchers were falling behind other developmental psychologists. Developmentalists interested in intellectual growth had extended principles of conditioning to mental functioning (e.g., Mateer, 1918), but not until the 1920s and 1930s did the emergence of behaviorism and psychoanalytic theory move social development researchers past the level of description. With naïve maturationist views challenged by Watson's version of behaviorism and later other learning theories and by psychoanalytic concepts, the focus became rigorous testing of hypotheses about how changes occur in social behaviors, attitudes, and values.

The most theoretically innovative researchers in this period were Watson and Arnold Gesell. Watson's conviction that conditioning accounted for the acquisition of all behaviors from infancy onwards had aroused many social developmentalists to grapple with mechanisms of growth and change. Watson's own conditioning studies (e.g., Watson & Rayner, 1920) "were only demonstrational and would hardly deserve publication on their methodological merit" (Cairns, 1998, p. 67). Other able psychologists tested key implications of his ideas for infant behavior (e.g., Jones' (1931) rigorous demonstration of the counterconditioning of learned fear).

Gesell is best known for normative-descriptive studies of physical and mental growth (Cairns, 1998; Thelen & Adolph, 1992). Nevertheless, he wrote that human infants were endowed with a "pre-eminent sociality," or impulse to seek connection with others. Moreover, he regarded development as a transaction process: "Growth ... is a historical complex

which reflects at every stage the past which it incorporates ... a continuous self-conditioning process, rather than a drama controlled . ..." (Gesell, 1928, p. 357). Although he never offered a full-fledged theory of development, his speculative interpretations of his findings implied a developmental theory much like that of James Mark Baldwin (1897) before him and many more recent theorists. Neither Gesell nor subsequent scholars, however, have tested these ideas systematically (Cairns, 1998; Thelen & Adolph, 1992).

Not until the 1930s and 1940s did compelling theory-testing research appear in the literature. Up to that point the developmental predictions of psychoanalysis, although much discussed, had stimulated relatively few empirical efforts, and those few were largely unsuccessful (Sears, 1944). Just before World War II, however, a group of young psychologists at Yale synthesized these predictions with Hullian theory learning mechanisms. Soon organized as the Institute of Human Relations, they first tackled Freud's views on frustration and aggression, reconstruing aggression as a learned response to being thwarted in efforts to reach a goal (frustration) (Dollard, Miller, Doob, Mowrer, & Sears, 1939). Two members of the group then re-explained identification as imitation reinforced by the experience of similarity to a valued other (secondary reinforcement) (Miller & Dollard, 1941). The best known among the few longitudinal studies of the middle period incorporated similar constructs to these pioneering process-oriented efforts (Baldwin, 1949; Kagan & Moss, 1962), as did other large-scale studies (e.g., Sears, Maccoby, & Levin, 1957; Sears, Rau, & Alpert, 1965; Sears, Whiting, Nowlis, & Sears, 1953) and laboratory experiments (e.g., Hartup, 1958; Hartup & Coates, 1967). The empirical fallout lasted for more than two decades.

The theoretical hybridizing of the Yale group proceeded in parallel to tests of predictions from other learning-theory formulations, such as operant learning (e.g., Gewirtz & Baer, 1958). An extensive body of findings accumulated around these behaviorist conceptions of social processes, evident in Stevenson's (1965) influential review of social reinforcement. By testing the theories that then occupied others in psychology, social development finally moved into the mainstream of the discipline (Cairns, 1998; White, in press).

The mechanistic core processes of social-learning theory, however, eventually quailed under accumulating evidence from infant studies, showing very early manifestations of abilities that had been assumed to result from conditioning, and from repeated findings that all children did not react to the same stimulus or the same reinforcers in the same way (Kagan, 1992; Maccoby, 1992a). Adaptations to these empirical findings by theorists like Bandura and Walter Mischel, among others, stimulated a search for processes that implicated intra-individual factors in behavioral and conceptual change. Following Bandura and Walters' (1963) classic volume on social learning and personality development, Mischel (1973) and Bandura (1986) each proposed a cognitive social-learning theory, in which such basic processes as reinforcement were reinterpreted as having informational, as well as emotional, significance (Grusec, 1992). In addition, Bandura (1977) advanced the idea that self-efficacy, or subjective beliefs about one's abilities in a domain, affect behavior and behavior change in that domain. These efforts were buttressed by the "cognitive revolution" in psychology, with its focus on such processes as memory, attention, and inferential thought, and in particular by the influx of Piagetian theory (Flavell, 1963; Maccoby, 1992a).

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*Mediational processes in social development.* In search of processes, then, social development researchers moved toward change processes based on notions of structural re-organization of thought and action. Such ideas, though far from new in developmental psychology, were long forgotten, for the most part. James Mark Baldwin (1897) had proposed similar dynamic structural processes in his writing at the turn of the century, echoed in the thought of Dewey and Gesell, among others. Piaget's formulation fell on more fertile ground than the previous ones had.

Advanced primarily to account for intellectual development, Piaget's theory depicted the child as trying to reconcile an expectation, or cognitive schema, and incompatible information from the environment. The resulting intrapsychic conflict motivates the child to adapt the schema to the new experience, thus enlarging his or her capacity to grasp new instances. Development occurred as the child inevitably confronted and adapted to a wide range of experiences.

A social dimension was implicit in this formulation, because many of these conflictinducing instances inevitably involved other persons. In contrast to the emphasis of learning theorists on parental socialization, Piaget gave special credence to interactions with peers. He reasoned that children encountering a discrepancy between their own schemas and the views of a parent would simply adopt the parent's view without undergoing cognitive change. With persons of equal power, children would be more likely to engage fully in the grappling with novelty that fostered cognitive growth. Piaget's explicit description of how and why children's action was essential to growth and especially the linking of this process to peer social interactions concretized the notion for researchers accustomed to the mechanistic accounts of social learning theorists. Kohlberg's (1969) classic essay elaborated the social ramifications, identifying equilibration following cognitive conflict as a fundamental process of social development.

The Piagetian–Kohlbergian account received most direct research attention in connection with stage-related hypotheses. But researchers working on a wide range of developmental problems today, some of them drawn from alternative theoretical models (e.g., information processing), invoke transactional accounts to explain the phenomena of social development. An example is formulations that invoke cognitive biases, such as the tendency to misattribute the causes of behavior in instances of provocation or failure, to account for behavior such as aggression (e.g., Dodge, 1986) or lack of persistence in difficult tasks (e.g., Dweck, 1986). Such cognitive biases result when children form schemas of events from repeated experiences that appear to confirm existing social scripts. In addition, homeostatic notions such as equilibration following conflict and transactional accounts of behavioral development suffuse the literature in fields such as parent–child relations, peer relations, stress and coping, and the development of prosocial behavior (e.g., Collins, 1995; Furman & Wehner, 1994; Gunnar, 1994). Regulatory mechanisms, whether intra-individual or contextual, occupy much of the intellectual energy in social development research at the beginning of a new century (Eisenberg, in press).

#### Expanded views of regulatory processes

Socialization, the dominant concern of social development research throughout the middle period, implies that individuals are "induced in some measure to conform to the ways of (their) society or of the particular groups to which (they) belong" (Clausen, 1968, p. 4). In social-learning formulations, regulation processes almost uniformly implied "other" regulation, whereas theories like Piaget's implied that children were collaborators in socialization. Moreover, research on language development and attachment implied that many developmental outcomes could not be explained by top-down influences; and studies of reinforcement and observational learning pointed to the likely variability in children's cognitive processing of, and inferences about, events, learning history, and other subjective intrusions into supposedly fixed, externally controlled processes (e.g., Grusec, 1992; Kagan, 1992; Maccoby, 1992a).

In the era of the active child, efforts to understand self-regulation focused on children's capacities for balancing internal and external demands to minimize disruptions of optimal functioning. Studies of regulation subsume diverse contexts, processes, and aspects of behavior and emotion. Among the salient topics have been attentional control and cognitive structuring of control tasks in delay of gratification (Mischel, 1984), coping strategies in stressful or anxiety-arousing conditions (Compas, 1987), and the relation between behavioral strategies and physiological "dampening" processes in response to stressors (Gunnar, 1994).

Closely related to the study of stressful circumstances is the burgeoning interest in children's regulation of their emotions. Able researchers in the middle period had conducted normative-descriptive research on emotional expressions, but had addressed questions of self-regulation only minimally. Yet evidence of self-regulation is abundant: children "manage" their emotional displays in accord with societal expectations and the demands of their parents (Saarni, 1990); and hormonal reactivity spikes under conditions of fear or novelty for some children, but typically returns to ambient levels following self-soothing activities of various kinds (Gunnar, 1994). Moreover, children vary in their typical emotion regulation, partly as a function of the socialization of emotion in families (Dunn, 1992; Eisenberg, in press).

Issues of self-regulation buttressed a growing renascence in the concept of temperament. The construct of temperament languished for three decades, partly because of political and popular resistance to implications of fixed qualities in individuals (Kagan, 1992) and partly because of inadequate measures of temperamental differences (Rothbart & Bates, 1998). With advanced instrumentation and sophisticated biological indicators, combined with behavioral profiles (Kagan, 1992), it is now more feasible to examine the regulatory patterns of infants and children who differ along common dimensions of temperament. Moreover, evidence is growing of interactions between temperament and socialization (Kochanska, 1993).

Interest in self-regulatory processes contributed, as well, to the resurgence of work on personality development after a long period of quiescence. Personality development had quavered under attacks from behaviorists (e.g., Mischel, 1968), but recent evidence from longitudinal studies and new techniques of combining research results across studies have

provided stronger evidence of long-term continuity and change than previously was available (for reviews, see Caspi, 1998; Roberts & DelVecchio, 2000; Shiner, 1998).

### Expanded units of social experience

The concept of an active child also fed a growing conviction that many of the most significant socializing experiences took place in interactions with others in which the child was an active partner. Sears (1951), in his presidential address to the American Psychological Association, had contended that "A diadic unit is essential if there is to be any conceptualization of the relationships between people . . ." (p. 479). Two decades later, Bell's (1968) article, "A Reinterpretation of the Direction of Effects in Studies of Socialization," and Rheingold's (1969) elegant essay, "The Social and Socializing Infant," again set forth the argument for child as well as parental effects. Another decade passed, however, before proposals for a science of relationships began to take hold in developmental and social psychology (Hinde, 1979; Kelley et al., 1983). New lines of research both bolstered the earlier argument for dyadic formulations and expanded the research directions in the area.

The dominant line of research stems from Bowlby's (1958) theory of attachment. Writing in reaction to earlier secondary-drive formulations (e.g., Freud, 1910/1957; Sears et al., 1957), Bowlby argued that initial bonds between infants and their caregivers result from evolved tendencies to maintain proximity to assure the infant's safety and survival. Such themes converged nicely with the interest in security as a social motive suggested by the discovery that young Rhesus monkeys deprived of social interaction sought contact comfort, rather than gravitating toward a source of food (Harlow & Zimmerman, 1959). Bowlby's (1969, 1973, 1980) theoretical works spurred systematic empirical studies of childhood attachment and numerous theoretical elaborations and refinements that continue unabated today.

Among the historically most important empirical sequelae of these activities are the following. First, the emergence of a bond between child and caregiver in the second half of the first year of life appears to be normative and universal (Ainsworth, 1967; Schaffer & Emerson, 1964). Second, both members of caregiver-child dyads contribute to these attachments (for recent reviews, see Marvin & Britner, 1999; Thompson, 1998). Third, the functional significance of attachment is underscored by evidence from non-human species that even minor deprivation of contact with responsive others results in abnormal neuroanatomical structures and impaired endocrinological sensitivity related to stress and coping (e.g., Ginsberg, Hof, McKinney, & Morris, 1993). Studies of human children adopted from orphanages, some having impoverished opportunities for human interaction, also reveal neuro-hormonal sequelae of restricted social contact (Chisholm, 1998; Gunnar, 2001; Rutter et al., 1998). Fourth, research on the long-term significance of early attachments has yielded some compelling findings of continuity with relationships in childhood, adolescence, and adulthood, but many instances of null findings as well (for a review, see Thompson, 1999). Fifth, the process by which relationships are linked to behavior patterns at a much later time is thought to be one instance of the more general process of expectancies being applied to new situations. Few researchers now espouse a simple "early determinism" model, embracing instead multivariate accounts that acknowledge the sometimes overlapping contributions of multiple kinds of dyads and that also attempt to explain discontinuities (e.g., Belsky, Campbell, Cohn, & Moore, 1996; Weinfield, Sroufe, Egeland, & Carlson, 1999).

Studies of peer relations also rest heavily on assumptions of bidirectional influence and the dyad as a unit of analysis (Hartup & Laursen, 1999). A compelling example comes from findings that, when two toddlers or school-age children interact, the qualities of their interactions are a joint function of their respective early relationships (Pastor, 1981). Thus, "...it is not simply that children behave differently depending on the relationship histories of their partners, but that relationships with different partners themselves vary in quality" (Sroufe & Fleeson, 1986, p. 59).

Developmentalists face several unique challenges in research with dyadic units of analysis. One is that both developmental and power differentials contribute to the unique functioning of a dyad composed of individuals of different ages. Moreover, different rates of change in two partners of different ages make it difficult to determine which partner is contributing more to the ongoing adaptations between the two persons (Hartup & Laursen, 1991). A second challenge is that a bilateral perspective on change processes encourages a shift from viewing developmental outcomes only in terms of individual traits or habit patterns toward thinking of outcomes as competences for participating in social life (e.g., security, effective conflict resolution, commitment, involvement, hostility; see Furman, Brown, & Feiring, 1999; Maccoby, 1992a). Although contemporary researchers have achieved more compelling ways of specifying and analyzing relationships than had been true before 1980, scholars continue to grapple with questions of methods and statistical strategies appropriate for research with dyads (Reis, Collins, & Berscheid, 2001).

#### Incorporating contextual variations into social processes

The fourth and final transformation in social developmental concerns the significance of aspects of the contexts in which relationships and interactions occur. Until the 1970s, the term *environment* implied a range of sources of stimulation, from the proximal social models or social reinforcers encountered by a child to unspecified sources of influence beyond a particular dyad. Psychological researchers were bent toward demonstrating generality in the effects of certain environmental influences, not appreciating the distinctions among them (Bronfenbrenner, 1979; Modell & Elder, in press).

An early challenge to this environment-neutral stance came from Kurt Lewin, who argued that the individual's *psychological* environment, as opposed to the physical or objectively determined environment, was composed of both intra-individual forces and external ones (Lewin, 1931). Children's perceptions of the stimuli specified by the researcher had to be assessed and included in both design and statistical analysis. Both Lewin's conceptual prediction and his empirical findings (e.g., Lewin, Lippitt, & White, 1938) have influenced generations of research on effects of parenting behavior (Baldwin, 1949; Baumrind, 1973; Maccoby, 1992b), teachers' classroom behavior (e.g., Arnold, McWilliams, & Arnold, 1998), and the dynamics of peer groups (Hartup, 1992).

Lewin's emphasis on context has re-appeared in a variety of formulations in the ensuing

decades. Bronfenbrenner's (1979) germinal volume, *The ecology of human development*, provided an organizing framework for diverse potential environmental influence, including those of historical period and cohort. In his now famous diagram of concentric levels, aspects of the environment of which the child did not have direct experience were pictured as distal, but possibilities for indirect influences were clearly apparent. Research examples of these indirect influences are increasingly familiar to developmentalists (see Elder, 1974; McLoyd, 1998). Another post-Lewinian manifestation came from developmental anthropologists' reminders of the centrality of the experienced, not the presumed, environment (e.g., Super & Harkness, 1986).

The impact of context is felt today not only in social development, but also in other subfields of developmental psychology and psychology generally. Many psychologists now believe that constructs should be labeled to specify the contexts to which they apply (Kagan, 1992). An example in social development is peer gender segregation (Maccoby, 1990), which refers specifically to the tendency for children to affiliate with same-gender peers *in mixed-gender settings*. Nevertheless, social developmentalists, like other psychologists, face continuing challenge in fully incorporating contexts into studies of development and developmental process (for recent critiques, see Elder, Modell, & Parke, 1993; Modell & Elder, in press).

#### The Search for Method

The earliest methods in social development research were observation and survey questionnaires. G. Stanley Hall's questionnaire method was purely descriptive research, similar in kind, though not in sophistication, to today's survey research. Only sporadically did the studies reported between 1890 and 1920 go beyond frequency counts of behaviors, attitudes, or values. Although description is an essential phase of any natural science, the early samples were too restricted and the administration too haphazard and error-ridden to serve this purpose for the emerging field of social development (Cairns, 1998; White, 1992). Early studies of children's social judgments (Schallenberger, 1894) and peer relations (Barnes, 1896–1897, 1902–1903; Monroe, 1899) were similarly descriptive and drawn from questionnaire responses. Observational and experimental methods were rare. One instance, however, was Triplett's (1897) report that children wound fishing reels faster when working with other children than when working alone. Not until the quest of 1930s' researchers for more rigorous descriptive studies did compelling observational work appear in the literature. Arrington's (1943) critical review of time-sampling methods revealed both the currency of observational strategies and the considerable progress toward a methodological canon (Smith & Connolly, 1972).

Charlotte Bühler (1927) led the way on controlled experimental observations of infants. She observed the babies of poor families at a milk station and concluded that interests in other babies were apparent by 6 months. Using clever methods such as the "baby party" she documented that 6-month-old infants incorporate simple coordinations into their social exchanges. Her advance in the study of infant social development was not matched for another 30 years. Careful observational studies of nursery-school children in the United States, though, showed age-related patterns during early childhood. For example, coordinated interactions of many different kinds increased with age (e.g., Parten, 1932–1933); physical aggression increased and subsequently declined across ages (Goodenough, 1931); and verbal aggression initially increase with age, but then stabilized (Jersild & Markey, 1935). Similar methods also revealed that conflict instigation and management were moderated by children's relationships with one another (Green, 1933).

The social behavior of older children demanded still more innovative techniques. Group behavior, both normative and antisocial, was studied through participant observation (e.g., Thrasher, 1927). Field experiments, such as Lewin et al.'s (1938) classic work on group atmospheres, anticipated later equally classic studies of groups like the Robber's Cave experiment (Sherif, Harvey, White, Hood, & Sherif, 1961). Later, ethnographic studies expanded the study of individuals and groups in context (e.g., Bryant, 1985; Thorne, 1993). The most influential strategy to date has been comparing the behavior of children who vary in peer-group status. Sociometric methods, derived from Moreno's (1934) strategy for studying institutionalized adults, has undergone important refinements and has yielded significant clues to meaningful variations in social skills and behavior (e.g., Coie, Dodge, & Coppotelli, 1982).

Cairns (1998) has observed that, despite the relatively greater rigor of later studies, studies of peers relations in the middle period were scarcely more theoretically motivated. Only after 1960 were theoretically driven studies conducted extensively. Contemporary studies draw from a range of theoretical formulations, such as those of exchange theory, Sullivan's (1953) theory of interpersonal relations, attachment, and an array of newer formulations (Hartup & Laursen, 1999).

Work on parenting generally has trailed these efforts in sophistication, despite the longer history of sustained interest in, and the larger number of, studies of parental effects and child outcomes. Questionnaire studies and self-report inventories dominate research on parenting behavior even today. Observational studies (e.g., Forgatch & DeGarmo, 1999; Patterson, 1982) and laboratory analogs (e.g., Kuczynski, 1984; Parpal & Maccoby, 1985) are relatively rare. Reliance on self-report studies and correlational statistics has weakened the contributions of these studies. Collins, Maccoby, Steinberg, Hetherington, and Bornstein (2000) recently identified several more rigorous types of designs that have recently been used to specify parental contributions to social development. Among these are behaviorgenetics designs augmented by specific measures of environment; studies distinguishing among children varying in genetically influenced predispositions in terms of their responses to different environmental conditions; experimental and quasi-experimental studies of change in children's behavior as a result of their exposure to parents' behavior, after controlling for children's initial characteristics; and research on interactions between parenting and nonfamilial environmental influences and contexts.

Technological changes underlie many methodological innovations of the modern era. Video recorders greatly facilitated progress in early studies of infant affect and mother– infant interaction (e.g., Cohn & Tronick, 1987). Digital and computer technologies, combined with video, have increased possibilities in observational and laboratory studies of social interaction in families and peers. Techniques to measure brain electrical activity, heart rate, blood pressure, muscle tension, cortisol, and blood chemistry have contributed to studies of temperament and are likely to be even more widely applied in the decade ahead (Eisenberg, in press; Kagan, 1992; Rothbart & Bates, 1998).

Many questions central to social development demand longitudinal research designs. Though more numerous in social development than in other subfields of developmental psychology, longitudinal studies were understandably rare in the first six decades of the history of social development. The exceptions were noteworthy for their scope and impact. The Berkeley and Oakland surveys (e.g., Clausen, 1993), Alfred Baldwin's study of parenting styles (e.g., Baldwin, 1949), and the Fels study (e.g., Kagan & Moss, 1962) all provided significant descriptive data on key constructs. The same can be said of pioneering short-term follow-ups of infants (e.g., Shirley, 1933). Today, the relatively numerous longitudinal efforts in the United States and Europe are all the more remarkable because of their size and scope. These efforts permit researchers to address heretofore intractable issues, such as the duration of the impact of significant social experiences, trajectories of change, the significance of timing of social experiences, and so forth (e.g., Sroufe, Carlson, & Shulman, 1993; also, see Magnusson, Bergman, Rudinger, & Torestad, 1991).

#### Conclusion

The development of social development research in its first century is a story of evolution, rather than revolution. Shifts of strategy and method are more apparent than shifts of interest or focal questions. The interests underlying the canonical work in the field are present today in more theoretically and methodologically sophisticated forms. The best work on parental influences today takes account of the nature of the child and the possibility of bidirectionality, as well as the strong likelihood of other socializing influences such as peers, schools, and the mass media (Collins et al., 2000). Research on peer relations acknowledges contextual effects and qualitative variations among peer companions, as well as child temperament, familial relationship history, and quantitative differences in the nature of the relationship. Studies of individual differences in behaviors (e.g., aggression) and behavioral orientations (e.g., gender) draw broadly on knowledge of social, biobehavioral, cognitive, and emotional processes to formulate hypotheses and interpret research results. The first century has been a promising start on the next one.

#### References

- Ainsworth, D. D. S. (1967). *Infancy in Uganda: Infant care and the growth of love*. Baltimore: Johns Hopkins University.
- Arnold, D. H., McWilliams, L., & Arnold, E. H. (1998). Teacher discipline and child misbehavior in day care: Untangling causality with correlational data. *Developmental Psychology*, 34, 267– 287.
- Arrington, R. E. (1943). Time sampling in studies of social behavior: A critical review of techniques and results with research suggestions. *Psychological Bulletin, 40*, 81–124.
- Baldwin, A. (1949). The effect of home environment on nursery school behavior. *Child Development, 20,* 49–62.

- Baldwin, J. M. (1897). Social and ethical interpretations in mental development: A study in social psychology. New York: Macmillan.
- Bandura, A. (1977). Social learning theory. Morristown, NJ: General Learning Press.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A., & Walters, R. H. (1963). Social learning and personality development. New York: Holt-Rinehart & Winston.
- Barenboim, C. E. (1981). The development of person perception in childhood and adolescence: From behavioral comparisons to psychological constructs to psychological comparisons. *Child Development*, *52*, 129–144.
- Barnes, E. (1896–1897, 1902–1903). Studies in education (2 vols.). Philadelphia: Author.
- Baumrind, D. (1973). The development of instrumental competence through socialization. In A. D. Pick (Ed.), *Minnesota symposium on child psychology, Vol. 7* (pp. 3–46). Minneapolis, MN: University of Minnesota Press.
- Bell, R. Q. (1968). A reinterpretation of the direction of effects in studies of socialization. Psychological Review, 75, 81–95.
- Belsky, J., Campbell, S. B., Cohn, J. F., & Moore, G. (1996). Instability of infant-parent attachment security. *Developmental Psychology*, 32, 921-924.
- Bowlby, J. (1958). The nature of the child's tie to his mother. *International Journal of Psycho-Analysis*, *39*, 350–373.
- Bowlby, J. (1969). Attachment and loss; Vol 1. Attachment. New York: Basic Books.
- Bowlby, J. (1973). Attachment and loss: Vol. 2. Separation: Anxiety and anger. New York: Basic Books.
- Bowlby, J. (1980). Attachment and loss: Vol. 3. Loss: Sadness and depression. New York: Basic Books.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design.* Cambridge, MA: Harvard University Press.
- Bryant, B. (1985). The neighborhood walk: Sources of support in middle childhood. *Monographs of the Society for Research in Child Development, 50* (3, Serial No. 210).
- Bühler, C. (1927). Die ersten soziale Verhaltungsweisen des Kindes. In *Soziologische und psychologische Studien über das erste Lebensjahr*. Jena: Fischer.
- Bühler, C. (1930). The first year of life. New York: The John Day Company.
- Bühler, C. (1931). The social behavior of the child. In C. Murchison (Ed.), A handbook of child psychology (pp. 374–416). Worcester, MA: Clark University Press.
- Cairns, R. B. (1992). The making of developmental science: The contribution and intellectual heritage of James Mark Baldwin. *Developmental Psychology*, 28, 17–24.
- Cairns, R. B. (1998). The making of developmental psychology. In W. Damon (Series Ed.) & R.
  M. Lerner (Vol. Ed.), *Handbook of child psychology. Vol. 1: History and systems of developmental psychology* (pp. 25–105). New York: Wiley.
- Caspi, A. (1998). Personality development across the life course. In W. Damon (Series Ed.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology. Vol. 3: Social, emotional, and personality development* (pp. 311–388). New York: Wiley.
- Chisholm, K. (1998). A three-year follow-up of attachment and indiscriminate friendliness in children adopted from Romanian orphanages. *Child Development*, *69*, 1092–1106.
- Clausen, J. A. (1968). Socialization as a concept and as a field of study. In J. A. Clausen (Ed.), *Socialization and society* (pp. 1–17). Boston: Little, Brown.
- Clausen, J. A. (1993). *American lives: Looking back at the children of the Great Depression*. New York: Free Press.
- Cohn, J. F., & Tronick, E. Z. (1987). Mother-infant face-to-face interaction: The sequence of dyadic states at 3, 6, and 9 months. *Developmental Psychology, 23*, 68-77.

- Coie, J. D., Dodge, K. A., & Coppotelli, H. (1982). Dimensions and types of social status: A crossage perspective. *Developmental Psychology*, 18, 557–570.
- Collins, W. A. (1995). Relationships and development: Family adaptation to individual change. In S. Shulman (Ed.), *Close relationships and socioemotional development* (pp. 128–154). New York: Ablex.
- Collins, W. A., Maccoby, E. E., Steinberg, L., Hetherington, E. M., & Bornstein, M. H. (2000). Contemporary research on parenting: The case for nature and nurture. *American Psychologist*, 55, 218–232.
- Compas, B. (1987). Coping with stress during childhood and adolescence. *Psychological Bulletin*, *101*, 393–403.
- Cooley, C. H. (1909). Social organization. New York: Scribner.
- Darwin, C. (1877). Biographical sketch of an infant. Mind, 2, 285-294.
- Dewey, J. (1899). The school and society. Chicago: University of Chicago Press.
- Dodge, K. A. (1986). A social information processing model of social competence in children. In M. Perlmutter (Ed.), *Minnesota symposia on child psychology*, Vol. 18 (pp. 72–125). Hillsdale, NJ: Erlbaum.
- Dollard, J., Miller, N. E., Doob, L. W., Mowrer, O. H., & Sears, R.R. (with Ford, C. S., Hovland, C. I., & Sollenberger, R. T.) (1939). *Frustration and aggression*. New Haven, CT: Yale University Press.
- Dunn, J. (1992). Mindreading and social relationships. In M. Bennett (Ed.), *Developmental psychology: Achievements and prospects* (pp.72–88). Philadelphia: Psychology Press.
- Dweck, C. (1986). Motivational processes affecting learning. *American Psychologist, 41*, 1040–1048.
- Eisenberg, N. (in press). Emotion-related regulation and its relation to quality of social functioning. In W. W. Hartup & R. A. Weinberg (Eds.), *Child psychology in retrospect and prospect: The Minnesota symposia on child.psychology, Vol. 32*, Mahwah, NJ: Erlbaum.
- Elder, G. H., Jr. (1974). *Children of the Great Depression: Social change and life experience*. Chicago: University of Chicago Press.
- Elder, G. H., Jr., Modell, J., & Parke, R. D. (Eds.) (1993). Children in time and place: Developmental and historical insights. New York: Cambridge University Press.
- Emde, R. N. (1992). Individual meaning and increasing complexity: Contributions of Sigmund Freud and Rene Spitz to developmental psychology. *Developmental Psychology*, 28, 347–359.
- Flavell, J. H. (1963). The developmental psychology of Jean Piaget. Princeton, NJ: Van Nostrand.
- Forgatch, M. S., & DeGarmo, D. S. (1999). Parenting through change: An effective prevention program for single mothers. *Journal of Consulting and Clinical Psychology*, 67, 711–724.
- Freud, S. (1910/1957). The origin and development of psychoanalysis. *American Journal of Psychology*, 21, 181–218.
- Furman, W., Brown, B. B., & Feiring, C. (Eds.) (1999). The development of romantic relationships in adolescence. New York: Cambridge University Press.
- Furman, W., & Wehner, E. (1994). Romantic views: Toward a theory of adolescent romantic relationships. In R. Montemayor, G. R. Adams, & T. P. Gullotta (Eds.), *Personal relationship during adolescence* (pp. 168–195). Thousand Oaks, CA: Sage.
- Gesell, A. (1928). Infancy and human growth. New York: Macmillan.
- Gewirtz, J. L., & Baer, D. (1958). The effect of brief social deprivation on behaviors for a social reinforcer. *Journal of Abnormal and Social Psychology*, 56, 49–56.
- Ginsberg, S. D., Hof, P. R., McKinney, W. T., & Morrison, J. H. (1993). Quantitative analysis of tuberoinfundibular tyrosine hydroxylase- and corticotropin-releasing-factor-immunoreactive neurons in monkeys raised with differential rearing conditions. *Experimental Neurology*, *120*, 95–105.

- Goodenough, F. L. (1929). The emotional behavior of young children during mental tests. *Journal of Juvenile Research*, *13*, 204–219.
- Goodenough, F. L. (1931). *Anger in young children*. Minneapolis, MN: University of Minnesota Press.
- Green, E. H. (1933). Friendships and quarrels among preschool children. *Child Development, 4*, 237–252.
- Grusec, J. E. (1992). Social learning theory and developmental psychology: The legacies of Robert Sears and Albert Bandura. *Developmental Psychology*, 28, 776–786.
- Gunnar, M. (1994). Psychoendocrine studies of temperament and stress in early childhood: Expanding current models. In J. E. Bates & T. D. Wachs (Eds.), *Temperament: Individual differences at the interface of biology and behavior* (pp. 387–410). Hillsdale, NJ: Erlbaum.
- Gunnar, M. (2001). Effects of early deprivation: Findings from orphanage-reared infants and children. In C. A. Nelson & M. Luciana (Eds.), *Handbook of developmental cognitive neuroscience* (pp. 617–630). Cambridge, MA: MIT Press.
- Hall, G. S. (1904). Adolescence: Its psychology and its relations to physiology, anthropology, sociology, sex, crime, religion, and education (2 vols.). New York: Appleton.
- Harlow, H. F., & Zimmerman, R. (1959). Affectional responses in the infant monkey. *Science, 130*, 421–432.
- Harris, P. L. (1992). Acquiring the art of conversation: Children's developing conception of their conversation partner. In M. Bennett (Ed.), *Developmental psychology: Achievements and prospects* (pp. 89–105). Philadelphia: Psychology Press.
- Hartshorne, H., & May, M. S. (1928–1930). *Studies in the nature of character* (3 vols.). New York: Macmillan.
- Hartup, W. W. (1958). Nurturance and nurturance-withdrawal in relation to the dependency behavior of preschool children. *Child Development*, 29, 191–201.
- Hartup, W. W. (1991). Social development and social psychology: Perspectives on interpersonal relationships. In J. H. Cantor, C. C. Spiker, & L. Lipsitt (Eds.), *Child behavior and development: Training for diversity* (pp. 1–33). Norwood, NJ: Ablex.
- Hartup, W. W. (1992). Peer experience and its developmental significance. In M. Bennett (Ed.), Developmental psychology: Achievements and prospects (pp. 106–125). Philadelphia: Psychology Press.
- Hartup, W. W., & Coates, B. (1967). Imitation of a peer as a function of reinforcement from the peer group and rewardingness of the model. *Child Development*, *38*, 1003–1016.
- Hartup, W. W., Johnson, A., & Weinberg, R. A. (in press). The Institute of Child Development: Pioneering in science and application. In W. W. Hartup & R. A. Weinberg (Eds.), *Child* psychology in retrospect and prospect: The Minnesota symposia on child psychology, Vol. 32. Mahwah, NJ: Erlbaum.
- Hartup, W. W., & Laursen, B. (1991). Relationships as developmental contexts. In R. Cohen & A.
  W. Siegel (Eds.), Context and development (pp.253–279). Hillsdale, NJ: Erlbaum.
- Hartup, W. W., & Laursen, B. (1999). Relationships as developmental contexts: Retrospective themes and contemporary issues. In W. A. Collins & B. Laursen (Eds.), *Relationships as developmental contexts: The Minnesota symposia on child psychology, Vol. 30* (pp. 13–35). Mahwah, NJ: Erlbaum.
- Hinde, R. A. (1979). Towards understanding relationships. London: Academic Press.
- Horowitz, F. D. (1992). John B. Watson's legacy: Learning and environment. *Developmental Psy*chology, 28, 360–367.
- Jersild, A. T., & Markey, F, U. (1935). Conflicts between preschool children. Child Development Monographs No. 21. New York: Columbia University Press.
- Jones, E. E. (1998). Major developments in five decades of social psychology. In D. T. Gilbert, S. T.

Fiske, & G. Lindzey (Eds.), *The handbook of social psychology, Vol. 1* (pp. 3–57). New York: Oxford University Press.

- Jones, M. C. (1931). The conditioning of children's emotions. In C. Murchison (Eds.), *A handbook of child psychology* (pp. 71–93). Worcester, MA: Clark University Press.
- Kagan, J. (1992). Yesterday's premises, tomorrow's promises. *Developmental Psychology, 28*, 990–997.
- Kagan, J., & Moss, H. A. (1962). Birth to maturity, a study in psychological development. New York: Wiley.
- Kelley, H. H., Berscheid, E., Christensen, A., Harvey, J. H., Huston, T. L., Levinger, G., McClintock, E., Peplau, L. A., & Peterson, D. R. (Eds.). (1983). *Close relationships*. New York: Freeman.
- Kochanska, G. (1993). Toward a synthesis of parental socialization and child temperament in early development of conscience. *Child Development*, *64*, 325–347.
- Kohlberg, L. (1969). Stage and sequence: The cognitive-developmental approach to socialization. In D. A. Goslin (Ed.), *Handbook of socialization theory and research* (pp. 347–480). Chicago: Rand McNally.
- Kuczynski, L. (1984). Socialization goals and mother-child interaction: Strategies for long-term and short-term compliance. *Developmental Psychology, 20*, 1061–1073.
- Lewin, K. (1931). Environmental forces in child behavior and development. In C. Murchison (Ed.), *A handbook of child psychology*, 2nd ed. (pp. 590–625). Worcester, MA: Clark University Press.
- Lewin, K., Lippitt, R., & White, R. K. (1938). Patterns of aggressive behavior in experimentally created "social climates." *Journal of Social Psychology*, 10, 271–299.
- Maccoby, E. E. (1990). Gender and relationships. American Psychologist, 45, 513-520.
- Maccoby, E. E. (1992a). The role of parents in the socialization of children: An historical overview. *Developmental Psychology*, 28, 1006–1017.
- Maccoby, E. E. (1992b). Trends in the study of socialization: Is there a Lewinian heritage? *Journal of Social Issues*, 48, 171–185.
- Magnusson, D., Bergman, L. R., Rudinger, G., & Torestad, B. (1991). *Problems and methods in longitudinal research: Stability and change*. Cambridge, England: Cambridge University Press.
- Markus, H., & Kitayama, S. (1994). A collective fear of the collective: Implications for selves and theories of selves. *Personality and Social Psychology Bulletin, 20*, 568–579.
- Marvin, R., & Britner, P. (1999). Normative development: The ontogeny of attachment. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 44–67). New York: Guilford Press.
- Mateer, F. (1918). Child behavior: A critical and experimental study of young children by the method of conditioned reflexes. Boston: Badger.
- McLoyd, V. C. (1998). Socioeconomic disadvantage and child development. *American Psychologist*, 53, 185–204.
- Mead, G. H. (1934). Mind, self, and society. Chicago: University of Chicago Press.
- Miller, N. E., & Dollard, J. (1941). Social learning and imitation. New York: McGraw-Hill.
- Mischel, W. (1968). Personality and assessment. New York: Wiley.
- Mischel, W. (1973). Toward a cognitive social learning reconceptualization of personality. *Psychological Review*, 80, 252–283.
- Mischel, W. (1984). Convergences and challenges in the search for consistency. *American Psychologist*, 39, 351–364.
- Modell, J., & Elder, G. H., Jr. (in press). Children develop in history: So what's new? In W. W. Hartup & R. A. Weinberg (Eds.), *Child psychology in retrospect and prospect: The Minnesota symposia on child* psychology, Vol. 32. Mahwah, NJ: Erlbaum.
- Monroe, W. S. (1899). *Die Entwicklung des sozialen Bewusstseins der Kinder*. Berlin: Reuther & Reichard.

- Moreno, J. L. (1934). *Who shall survive?* Washington, DC: Nervous and Mental Disease Publishing Company.
- Parpal, M., & Maccoby, E. E. (1985). Maternal responsiveness and subsequent child compliance. *Child Development*, 56, 1326–1334.
- Parten, M. B. (1932–1933). Social participation among preschool children. *Journal of Abnormal and Social Psychology*, 27, 243–269.
- Pastor, D. (1981). The quality of mother-infant attachment and its relationship to toddlers' initial sociability with peers. *Developmental Psychology*, *17*, 326–335.
- Patterson, G. R. (1982). Coercive family process. Eugene, OR: Castalia Press.
- Piaget, J. (1932/1965). The moral judgment of the child. New York: Free Press.
- Reis, H. T., Collins, W. A., & Berscheid, E. (2001). The relationship context of human behavior and development. *Psychological Bulletin, 126*, 844–872.
- Rheingold, H. (1969). The social and socializing infant. In D. A. Goslin (Ed.), *Handbook of socialization theory and research* (pp. 779–790). Chicago: Rand McNally.
- Rheingold, H. L., & Cook, K. V. (1975). The contents of boys and girls rooms as an index of parents' behavior. *Child Development*, 46, 459–463.
- Roberts, B. W., & DelVecchio, W. F. (2000). The rank-order consistency of personality traits from childhood to old age: A quantitative review of longitudinal studies. *American Psychologist*, 126, 3–25.
- Rothbart, M. K., & Bates, J. E. (1998). Temperament. In W. Damon (Series Ed.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology. Vol. 3. Social, emotional, and personality development* (pp. 105–176). New York: Wiley.
- Rutter, M., & English and Romanian Adoptees (ERA) study team. (1998). Developmental catchup, and deficit, following adoption after severe global early privation. *Journal of Child Psychol*ogy and Psychiatry, 39, 465–476.
- Saarni, C. (1990). Emotional competence: How emotions and relationships become integrated. In R. A. Thompson (Ed.), Socioemotional development. Nebraska symposia on motivation, Vol. 36 (pp. 115–181). Lincoln, NE: University of Nebraska Press.
- Schaffer, H. R., & Emerson, P. E. (1964). The development of social attachments in infancy. Monographs of the Society for Research in Child Development, 29 (3, Serial No. 94).
- Schallenberger, M. E. (1894). A study of children's rights, as seen by themselves. *Pedagogical Semi-nary*, 3, 87–96.
- Sears, R. R. (1944). Experimental analysis of psychoanalytic phenomena. In J. McV. Hunt (Ed.), *Personality and the behavior disorders, Vol. 1* (pp. 306–332). New York: Ronald Press.
- Sears, R. R. (1951). A theoretical framework for personality and social behavior. American Psychologist, 6, 476–483.
- Sears, R. R. (1975). Your ancients revisited: A history of child development. In E. M. Hetherington (Ed.), *Review of child development research, Vol. 5*. Chicago: University of Chicago.
- Sears, R.R., Maccoby, E. E., & Levin, H. (1957). Patterns of child rearing. Evanston, IL: Row Peterson.
- Sears, R. R., Rau, L., & Alpert, R. (1965). *Identification and child rearing*. Stanford, CA: Stanford University Press.
- Sears, R. R., Whiting, J. W. M., Nowlis, V., & Sears, P. S. (1953). Some child-rearing antecedents of aggression and dependency in young children. *Genetic Psychology Monographs*, 47, 135– 234.
- Selman, R. (1980). The growth of interpersonal understanding. New York: Academic Press.
- Senn, M. J. E. (1975). Insights on the child development movement in the United States. *Mono-graphs of the Society for Research in Child Development, 40* (Serial No. 161).
- Sherif, M., Harvey, O. J., White, B. J., Hood, W. R., & Sherif, C. W. (1961). *Intergroup conflict and cooperation: The Robbers Cave experiment*. Norman, OK: The University Book Exchange.

- Shiner, R. (1998). How shall we speak of children's personalities in middle childhood? A preliminary taxonomy. *Psychological Bulletin, 124*, 308–332.
- Shinn, M. (1893–1899). Notes on the development of a child. *University of California Publications, 1*. Shinn, M. (1900). *Biography of a baby*. Boston: Houghton Mifflin.
- Shirley, M. M. (1931). The first two years. A study of twenty-five babies: Vol. 1. Postural and locomotor development. Minneapolis: University of Minnesota Press.
- Shirley, M. M. (1933). *The first two years. A study of twenty-five babies: Vol. 3. Personality manifestations.* Minneapolis: University of Minnesota Press.
- Smith, P. K., & Connolly, K. (1972). Patterns of play and social interaction in pre-school children. In N. Blurton-Jones (Ed.), *Ethological studies of child behavior* (pp. 65–95). Cambridge, England: Cambridge University Press.
- Sroufe, L. A., Carlson, E. A., & Shulman, S. (1993). Individuals in relationships: Development from infancy through adolescence. In D. C. Funder, R. D. Parke, C. Tomlinson-Keasey, & K. Widaman (Eds.), *Studying lives through time: Personality and development* (pp. 315–342). Washington, DC: American Psychological Association.
- Sroufe, L. A., Egeland, B., & Carlson, E. A. (1999). One social world: The integrated development of parent-child and peer relationships. In W. A. Collins & B. Laursen (Eds.), *Relationships as developmental contexts: The Minnesota symposia on child psychology, Vol. 30* (pp. 241–261). Mahwah, NJ: Erlbaum.
- Sroufe, L. A., & Fleeson, J. (1986). Attachment and the construction of relationships. In W. W. Hartup & Z. Rubin (Eds.), *Relationships and development* (pp. 51–71). Mahwah, NJ: Erlbaum.
- Stevenson, H. W. (1965). Social reinforcement with children. In L. P. Lipsitt & C. C. Spiker (Eds.), Advances in child development and behavior, Vol. 2 (pp.97–126). New York: Academic Press.
- Sullivan, H. S. (1953). The interpersonal theory of psychiatry. New York: Norton.
- Super, C., & Harkness, S. (1986). The developmental niche: A conceptualization at the interface of the child and culture. *International Journal of Behavioral Development*, 9, 545–570.
- Thelen, E., & Adolph, K. E. (1992). Arnold L. Gesell: The paradox of nature and nurture. *Developmental Psychology*, 28, 368–380.
- Thompson, R. A. (1998). Early sociopersonality development. In W. Damon (Series ed.), N. Eisenberg (Vol. Ed.), *The handbook of child psychology: Vol. 3. Social, emotional, and personality development* (pp. 25–104). New York: Wiley.
- Thompson, R. A. (1999). Early attachment and later development. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 265–286). New York: Guilford Press.
- Thorne, B. (1993). *Gender play. Girls and boys in school*. New Brunswick, NJ: Rutgers University Press.
- Thrasher, F. M. (1927). The gang. Chicago: University of Chicago Press.
- Triplett, N. (1897). The dynamogenic factors in pacemaking and competition. American Journal of Psychology, 9, 507–533.
- Watson, J. B. (1913). Psychology as the behaviorist views it. Psychological Review, 20, 158-177.
- Watson, J. B., & Rayner, R. A. (1920). Conditional emotional reactions. *Journal of Experimental Psychology*, 3, 1–14.
- Weinfield, N., Sroufe, L. A., Egeland, B., & Carlson, E. A. (1999). The nature of individual differences in infant-caregiver attachment. In J. Cassidy & P. R. Shaver (Eds.), *Handbook* of attachment: Theory, research, and clinical applications (pp. 68–88). New York: Guilford Press.
- Wertsch, J. V., & Tulviste, P. (1992). L. S. Vygotsky and contemporary developmental psychology. Developmental Psychology, 28, 548–557.

- White, S. H. (1992). G. Stanley Hall: From philosophy to developmental psychology. *Developmental Psychology*, *28*, 25–34.
- White, S. H. (in press). Notes toward a philosophy of science for developmental science. In W. W. Hartup & R. A. Weinberg (Eds.), *Child psychology in retrospect and prospect: The Minnesota symposia on child psychology, Vol. 32.* Mahwah, NJ: Erlbaum.