

### **Special Issue Article**

# Developmental psychopathology: Our welcoming, inclusive, and eclectic intellectual home

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#### **Abstract**

The integrative nature of developmental psychopathology is its defining and most remarkable feature. Since its inception, often identified with the special issue of *Child Development* (Cichetti, 1984), this new discipline has shattered barriers and divisions that until then had artificially compartmentalized the study of human development, and perhaps even psychology in general, and it has proposed new ways of integrative thinking about development. One, developmental psychopathology has programmatically integrated research on typical or adaptive and atypical or maladaptive developmental processes and demonstrated how those inform each other. Two, developmental psychopathology has promoted bridges between developmental research and other disciplines. Three, less explicitly but equally importantly, developmental psychopathology has abolished conceptual and empirical barriers that had existed among various theories and perspectives within developmental psychology by creating a welcoming niche for research inspired by theories often historically seen as contradictory or incompatible. Ideas originating in psychoanalytic, learning, cognitive, ethological, and sociocultural theories all find a welcoming home and seamlessly coexist in heuristically productive harmony within developmental psychopathology, inform each other, and generate exciting questions and insights. This eclectic and conceptually inclusive nature is one reason for developmental psychopathology's lasting appeal and inspirational power.

Keywords: Developmental psychopathology; developmental theories; eclecticism

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#### Introduction

Over the last four decades, developmental psychopathology has remarkably transformed developmental and clinical sciences. The 1984 special issue of *Child Development*, with Dante Cicchetti as the guest editor, containing a collection of influential theoretical and empirical articles, ushered in the new discipline (Cicchetti, 1984; Garmezy et al., 1984; Sroufe & Rutter, 1984). Soon after, in 1989, the journal *Development and Psychopathology* was established, and, under Dante Cicchetti's editorship, has become the leading venue for the quickly emerging and rapidly burgeoning field.

Ever since, this new field's integrative power has been perhaps its most remarkable feature. Developmental psychopathology has shattered past barriers and divisions that had artificially partitioned, fragmented, and compartmentalized the study of human development, and perhaps psychology in general. That integrative power has been reflected in at least three inter-related ways.

### Integrating the study of typical and atypical development

One, as its defining feature, the new discipline has famously proposed that we learn about typical development by studying

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psychopathology and that we learn about psychopathology by studying typical development. Typical and atypical development were conceptualized as informing each other, producing extraordinarily innovative models of development. Constructs of multifinality, equfinality, developmental cascades, and risk and resilience have redefined our thinking about developmental processes, childhood disorders, and adaptative and maladaptive trajectories (Cicchetti & Toth, 2009; Cicchetti, 1993; Rutter & Sroufe, 2000). We illustrate this approach below with just a few examples selected from the very large field.

Researchers investigating Theory of Mind have made great strides by studying typically developing children and children with autism. Our understanding of typical and maladaptive parenting has been informed by the extremely influential paper by Belsky (1984), originally situated in the child maltreatment framework, but exerting a lasting influence on the study of parenting broadly conceptualized (Taraban & Shaw, 2018). The study of adaptive and dysfunctional parenting has been further fueled by research on non-maltreated and maltreated children (Cicchetti, 2016). The "normal:abnormal" framework applied to developmental phenomena has provided nuanced insights into both externalizing and internalizing psychopathology. Studying irritability and temper loss, Wakschlag and colleagues have distinguished between normative manifestations of early anger, noncompliance, defiance or temper loss and manifestations that reflect early risk and emerging psychopathology, thus informing our understanding of emotion regulation and dysregulation (Wakschlag et al., 2015).

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Studying early signs of fear, worry, and sadness, they provided a nuanced, developmentally informed analysis of early risk for future internalizing psychopathology (Bufferd et al., 2023; Buss et al., 2013; Wakschlag et al., 2023). The study of self-regulation in children from typical and at-risk, unstable, low-resource, harsh environments has provided insights into adaptive and maladaptive aspects of self-regulatory development (Sturge-Apple et al., 2016).

#### Integrating psychology with other disciplines

Two, developmental psychopathology catalyzed an integration of developmental psychology with other disciplines, such as psychiatry, neurobiology, neurophysiology, relationship sciences, or social psychology. Bridges with neuroscience, genetics, and biology have been among the most productive and heuristically powerful. Research on temperament (De Pauw & Mervielde, 2010; Gartstein et al., 2012; Muris & Ollendick, 2005; Nigg, 2006; Rothbart & Bates, 2006; Shiner & Caspi, 2003) and its role in both adaptive and atrisk developmental pathways elucidated biological foundations of internalizing (Fox et al., 2022; Kagan, 2022; Whalen et al., 2017) and externalizing psychopathology (Nigg, 2017). Research on early adversity, deprivation, and stress (Hostinar & Gunnar, 2013; Nelson et al., 2023; Pollak & Smith, 2021) highlighted its biological consequences for children. Research on biological factors fueled the highly influential and heuristically fertile frameworks of diathesis-stress, differential susceptibility, and plasticity (Belsky & Pluess, 2009; Ellis et al., 2011).

Bridges with social psychology and relationship sciences have also been productive. Social psychological constructs, such as communal orientation (Clark & Mills, 2012), interpersonal acceptance (Rohner & Lansford, 2017), and reciprocity (Maccoby, 1992), integrated with socialization frameworks, led to the notion of mutually responsive orientation (Kochanska et al., 2019), and it, in turn, informed our understanding of socialization in both typical and at-risk environments (Kochanska et al., 2013, 2019).

## Integrating and welcoming developmental theories and perspectives historically seen as incompatible

Those first two ways in which developmental psychopathology eliminated old divisions are broadly acknowledged. But there is also a third way, perhaps the least appreciated: Less explicitly but equally importantly, developmental psychopathology has abolished the conceptual and empirical barriers and distinctions that had existed among various "grand" theories and perspectives within developmental psychology. That integration of theories and perspectives historically seen as incompatible is as remarkable and heuristically fertile as the first two forms.

Every year, as we teach courses on social-emotional development, we typically begin by contrasting various theoretical perspectives – for example, psychoanalytic, learning, ethological, cognitive, sociocultural theories – and then we describe their very different portrayals of development and different answers to the key developmental questions. We review the often-spirited historical arguments in the field and portray those various perspectives as contradictory and incompatible. This is a deliberate pedagogical exercise to pique students' curiosity and convey the rich, diverse theoretical canvass and the fascinating history of our discipline.

We intentionally highlight contrasting views the various theories have offered on the key questions: What roles do nature and nurture play? What comprises nature and nurture? Who is more "in charge" of development – the parent or the child? How does development progress – is it incremental and continuous or does it happen in qualitatively different stages? What changes and what stays the same? What makes children different from one another? What is the role of past experiences? Can we predict the child's future from his or her past?

Emphasizing contrasts among seemingly incompatible and contradictory views and positions historically staked out within various perspectives is pedagogically useful; and to some extent, it is a true portrayal of past diverse traditions in developmental science and psychology in general. And yet, such compartmentalized, segmented vision of our field has been vastly redefined – in fact, rendered moot – by the ascension of developmental psychopathology.

Developmental psychopathology has revolutionized the "big picture" due to the remarkable openness and richness of its conceptual framework that welcomes and seamlessly integrates diverse perspectives. Psychoanalytic, learning, ethological, biological, cognitive, and sociocultural ideas are all incorporated in a meaningful manner. Although historically those theories may have indeed been incompatible, in developmental psychopathology, they coexist in a remarkable conceptual harmony, inform and complement each other, resulting in new insights and a new synergy – a heuristically rich and complex portrayal of development and socialization.

Cicchetti's original paper (1984), by meaningfully weaving in contributions of Freud, Erikson, and Piaget already implied that such would be the future of this new discipline. Other early papers in that issue, foundational to developmental psychopathology (e.g., Belsky, 1984; Sroufe & Rutter, 1984), and other works that appeared at about the same time (Masten & Garmezy, 1985) evinced a similar integrative spirit. Consequently, developmental psychopathology has become an inclusive, welcoming, eclectic intellectual home for scholars representing a myriad conceptual perspectives and theories. Ever since, that richness, inclusiveness, and theoretical breadth have been a source of inspiration, and one reason for the continuing appeal and growing heuristic power of the developmental psychopathology framework.

Below, we present a few examples illustrating how developmental psychopathology has accommodated, incorporated, and productively drawn from very different historical perspectives on human development. We then briefly review the work in our laboratory, where we explicitly seek to take advantage of all three forms of developmental psychopathology's integrative strategies: Studying typical and atypical development, drawing from other fields of psychology, and integrating multiple theories in an eclectic, conceptually comprehensive approach.

#### Psychoanalytic theories and developmental psychopathology

Although many of Freud's specific notions have been dismissed and are often disparaged, derided, or ridiculed, his fundamental deeper ideas about human psyche – albeit substantially recast and transformed – have been echoed in many research themes in developmental psychopathology (Sroufe, 1986; Westen, 1998). We appreciate Freud's original emphasis on affective processes and his portrayal of the mind as not merely reflecting reality but actively transforming it to help cope with anxiety, fear, anger, and other aversive emotions through "defense mechanisms". In developmental psychopathology, those topics are mirrored by our appreciation of emotions and emotion regulation and

dysregulation, widely viewed as key transdiagnostic markers in research on origins of adaptive and maladaptive development.

We also embrace Freud's beliefs in the significance, importance, and complexity of the early affective experiences that can frame future development through unconscious or partly conscious processes. Freud was the first to emphasize that early relational experiences, even if preverbal, unconscious, and represented in what we would call implicit, nondeclarative memory, are critically important. They are - again in today's language - "developmentally privileged", carried forward, and framing future trajectories, often in a complex and nonlinear manner. Within modern frameworks, developmental psychopathology scholars have highlighted the critical impact of early relationships, written extensively about how that process may occur, and delineated its various forms: direct, moderated effects, indirect effects; or cascades (Kochanska et al., 2019; Masten & Cicchetti, 2010; Sroufe, 1986; 2005; 2013; 2016). We also revisit Freud's belief that emotional experiences can be expressed in dreams, although we view the process through the lens of the contemporary attachment theory (Mikulincer et al., 2011).

Freud's follower, Erikson, transformed Freudian ideas in ways remarkably aligned with contemporary tenets of developmental psychopathology. We view development through a strikingly similar lens. We consider age-salient adaptation tasks (Sroufe, 2016), tied to developmentally changing challenges, carrying a potential for resilience, adaptation, and growth or a risk of maladaptation or failure, and setting the stage for, or framing future development.

#### Learning theories and developmental psychopathology

Classic learning research produced an important finding that fits well with developmental psychopathology. Studying effectiveness of punishment, Parke (1969) observed that punishment delivered by a "nurturant agent" – an experimenter who had first engaged in a friendly interaction with the child – was more effective than one delivered by a neutral agent. Although not much noticed at the time, that insightful result dovetails with current research on relationships as developmental contexts whose quality can powerfully moderate effects of parenting strategies (Bendel-Stenzel et al., 2023; Deater-Deckard et al., 2006; Kim & Kochanska, 2012).

Learning theories have also inspired research by the Oregon Social Learning Center that has produced sophisticated micro-analytic analyses of coercive family systems and nuanced descriptions of the process of entrenching or cascading mutually aversive and destructive parent-child dynamics. That research demonstrated how difficult, hard-to-manage children elicit harsh parental control that leads to more child defiance, and then to more parental coercion (Dishion & Patterson, 2006; Scaramella & Leve, 2004; Tiberio et al., 2016). Over time, those dynamics cascade, resulting in an entrenched, escalating mutually adversarial parent-child relationship, and finally, in maladaptive child outcomes. That approach remains prominent and influential in developmental psychopathology, and widely accepted as elucidating origins of externalizing psychopathology in children and youth and informing treatment and prevention.

#### Ethology and developmental psychopathology

Ethological theories – most prominently, Bowlby's attachment theory – have been uniquely synergistic with questions and constructs of developmental psychopathology (Sroufe et al., 1999; Sroufe, 1986, 2016); Bowlby could be legitimately seen as its

forerunner, and the construct of attachment has been enormously influential in developmental psychopathology. Bowlby had recast psychodynamic tenets on the importance of early relationships in an evolutionary framework (Bowlby, 1969/1982). Ever since, attachment theory has remained a conceptually, empirically, and heuristically powerful force in developmental psychopathology, as it embodies its multiple key principles.

Attachment is an evolutionarily based proximity-regulating biobehavioral system, amenable to rigorous measurement; secure attachment provides the child with confidence in protection and helps manage threat, stress, and distress at the behavioral, emotional, and physiological levels. Analyses of secure and insecure attachment organizations, representing examples of adaptive and maladaptive developmental processes informing each other, have had an enormous impact on research on risk and resilience across the lifespan (e.g., Cassidy & Shaver, 2016; Thompson et al., 2021; Thompson, 2015, 2016). The view of development in attachment theory, depicting indirect, complex, nonlinear probabilistic effects, highlighting adaptive and maladaptive trajectories in development, is fully consistent with contemporary views in developmental psychopathology (Kochanska & Kim, 2012; Sroufe, 2005, 2016).

More recently, attachment's role has been broadened to include also another developmental goal: To promote the child's positive, receptive orientation toward the parent. A secure attachment renders the child receptive to parental influence and eager to embrace it. It inaugurates positive parent-child socialization dynamics, the parent-child implicitly cooperative interpersonal set, permeated with mutual good will and infused with shared positive feelings. Such orientation is especially significant at the beginning of the second year, as it coincides with the typical onset of parental control and discipline, and child compliance and noncompliance. By contrast, an insecure attachment can launch the dyad on a mutually adversarial and resentful trajectory, with the parent and the child becoming increasingly antagonistic (An et al., 2021; Goffin et al., 2018; Kochanska et al., 2015; Shaver et al., 2016; Thompson, 2016; Waters et al., 1990).

## Cognitive theories and information-processing theories and developmental psychopathology

In recent decades, cognitive theories have found a particularly heuristically fertile niche in developmental psychopathology, due to their conceptual and empirical interface with attachment theory's key constructs of Internal Working Models (IWMs). Research on representations, implicit and explicit memory, scripts, procedural knowledge, and mentalization – studied in both parents and children – has become one of the most dynamic hubs in developmental psychopathology.

Research on parents' cognitive processing and mentalization, with the foci on reflective functioning (Katznelson, 2014; Luyten et al., 2017; Sharp & Fonagy, 2008), mind-mindedness (McMahon & Bernier, 2017; Meins, 1997, 1999, 2013; Slade, 2005), relational schemas (Sher-Censor, 2015), secure base scripts (Fraley et al., 2013; Groh & Haydon, 2018; Waters et al., 2015), and attributions (Snarr et al., 2009) has substantially informed our understanding of intergenerational links between parents' emotional histories and their adaptive and maladaptive parenting (An et al., 2022). Research that has applied well-established infant cognition paradigms, such as violation of expectations, to children's representations of parents, provided a unique, innovative window into infants' IWMs of the caregiver, self, and others (Johnson et al., 2010). Memory paradigms

have also proved useful (Belsky et al., 1996; Kirsh & Cassidy, 1997). Rigorously studied children's narratives elucidate their representations of parents, self, and relationships (Toth et al., 1997, 2002, 2009). Several systematic reviews summarize this emerging and vibrant field (Cassidy et al., 2013; Dykas & Cassidy, 2011; Kochanska et al., 2019; Sherman et al., 2015).

Research on social-information processing, implemented to explain mechanisms of children's aggression, represents another example of a cognitive perspective finding an important key niche in developmental psychopathology. This elegant, highly influential, and heuristically productive application of social cognition and attributional theories has elucidated how biased information processing explains origins of aggression in children and youth, leading to cascading risks to peer rejection and entrenched social problems (Crick & Dodge, 1994). Notably, those early biases, due largely to experiences of early abusive care, coalesce into a broad defensive set that frames maladaptive outcomes into adult age (Dodge et al., 2022).

# Sociocultural and ecological theories and developmental psychopathology

Developmental psychopathology has also incorporated extensions beyond individual-level factors to emphasize the roles of contexts and social environment in the unfolding adaptive and maladaptive trajectories. Drawing from Bronfenbrenner's model of development as embedded in multilayered ecological systems (Bronfenbrenner & Morris, 2006), theories focused on broader contexts have found a welcoming niche in developmental psychopathology, and they provided rich tools and resources for understanding adaptive and maladaptive trajectories of development and phenomena of risk and resilience.

Decades of research on developmental risk and resilience have highlighted the concepts of adverse childhood experiences and cumulative risk, and the ways to mitigate their negative impact and to promote resilience (Ellis et al., 2022). Much of the early focus on resilience has been on individuals' sensitivity to the risk and protective factors in the environment (e.g., differential susceptibility). In the recent years, the definition of resilience has been extended to incorporate a multisystem perspective, which views resilience as a dynamic process that can exist both within the individual and in the environment, connecting individuals and families to the resources necessary for positive adaptation (Masten et al., 2021). The process of resilience can occur at multiple levels and cascade across levels.

This evolving view of resilience has elucidated both research and intervention work in developmental psychopathology, especially in the current contexts of social justice, multiculturalism, and crises (e.g., pandemic, wars). A growing body of literature has examined the interplay between family dynamics and broader sociocultural contexts, and emphasized the crucial role of parental socialization in mitigating risks in the social environment, as well as the importance of building an equal, inclusive, and safe society and addressing structural barriers for promoting positive dynamics and adaptive functioning among families and children (Dunbar et al., 2022; Eltanamly et al., 2021; Stern et al., 2022; Tyrell & Masten, 2022).

### Adopting an eclectic, integrative perspective in research on parental socialization of children's adaptive and maladaptive developmental trajectories

Developmental psychopathology has offered researchers a rich set of perspectives and tools for comprehensively understanding children's development. Below, we will briefly illustrate how the eclectic flexibility and inclusiveness afforded by developmental psychopathology have informed our research program. We address a perennial developmental question: Why do some children embrace their parents' influence and embark on adaptive, positive developmental trajectories toward prosocial, internalized, rule-abiding conduct and robust social competence? Why do other children reject and resent their parents' influence and embark on maladaptive paths toward callousness, disregard for conduct rules and others' feelings, antisocial behavior, and impoverished competence?

Enriching the learning theories' perspective on early traits and later adjustment: parent-child relationship as a foundation for multifinal cascades

In our work, we bridge children's biologically-based traits with relationship science by examining multifinality in trajectories from early temperament to later adjustment in the context of family relationships. By integrating perspectives and constructs from the biological, learning, attachment, cognitive, and ecological theories, we aim to elucidate children's adaptive and maladaptive developmental cascades.

Ever since Bell (1968) highlighted the importance of child effects in socialization, several biologically-based traits have been seen as early markers of risk for maladaptive development. Often referred to as "child difficulty", those traits include anger proneness, challenging, hard-to-manage temperament, or poor regulation, and more recently, also molecular genetic markers (Brock et al., 2017). We have drawn from that research, deploying multilevel measures of child difficulty (behavioral, genetic, psychophysiological, and parent rated).

Further, we have drawn from the above-mentioned elegant body of research on coercive family systems, inspired by learning theories. That work has persuasively shown that "child difficulty" elicits harsh, power-assertive control, which in turn leads to children's escalating negative socialization outcomes. We have noticed, however, growing evidence that shows that such negative cascade from child difficulty to parental power assertion to negative socialization outcomes is far from universal. In the language of developmental psychopathology, research has increasingly revealed substantial multifinality in paths that unfold from early child difficult temperament (Cicchetti & Rogosch, 1996; Kim & Kochanska, 2021). Consequently, we explored potential factors that can alter such negative cascades.

We observed that the learning perspective was largely silent on the role of the early parent-child relationship in the first years of life, prior to the onset of control. To address this gap, we have next reached to Bowlby's construct of attachment, as well as constructs of reciprocity, cooperation, and communal relationship from social psychology (Clark & Mills, 2012; Maccoby, 1992). We proposed that the quality of the early parent-child relationship (security, mutuality) in the first two years is key in determining whether the cascade from child difficulty to parental negative, harsh control to child maladaptive outcomes will – or will not – unfold. Specifically, we expected that such adversarial, maladaptive cascades depicted by the learning literature would be present in dyads whose early relationships are suboptimal, insecure, and negative, but absent or defused in dyads whose early relationships are optimal and secure.

Over three decades, we have obtained converging, remarkably consistent evidence, across multiple studies, designs, ages, and diverse measures of all constructs, supporting our model (Kochanska et al., 2019; Kochanska & Kim, 2012). Early relational experience does alter future socialization processes that unfold in parent-child dyads. Dyads with temperamentally difficult children are indeed at high risk, but only if they have a history of an early suboptimal relationship. This conclusion is consistent with tenets of developmental psychopathology, but rarely integrated with the learning perspectives. The early relationship is an organizing core in development, always integrated with later experience and never lost; it has a distinct, privileged impact, framing the child's subsequent transactions with the environment (Fraley et al., 2013; Sroufe, 2005, 2013, 2016). We have also incorporated the sociocultural perspective by testing our model in both low-risk community families and in high-risk mother-child dyads, struggling with a harsh ecology of poverty and multiple forms of adversity. Our model has informed a randomized intervention we deployed in the latter sample, targeting the quality of the mother-child relationship. The intervention exerted its primary influence on the cascade from child difficulty to maternal negative control to child maladjustment by weakening the first link: between child difficulty and maternal negative control (Brock & Kochanska, 2016).

Mechanisms that account for multifinality: contributions of cognitive and information-processing theories and the constructs of internal working models (IWMs)

We are now asking the next generation of questions: Why and how do such divergent cascades emerge? What mechanisms account for such multifinality?

Here, we have drawn from cognitive and information-processing theories. We have proposed that the parent's and the child's representations of each other, evolving in early relationships – IWMs in attachment theory – are key mechanisms that account for the cascades of parent-child dynamics unfolding in suboptimal relationships, as compared to optimal ones.

In suboptimal relationships, the parent's IWMs of the child are characterized by impoverished reflective functioning, poor mind-mindedness, negative relational schemas, and hostile attributions, and the child's IWMs include representations of the parent as untrustworthy, unresponsive, rejecting, hostile, and unfair. By contrast, in optimal relationships, parents have reflective and positive views of their children and children perceive the parents as trustworthy, responsive, accepting, well-intentioned, and benevolent (Bretherton & Munholland, 2008; Carlson et al., 2004; Cassidy et al., 2013; Dykas & Cassidy, 2011; Main et al., 1985; Thompson, 2016; Toth et al., 2009). Of note, children's early representations of their parents generalize to other relationships, and more broadly to perceptions of safety and stress (Smith & Pollak, 2021; Thompson, 2021).

We then integrated those concepts into a "dual-moderator" model, in which the parent's IWM of the child moderates the links between child difficulty and parental control, and the child's IWM of the parent moderates the links between parental control and developmental outcomes. For a parent with less reflective, negative, and hostile IWM of the child, the child's difficult, angry, hard-to-manage traits easily trigger harsh, angry, negative, rejecting control (Scaramella & Leve, 2004; Smith et al., 2014, 2015). By contrast, for a parent with a rich, reflective, positive IWM of the child, the same child traits do not trigger negative control; indeed, they may even elicit supportive and empathic control (Dix, 1991). Thus, the

parent's perception of the child accounts for the moderated link between child difficulty and parental negative control.

In turn, a child who has a negative IWM of the parent is biased to perceive parental control as hostile, unfair, mean-spirited, and arbitrary (Gershoff, 2002; Grusec & Goodnow, 1994). The child then resents and rejects parental influence, ultimately leading to poor developmental outcomes, particularly disruptive behavior problems. By contrast, a child who has a positive, trusting IWM of the parent, comes to view control – even if firm – as benevolent, fair, and well-intentioned. That child willingly embraces socialization, entering a path to positive outcomes and competence – and as a result, the maladaptive cascade is "defused" (Kochanska et al., 2019). Thus, the child's perception of the parent accounts for the moderated link between parental harsh control and poor developmental outcomes. Preliminary evidence has supported such a "dual moderator" model (An & Kochanska, 2020; Kochanska & An, 2023).

# The future of developmental psychopathology: research on parental socialization as a case in point

The promise of developmental psychopathology, as articulated in the visionary special issue (Cicchetti, 1984), has been fully realized. The new discipline has transformed how we think about adaptive and maladaptive development. We conclude with a few examples regarding the future of our area of interest – parental socialization.

We expect to see all three integrative directions to continue to fuel and inform research on socialization. Typical or adaptive and atypical or maladaptive trajectories of parenting and socialization will continue to be studied. For example, understanding parents' early experiences, including parental history of trauma, can inform our understanding of both destructive, high-risk and positive, resilience-promoting parental early experiences (Narayan et al., 2021).

Bridges between developmental research and other disciplines will continue to be built. For example, the integration of parenting research with the flourishing disciplines of neuroscience and genetics will inform our understanding of infants' and parents' biologically-based traits that influence both the parent's (Groh & Haydon, 2018) and the child's (Slagt et al., 2016) roles in the socialization process.

Finally, various theories and perspectives, historically seen as incompatible, will continue to inform our understanding of parenting and complement each other. We will study early relationships, drawing from psychoanalytic and attachment theories, as critical for socialization process. We will continue to apply nuanced analyses of learning processes that occur in parentchild control interactions and to study how those processes are altered and framed by the context of the early parent-child relationship. We will make strides in our understanding of the parent's and the child's representations of each other, recruiting cognitive research methods and paradigms such as eye-tracking or explicit and implicit memory tasks (Dykas & Cassidy, 2011; Sherman et al., 2015). Such integrated approach may elucidate some long-standing thorny questions, such as how children come to form generalized representations from their separate representations of each parent. We will examine sociocultural contexts in which socialization processes occur and study those contexts as sources of risk and resilience (Causadias, 2013).

The integrative spirit and inspirational power of developmental psychopathology have not only not diminished since 1984, but

have kept growing, remaining an engine of progress. We envision a lasting bright future for our discipline across the full spectrum of research on human development.

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#### References

- An, D., Bendel-Stenzel, L. C., & Kochanska, G. (2022). Negative internal working models as mechanisms that link mothers' and fathers' personality with their parenting: A short-term longitudinal study. *Journal of Personality*, 90(6), 1004–1020. https://doi.org/10.1111/jopy.12711
- An, D., & Kochanska, G. (2020). Parents' early representations of their children moderate socialization processes: Evidence from two studies. *Development* and Psychopathology, 34(3), 823–840. https://doi.org/10.1017/S09545 79420001546
- An, D., Kochanska, G., Yeager, N. C., Sivagurunathan, N. M., Praska, R. L., Campbell, R. J., & Shin, S. Y. (2021). Children's emerging receptive, positive orientation toward their parents in the network of early attachment relationships. Attachment and Human Development, 23(5), 687–709. https:// doi.org/10.1080/14616734.2021.1906722
- Bell, R. Q. (1968). A reinterpretation of the direction of effects in studies of socialization. *Psychological Review*, 75(2), 81–95. https://doi.org/10.1037/ h0025583
- Belsky, J. (1984). The determinants of parenting: A process model. *Child Development*, 55(1), 83–96. https://doi.org/10.2307/1129836
- Belsky, J., & Pluess, M. (2009). Beyond diathesis stress: Differential susceptibility to environmental influences. *Psychological Bulletin*, 135(6), 885–908. https://doi.org/10.1037/a0017376
- Belsky, J., Spritz, B., & Crnic, K. (1996). Infant attachment security and affective-cognitive information processing at age 3. *Psychological Science*, 7(2), 111–114. https://doi.org/10.1111/j.1467-9280.1996.tb00339.x
- Bendel-Stenzel, L., An, D., & Kochanska, G. (2023). Revisiting the debate on effects of parental power-assertive control in two longitudinal studies: Early attachment security as a moderator. *Attachment and Human Development*, 25(5), 461–486. https://doi.org/10.1080/14616734.2023.2262979
- Bowlby, J. (1969/1982). Attachment: Attachment and loss, vol. 1. Basic Books.
  Bretherton, I., & Munholland, K. A. (2008). Internal working models in attachment relationships: Elaborating a central construct in attachment theory. In J. Cassidy, & P. R. Shaver (Eds.), Handbook of attachment: Theory, research, and clinical application (2nd ed. pp. 102–127). Guilford.
- Brock, R. L., & Kochanska, G. (2016). Toward a developmentally informed approach to parenting interventions: Seeking hidden effects. *Development and Psychopathology*, 28(2), 583–593. https://doi.org/10.1017/S09545 79415000607
- Brock, R. L., Kochanska, G., & Boldt, L. J. (2017). Interplay between children's biobehavioral plasticity and interparental relationship in the origins of internalizing problems. *Journal of Family Psychology*, 31(8), 1040–1050. https://doi.org/10.1037/fam0000335
- Bronfenbrenner, U., & Morris, P. (2006). The bioecological model of human development. In R. M. Lerner, & W. Damon (Eds.), Handbook of child psychology. Theoretical models of human development, 1, (6th ed. pp. 793– 828). Wiley
- Bufferd, S. J., Olino, T. M., & Dougherty, L. R. (2023). Quantifying severity of preschool-aged children's internalizing behaviors: A daily diary analysis. *Assessment*, 30(1), 190–209. https://doi.org/10.1177/10731911211046661
- Buss, K. A., Davis, E. L., Kiel, E. J., Brooker, R. J., Beekman, C., & Early, M. C. (2013). Dysregulated fear predicts social wariness and social anxiety symptoms during kindergarten. *Journal of Clinical Child & Adolescent Psychology*, 42(5), 603–616. https://doi.org/10.1080/15374416.2013.769170

- Carlson, E. A., Sroufe, L. A., & Egeland, B. (2004). The construction of experience: A longitudinal study of representation and behavior. *Child Development*, 75(1), 66–83. https://doi.org/10.1111/j.1467-8624.2004. 00654 x
- Cassidy, J., Jones, J. D., & Shaver, P. R. (2013). Contributions of attachment theory and research: A framework for future research, translation, and policy. *Development and Psychopathology*, 25(4pt2), 1415–1434. https://doi. org/10.1017/s0954579413000692
- Cassidy, J., & Shaver, P. R. (Eds.) (2016). Handbook of attachment: Theory, research, and clinical applications (3rd edn.) Guilford Press.
- Causadias, J. M. (2013). A roadmap for the integration of culture into developmental psychopathology. *Development and Psychopathology*, 25(4pt2), 1375–1398. https://doi.org/10.1017/S0954579413000679.
- Cicchetti, D. (1984). The emergence of developmental psychopathology. Child Development, 55(1), 1–7. https://doi.org/10.2307/1129830
- Cicchetti, D. (1993). Developmental psychopathology: Reactions, reflections, projections. *Developmental Review*, 13(4), 471–502. https://doi.org/10.1006/drev.1993.1021.
- Cicchetti, D. (2016). Socioemotional, personality, and biological development: Illustrations from a multilevel developmental psychopathology perspective on child maltreatment. *Annual Review of Psychology*, 67(1), 187–211. https://doi.org/10.1146/annurev-psych-122414-033259
- Cicchetti, D., & Rogosch, F. A. (1996). Equifinality and multifinality in developmental psychopathology. *Development and Psychopathology*, 8(4), 597–600. https://doi.org/10.1017/s0954579400007318
- Cicchetti, D., & Toth, S. L. (2009). The past achievements and future promises of developmental psychopathology: The coming of age of a discipline. *Journal of Child Psychology and Psychiatry*, 50(1-2), 16–25. https://doi.org/ 10.1111/j.1469-7610.2008.01979.x
- Clark, M. S., & Mills, J. R. (2012). A theory of communal (and exchange) relationships. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), Handbook of theories of social psychology (pp. 232–250). Sage. https://doi.org/10.4135/9781446249222.n38
- Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological Bulletin*, 115(1), 74–101. https://doi.org/10.1037/0033-2909. 115.1.74
- De Pauw, S. S. W., & Mervielde, I. (2010). Temperament, personality and developmental psychopathology: A review based on the conceptual dimensions underlying childhood traits. *Child Psychiatry & Human Development*, 41(3), 313–329. https://doi.org/10.1007/s10578-009-0171-8
- Deater-Deckard, K., Ivy, L., & Petrill, S. A. (2006). Maternal warmth moderates the link between physical punishment and child externalizing problems: A parent - offspring behavior genetic analysis. *Parenting: Science and Practice*, 6(1), 59–78. https://doi.org/10.1207/s15327922par0601\_3
- Dishion, T. J., & Patterson, G. R. (2006). The development and ecology of antisocial behavior in children and adolescents. In D. Cicchetti, & D. J. Cohen (Eds.), Developmental psychopathology. (vol. 3, 2nd ed. pp. 503–541). Wiley.
- Dix, T. H. (1991). The affective organization of parenting: Adaptive and maladaptive processes. *Psychological Bulletin*, 110(1), 3–25. https://doi.org/ 10.1037/0033-2909.110.1.3
- Dodge, K. A., Bai, Y., Godwin, J., Lansford, J. E., Bates, J. E., Pettit, G. S., & Jones, D. (2022). A defensive mindset: A pattern of social information processing that develops early and predicts life course outcomes. *Child Development*, 93(4), e357–e378. https://doi.org/10.1111/cdev.13751
- Dunbar, A. S., Zeytinoglu, S., & Leerkes, E. M. (2022). When is parental suppression of black children's negative emotions adaptive? The role of preparation for racial bias and children's resting cardiac vagal tone. Research on Child and Adolescent Psychopathology, 50(2), 163–176. https://doi.org/10.1007/s10802-021-00779-z
- Dykas, J., & Cassidy, J. (2011). Attachment and the processing of social information across the life span: Theory and evidence. *Psychological Bulletin*, 137(1), 19–46. https://doi.org/10.1037/a0021367
- Ellis, B. J., Boyce, W. T., Belsky, J., Bakermans-Kranenburg, M. J., & van Ijzendoorn, M. H. (2011). Differential susceptibility to the environment: An evolutionary-neurodevelopmental theory. *Development and Psychopathology*, 23(1), 7–28. https://doi.org/10.1017/S0954579410000611

- Ellis, B. J., Sheridan, M. A., Belsky, J., & McLaughlin, K. A. (2022). Why and how does early adversity influence development? Toward an integrated model of dimensions of environmental experience. *Development and Psychopathology*, 34(2), 447–471. https://doi.org/10.1017/s0954579421001838
- Eltanamly, H., Leijten, P., Jak, S., & Overbeek, G. (2021). Parenting in times of war: A meta-analysis and qualitative synthesis of war exposure, parenting, and child adjustment. *Trauma, Violence, and Abuse, 22*(1), 147–160. https://doi.org/10.1177/1524838019833001
- Fox, N. A., Zeytinoglu, S., Valadez, E. A., Buzzell, G. A., Morales, S., & Henderson, H. A. (2022). Annual Research Review: Developmental pathways linking early behavioral inhibition to later anxiety. *Journal of Child Psychology and Psychiatry*, 64(4), 537–561. https://doi.org/10.1111/jcpp.13702
- Fraley, R. C., Roisman, G. I., & Haltigan, J. D. (2013). The legacy of early experiences in development: Formalizing alternative models of how early experiences are carried forward over time. *Developmental Psychology*, 49(1), 109–126. https://doi.org/10.1037/a0027852
- Garmezy, N., Masten, A. S., & Tellegen, A. (1984). The study of stress and competence in children: A building block for developmental psychopathology. *Child Development*, 55(1), 97–111. https://doi.org/10.2307/1129837
- Gartstein, M. A., Putnam, S. P., & Rothbart, M. K. (2012). Etiology of preschool behavior problems: Contributions of temperament attributes in early childhood. *Infant Mental Health Journal*, 33(2), 197–211. https://doi. org/10.1002/imhj.21312
- Gershoff, E. T. (2002). Corporal punishment by parents and associated child behaviors and experiences: A meta-analytic and theoretical review. *Psychological Bulletin*, *128*(4), 539–579. https://doi.org/10.1037//0033-2909.128.4.539
- Goffin, K. C., Boldt, L. J., & Kochanska, G. (2018). A secure base from which to cooperate: Security, child and parent willing stance, and adaptive and maladaptive outcomes in two longitudinal studies. *Journal of Abnormal Child Psychology*, 46(5), 1061–1075. https://doi.org/10.1007/s10802-017-0352-7.
- Groh, A. M., & Haydon, K. C. (2018). Mothers' neural and behavioral responses to their infants' distress cues: The role of secure base script knowledge. *Psychological Science*, 29(2), 242–253. https://doi.org/10.1177/ 0956797617730320
- Grusec, J. E., & Goodnow, J. J. (1994). Impact of parental discipline methods on the child's internalization of values: A reconceptualization of current points of view. *Developmental Psychology*, 30(1), 4–19. https://doi.org/10. 1037/0012-1649.30.1.4
- Hostinar, C. E., & Gunnar, M. R. (2013). The developmental effects of early life stress: An overview of current theoretical frameworks. *Current Directions in Psychological Science*, 22(5), 400–406. https://doi.org/10.1177/096372 1413488889
- Johnson, S. C., Dweck, C., Chen, F. S., Stern, H. L., Ok, S. J., & Barth, M. (2010). At the intersection of social and cognitive development: Internal working models of attachment in infancy. *Cognitive Science*, 34(5), 807–825. https://doi.org/10.1111/j.1551-6709.2010.01112.x
- Kagan, J. (2022). Temperamental and theoretical contributions to clinical psychology. Annual Review of Clinical Psychology, 18(1), 1–18. https://doi. org/10.1146/annurev-clinpsy-071720-014404
- Katznelson, H. (2014). Reflective functioning: A review. Clinical Psychology Review, 34(2), 107–117. https://doi.org/10.1016/j.cpr.2013.12.003
- Kim, S., & Kochanska, G. (2012). Child temperament moderates effects of parent-child mutuality on self-regulation: A relationship-based path for emotionally negative infants. *Child Development*, 83(4), 1275–1289. https:// doi.org/10.1111/j.1467-8624.2012.01778.x
- Kim, S., & Kochanska, G. (2021). Family sociodemographic resources moderate the path from toddlers' hard-to-manage temperament to parental control to disruptive behavior in middle childhood. *Development and Psychopathology*, 33(1), 160–172. https://doi.org/10.1017/S0954579419001664
- Kirsh, S. J., & Cassidy, J. (1997). Preschoolers' attention to and memory for attachment-relevant information. *Child Development*, 68(6), 1143–1153. https://doi.org/10.2307/1132297
- Kochanska, G., & An, D. (2023). The parent's and the child's internal working models of each other moderate cascades from child difficulty to socialization

- outcomes: Preliminary evidence for dual moderation? *Development and Psychopathology*, 1–14. https://doi.org/10.1017/S0954579422001365
- Kochanska, G., Boldt, L. J., & Goffin, K. C. (2019). Early relational experience: A foundation for the unfolding dynamics of parent-child socialization. *Child Development Perspectives*, 13(1), 41–47. https://doi.org/10.1111/cdep.12308
- Kochanska, G., & Kim, S. (2012). Toward a new understanding of legacy of early attachments for future antisocial trajectories: Evidence from two longitudinal studies. *Development and Psychopathology*, 24(3), 783–806. https://doi.org/10.1017/S0954579412000375
- Kochanska, G., Kim, S., & Boldt, L. J. (2013). Origins of children's externalizing behavior problems in low-income families: Toddlers' willing stance toward their mothers as the missing link. *Development and Psychopathology*, 25(4pt1), 891–901. https://doi.org/10.1017/S0954579413000254.
- Kochanska, G., Kim, S., & Boldt, L. J. (2015). (Positive) power to the child: The role of children's willing stance toward parents in developmental cascades from toddler age to early preadolescence. *Development and Psychopathology*, 27(4, Pt 1), 987–1005. https://doi.org/10.1017/S0954579415000644
- Luyten, P., Nijssens, L., Fonagy, P., & Mayes, L. C. (2017). Parental reflective functioning: Theory, research, and clinical applications. *The Psychoanalytic Study of the Child*, 70(1), 174–199. https://doi.org/10.1080/00797308.2016. 1277901
- Maccoby, E. E. (1992). The role of parents in the socialization of children: An historical overview. *Developmental Psychology*, 28(6), 1006–1017. https://doi. org/10.1037/0012-1649.28.6.1006
- Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood, and adulthood: A move to the level of representation. *Monographs of the Society for Research in Child Development*, 50(1-2), 66–104. https://doi.org/10.2307/3333827
- Masten, A. S., & Cicchetti, D. (2010). Developmental cascades. Development and Psychopathology, 22(3), 491–495. https://doi.org/10.1017/s0954579 410000222
- Masten, A. S., & Garmezy, N. (1985). Risk, vulnerability, and protective factors in developmental psychopathology. In *Advances in clinical child psychology* (pp. 1–52). https://doi.org/10.1007/978-1-4613-9820-2\_1
- Masten, A. S., Lucke, C. M., Nelson, K. M., & Stallworthy, I. C. (2021). Resilience in development and psychopathology: Multisystem perspectives. *Annual Review of Clinical Psychology*, 17(1), 521–549. https://doi.org/10.1146/annurev-clinpsy-081219-120307
- McMahon, C. A., & Bernier, A. (2017). Twenty years of research on parental mind-mindedness: Empirical findings, theoretical and methodological challenges, and new directions. *Developmental Review*, 46, 54–80. https:// doi.org/10.1016/j.dr.2017.07.001
- Meins, E. (1997). Security of attachment and the social development of cognition. Psychology Press/Erlbaum (UK) Taylor & Francis.
- Meins, E. (1999). Sensitivity, security, and internal working models: Bridging the transmission gap. *Attachment and Human Development*, 1(3), 325–342. https://doi.org/1080/14616739900134181
- Meins, E. (2013). Sensitive attunement to infants' internal states: Operationalizing the construct of mind-mindedness. Attachment & Human Development, 15(5-6), 524–544. https://doi.org/10.1080/14616734. 2013.830388
- Mikulincer, M., Shaver, P. R., & Avihou-Kanza, N. (2011). Individual differences in adult attachment are systematically related to dream narratives. *Attachment and Human Development*, 13(2), 105–123. https://doi.org/10.1080/14616734.2011.553918
- Muris, P., & Ollendick, T. H. (2005). The role of temperament in the etiology of child psychopathology. *Clinical Child and Family Psychology Review*, 8(4), 271–289. https://doi.org/10.1007/s10567-005-8809-y
- Narayan, A. J., Lieberman, A. F., & Masten, A. S. (2021). Intergenerational transmission and prevention of adverse childhood experiences (ACEs). Clinical Psychology Review, 85, 101997. https://doi.org/10.1016/j.cpr.2021. 101997
- Nelson, C. A., Fox, N. A., & Zeanah, C. H. (2023). Romania's abandoned children: The effects of early profound psychosocial deprivation on the course of human development. *Current Directions in Psychological Science*, 32(6), 515–521. https://doi.org/10.1177/09637214231201079

- Nigg, J. T. (2006). Temperament and developmental psychopathology. *Journal of Child Psychology and Psychiatry*, 47(3-4), 395–422. https://doi.org/10.1111/j.1469-7610.2006.01612.x
- Nigg, J. T. (2017). Annual Research Review: On the relations among self-regulation, self-control, executive functioning, effortful control, cognitive control, impulsivity, risk-taking, and inhibition for developmental psychopathology. *Journal of Child Psychology and Psychiatry*, 58(4), 361–383. https://doi.org/10.1111/jcpp.12675
- Parke, R. D. (1969). Effectiveness of punishment as an interaction of intensity, timing, agent nurturance, and cognitive structuring. *Child Development*, 40(1), 213–235.
- Pollak, S. D., & Smith, K. E. (2021). Thinking clearly about biology and childhood adversity: Next steps for continued progress. *Perspectives on Psychological Science*, 16(6), 1473–1477. https://doi.org/10.1177/17456916211031539
- Rohner, R. P., & Lansford, J. E. (2017). Deep structure of the human affectional system: Introduction to interpersonal acceptance-rejection theory. *Journal of Family Theory & Review*, 9(4), 426–440. https://doi.org/10.1111/jftr.12219
- Rothbart, M. K., & Bates, J. E. (2006). Temperament. In W. Damon, R.M. Lerner, & N. Eisenberg (Eds.), *Handbook of child psychology: Social, emotional, and personality development* (pp. 99–166). Wiley.
- Rutter, M., & Sroufe, L. A. (2000). Developmental psychopathology: Concepts and challenges. *Development and Psychopathology*, 12(3), 265–296. https://doi.org/10.1017/s0954579400003023
- Scaramella, L. V., & Leve, L. D. (2004). Clarifying parent-child reciprocities during early childhood: The Early Childhood Coercion Model. Clinical Child and Family Psychology Review, 7(2), 89–107. https://doi.org/10.1023/B: CCFP.0000030287.13160.a3
- **Sharp, C., & Fonagy, P.** (2008). The parent's capacity to treat the child as a psychological agent: Constructs, measures and implications for developmental psychopathology. *Social Development*, 17(3), 737–754. https://doi.org/10.1111/j.1467-9507.2007.00457.x
- Shaver, P. R., Mikulincer, M., Gross, J. T., Stern, J. A., & Cassidy, J. A. (2016).
  A lifespan perspective on attachment and care for others: Empathy, altruism, and prosocial behavior. In J. Cassidy, & P. R. Shaver (Eds.), Handbook of attachment: Theory, research, and clinical applications (3rd ed. pp. 878–916).
  Guilford Press.
- Sher-Censor, E. (2015). Five Minute Speech Sample in developmental research: A review. *Developmental Review*, 36, 127–155. https://doi.org/10.1016/j.dr. 2015.01.005
- Sherman, L. J., Rice, K., & Cassidy, J. (2015). Infant capacities related to building internal working models of attachment figures: A theoretical and empirical review. *Developmental Review*, 37, 109–141. https://doi.org/10. 1016/j.dr.2015.06.001
- Shiner, R., & Caspi, A. (2003). Personality differences in childhood and adolescence: Measurement, development, and consequences. *Journal of Child Psychology and Psychiatry*, 44(1), 2–32. https://doi.org/10.1111/1469-7610.00101
- Slade, A. (2005). Parental reflective functioning: An introduction. *Attachment & Human Development*, 7(3), 269–281. https://doi.org/10.1080/14616730500245906
- Slagt, M., Dubas, J. S., Deković, M., & van Aken, M. A. G. (2016). Differences in sensitivity to parenting depending on child temperament: A metaanalysis. *Psychological Bulletin*, 142(10), 1068–1110. https://doi.org/10.1037/ bul0000061
- Smith, J. D., Dishion, T. J., Shaw, D. S., & Wilson, M. N. (2015). Negative relational schemas predict the trajectory of coercive dynamics during early childhood. *Journal of Abnormal Child Psychology*, 43(4), 693–703. https:// doi.org/10.1007/s10802-014-9936-z
- Smith, J. D., Dishion, T. J., Shaw, D. S., Wilson, M. N., Winter, C. C., & Patterson, G. R. (2014). Coercive family process and early-onset conduct problems from age 2 to school entry. *Development and Psychopathology*, 26 (4 pt1), 917–932. https://doi.org/10.1017/S0954579414000169
- Smith, K. E., & Pollak, S. D. (2021). Social relationships and children's perceptions of adversity. *Child Development Perspectives*, 15(4), 228–234. https://doi.org/10.1111/cdep.12427
- Snarr, J. D., Slep, A. M. S., & Grande, V. P. (2009). Validation of a new self-report measure of parental attributions. *Psychological Assessment*, 21(3), 390–401. https://doi.org/10.1037/a0016331

- Sroufe, L. A. (1986). Appraisal: Bowlby's contribution to psychoanalytic theory and developmental psychology; Attachment: Separation: Loss. *Journal of Child Psychology and Psychiatry*, 27(6), 841–849. https://doi.org/10.1111/j. 1469-7610.1986.tb00203.x
- Sroufe, L. A. (2005). Attachment and development: A prospective, longitudinal study from birth to adulthood. Attachment and Human Development, 7(4), 349–367. https://doi.org/10.1080/14616730500365928
- Sroufe, L. A. (2013). The promise of developmental psychopathology: Past and present. *Development and Psychopathology*, 25(4, pt2), 1215–1224. https://doi.org/10.1017/S0954579413000576
- Sroufe, L. A. (2016). The place of attachment in development. In J. Cassidy, & P. R. Shaver (Eds.), Handbook of attachment: Theory, research, and clinical applications (3rd ed. pp. 997–1011). Guilford.
- Sroufe, L. A., Carlson, E. A., Levy, A. K., & Egeland, B. (1999). Implications of attachment theory for developmental psychopathology. *Development and Psychopathology*, 11(1), 1–13. https://doi.org/10.1017/s0954579499001923
- Sroufe, L. A., & Rutter, M. (1984). The domain of developmental psychopathology. Child Development, 55(1), 17–29. https://doi.org/10. 2307/1129832
- Stern, J. A., Barbarin, O., & Cassidy, J. (2022). Attachment perspectives on race, prejudice, and anti-racism: Introduction to the Special Issue. Attachment and Human Development, 24(3), 253–259. https://doi.org/10. 1080/14616734.2021.1976920
- Sturge-Apple, M. L., Davies, P. T., Cicchetti, D., Hentges, R. F., & Coe, J. L. (2016). Family instability and children's effortful control in the context of poverty: Sometimes a bird in the hand is worth two in the bush. *Development and Psychopathology*, 29(3), 685–696. https://doi.org/10.1017/s0954579416000407
- **Taraban, L., & Shaw, D. S.** (2018). Parenting in context: Revisiting Belsky's classic process of parenting model in early childhood. *Developmental Review*, 48, 55–81. https://doi.org/10.1016/j.dr.2018.03.006
- Thompson, R. A. (2015). Relationships, regulation, and early development. In M. E. Lamb (Ed.), Handbook of child psychology and developmental science. Socioemotional processes, (vol. 3, 7th ed. pp. 201–246). Wiley.
- **Thompson, R. A.** (2016). Early attachment and later development: Reframing the questions. In J. Cassidy, & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (3rd ed. pp. 330–348). Guilford
- **Thompson, R. A.** (2021). Internal working models as developing representations. In R. A. Thompson, J. A. Simpson, & L. J. Berlin (Eds.), *Attachment: The fundamental questions* (pp. 128–135). The Guilford Press.
- **Thompson, R. A., Simpson, J. A., & Berlin, L. J.** (Eds.) (2021). *Attachment: The fundamental questions.* The Guilford Press.
- Tiberio, S. S., Capaldi, D. M., Kerr, D. C. R., Bertrand, M., Pears, K. C., & Owen, L. (2016). Parenting and the development of effortful control from early childhood to early adolescence: A transactional developmental model. Development and Psychopathology, 28(3), 837–853. https://doi.org/10.1017/S0954579416000341
- **Toth, S. L., Cicchetti, D., & Kim, J.** (2002). Relations among children's perceptions of maternal behavior, attributional styles, and behavioral symptomatology in maltreated children. *Journal of Abnormal Child Psychology*, 30(5), 487–501. https://doi.org/10.1023/A:1019868914685
- **Toth, S. L., Cicchetti, D., Macfie, J., & Emde, R. N.** (1997). Representations of self and other in the narratives of neglected, physically abused, and sexually abused preschoolers. *Development and Psychopathology*, *9*(4), 781–796. https://doi.org/10.1017/S0954579497001430
- Toth, S. L., Rogosch, F. A., Sturge-Apple, M., & Cicchetti, D. (2009). Maternal depression, children's attachment security, and representational development: An organizational perspective. *Child Development*, 80(1), 192–208. https://doi.org/10.1111/j.1467-8624.2008.01254.x
- Tyrell, F. A., & Masten, A. S. (2022). Father-child attachment in Black families: Risk and protective processes. *Attachment & Human Development*, 24(3), 274–286. https://doi.org/10.1080/14616734.2021.1976923
- Wakschlag, L. S., Estabrook, R., Petitclerc, A., Henry, D., Burns, J. L., Perlman, S. B., Voss, J. L., Pine, D. S., Leibenluft, E., & Briggs-Gowan, M. L. (2015). Clinical implications of a dimensional approach: The normal: abnormal spectrum of early irritability. *Journal of the American Academy of Child & Adolescent Psychiatry*, 54(8), 626–634. https://doi.org/10.1016/j.jaac. 2015.05.016

- Wakschlag, L. S., Sherlock, P., Blackwell, C. K., Burns, J. L., Krogh-Jespersen, S., Gershon, R. C., Cella, D., Buss, K. A., & Luby, J. L. (2023). Modeling the normal: abnormal spectrum of early childhood internalizing behaviors: A clinical-developmental approach for the Multidimensional Assessment Profiles Internalizing Dimensions. *International Journal of Methods in Psychiatric Research*, 32(S1). https://doi.org/10.1002/mpr.1987
- Waters, E., Kondo-Ikemura, K., Posada, G., & Richters, J. E. (1990). Learning to love: Mechanisms and milestones. In M. R. Gunnar, & L. A. Sroufe (Eds.), *Minnesota symposia on child psychology*. Self processes and development. (vol. 23, 217–255). Erlbaum.
- Waters, T. E. A., Fraley, R. C., Groh, A. M., Steele, R. D., Vaughn, B. E., Bost, K. K., Verissimo, M., & Roisman, G. I. (2015). The latent structure of secure base script knowledge. *Developmental Psychology*, 51(6), 823–830. https://doi.org/10.1037/dev0000012
- Westen, D. (1998). The scientific legacy of Sigmund Freud: Toward a psychodynamically informed psychological science. *Psychological Bulletin*, 124(3), 333–371. https://doi.org/10.1037/0033-2909.124.3.333
- Whalen, D. J., Sylvester, C. M., & Luby, J. L. (2017). Depression and anxiety in preschoolers. *Child and Adolescent Psychiatric Clinics of North America*, 26(3), 503–522. https://doi.org/10.1016/j.chc.2017.02.006