Self-Regulation Processes and Thriving in Childhood and Adolescence: A View of the Issues


Abstract

Both organismic and intentional self-regulation processes must be integrated across childhood and adolescence for adaptive developmental regulations to exist and for the developing person to thrive, both during the first two decades of life and through the adult years. To date, such an integrated, life-span approach to self-regulation during childhood and adolescence has not been fully formulated. The purpose of this monograph is to provide such integration; in this introduction, the editors of the monograph explain the purposes of the volume and provide a brief overview of the work of the contributing scholars. © 2011 Wiley Periodicals, Inc.

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Across the life span, individuals live in complex physical, social, cultural, and historical contexts. To thrive, individuals make decisions about how to act in ways that meet personal needs and environmental demands (Brandstädter, 2006; Lewontin, 2000). In other words, to be adaptive, individuals must act in ways that support their own healthy functioning and are of benefit to their context as well. Arguably, these requirements for adaptation undergo significant developmental change during the first two decades of life, and changes during these years can set the course for future development (Gestsdottir & Lerner, 2008).

During childhood and adolescence, individuals need to accomplish several adaptive tasks involving self and context. First, they must establish and then build knowledge about the requirements for personal adjustment, given their particular characteristics of physiological, physical, psychological, and behavioral individuality; they must learn also the demands for adaptation present in their specific ecological niche. Second, during these portions of life the foundation also needs to be established, and then enhanced, for attaining the cognitive and behavioral skill sets needed for setting goals necessary for survival and, even more, for thriving. Thriving involves taking actions that optimize one’s chances for a life marked by health and positive exchanges with one’s world.

To accomplish these ends, strategic thinking and executive functioning need to be coupled with the actions required for turning life goals into reality, that is, into successful personal adjustment and ecological adaptation (Baltes, 1997; Baltes, Lindenberger, & Staudinger, 2006). These adaptive tasks are especially complicated during childhood and adolescence. Developing links between thinking and action in the service of adaptation occurs during childhood in the midst of emerging and, in many cases, rapidly changing developmental trajectories. For instance, such trajectories involve changing neurological, cognitive, emotional, somatic, and behavioral characteristics that evolve in relation to normative and often non-normative changes in key contexts of life, for example, families, peer groups, schools, and communities (Bronfenbrenner, 1979, 2005).

The goal of these child and adolescent adaptive tasks is optimizing one’s developmental trajectory, of attaining an “idealized adulthood” (Csikszentmihalyi & Rathunde, 1998). However, when one is moving toward an end state or goal that is as yet uncertain, how does one select the best means to get there? This question reflects the fundamental adaptive challenge of the first two decades of life (Geldhof, Little, & Colombo, 2010; Gestsdottir & Lerner, 2008).

How might children and adolescents meet this challenge? As is the case for people at all points across the life span, children and adolescents are influenced by their environments; they can simultaneously select, create, and change their settings as well. This bidirectional, or reciprocal, relation between individual and context creates “circular functions”
(Schneirla, 1957) in ontogeny and, through such relations, individuals become shapers of the contexts influencing them; thus individuals become producers of their own development (Lerner, 1982; Lerner & Busch-Rossnagel, 1981; Lewis & Rosenblum, 1974). Accordingly, from the beginning of infancy through the end of adolescence, individuals are active agents in their own developmental regulations, that is, they are active agents in mutually influential relations among the levels of organization within a dynamic, developmental system; these relations involve variables from integrated biological through historical (temporal) levels. These integrated interlevel relations may be represented as Level 1 ↔ Level 2: When focused on the developing individual and his or her active, changing context, these developmental regulations may be represented as individual ↔ context relations.

When these mutually influential relations are beneficial for both the person and his or her context they may be termed adaptive developmental regulations. However, given the foundational and developmental knowledge acquisition and skill attainment required for thriving during childhood and adolescence, and the embeddedness of these requirements in multiple and complex trajectories across the developmental system, the challenges to manifesting adaptive developmental regulations are enormous (and arguably ontogenetically distinct) during these portions of the life span.

Organismic and Intentional Self-Regulation

Developmental science has recognized the theoretical importance across the first two decades of life of establishing and maintaining adaptive developmental regulations for individual thriving, as well as for understanding the contribution of individuals to the quality of their contexts. For instance, Posner and Rothbart (2000) have stated that “understanding self-regulation is the single most crucial goal for advancing an understanding of development” (p. 427). Not surprisingly, then, in the last decade, the theoretical focus on self-regulation has been coupled with burgeoning research about the ways in which the developing physiological, psychological, and behavioral attributes of children and adolescents coalesce to provide the means for them to actively contribute to mutually beneficial individual ↔ context relations. The attributes through which the individual contributes to these developmental regulations may be termed self-regulation, a term that encompasses multiple forms of functioning ranging from physiological functions to complicated, intentional thought processes. Self-regulation also involves actions designed to either enact strategies for attaining the aims of (goals for) selected transactions with the context or for compensating effectively when goals are blocked or initial actions fail (Baltes, 1997; Geldhof et al., 2010; Gestsdottir & Lerner, 2008; McClelland, Ponitz, Messersmith, & Tominey, 2010).
As such, self-regulation pertains to all aspects of adaptation, as individuals alter their behaviors—as well as thoughts, attention, and emotions—to react to different contexts and modulate their reactions to and actions aimed at influencing their contexts (Shonkoff & Phillips, 2000). In short, then, self-regulation may be defined as “the ability to flexibly activate, monitor, inhibit, persevere and/or adapt one’s behavior, attention, emotions and cognitive strategies in response to direction from internal cues, environmental stimuli and feedback from others, in an attempt to attain personally-relevant goals” (Moilanen, 2007, p. 835).

Clearly, these conceptions of self-regulation encompass two integrated, but nevertheless distinguishable processes: those involving either primarily physiological or organismic processes and those involving primarily intentional processes. Gestsdottir and Lerner (2008) have explained that intentional self-regulations are contextualized actions that are actively aimed toward harmonizing demands and resources in the context with personal goals to attain better functioning and to enhance self-development. Intentional self-regulation is characterized by goal-directed behaviors. Processes of intentional self-regulation are more readily available to consciousness than processes and structures of organismic regulation, which are broad, ontogenetically consistent (relatively continuous) attributes of a person that involve biologically based, physiological structures and functions that contribute to the relationship an individual has with the environment. Such organismic characteristics (for example, hypothalamic control of body temperature, circadian rhythms, pubertal timing, and temperamental attributes such as threshold of responsivity or quality of mood) are under no or limited control of the person, and do not involve intentional efforts of the person to regulate his or her individual ↔ context exchanges.

Both organismic and intentional self-regulation processes must be integrated across childhood and adolescence for adaptive developmental regulations to exist and for the developing person to thrive, not only during the first two decades of life but also across the transition into and throughout the adult years. However, to date, such an integrated and life-span approach to self-regulation during childhood and adolescence has not been fully formulated. Such an integrative approach would require scholarship about (a) each of the two domains of self-regulation processes, and (b) their systematic interrelation across the life span.

An Overview of the Present Volume

The present volume seeks to contribute to such an integrative direction for future scholarship. Given the nature of the extant literature in the study of self-regulation in childhood and adolescence, relatively more discussion is devoted to evidence regarding intentional self-regulation processes than to discussion of either organismic self-regulation or the
connections between the intentional and organismic facets of self-regulation during the first two decades of life. Nevertheless, the chapters in this volume do address both facets of self-regulation and their interrelation, given the fact that all authors use a theoretical frame informed by a relational, developmental systems theoretical model that focuses on dynamic individual ↔ context relations. Indeed, although the present volume brings together scholars whose research has focused on age-specific facets of self-regulation processes during selected portions of childhood and adolescence, the chapters together contribute to the larger, integrative, and life-span study of self-regulation precisely because of the frame provided by a relational, developmental systems approach to individual ↔ contexts relations. All contributors to the volume draw on their respective data sets to discuss the individual ↔ context relations across the developmental system, and, thus, in different ways, both span the organismic-intentional components of self-regulation and provide a view of the developmental process that extends beyond the childhood and adolescent periods. As such, we believe that the overall importance of the work represented in this volume is that it advances theoretical understanding of trajectories of developmental regulation within childhood and adolescence and across the transition to the adult years.

For instance, Bodrova, Leong, and Akhutina (this volume) note that as new data emerge about the role of executive functions (EFs) in children’s development and learning, researchers and educators have pointed to the need for instructional interventions that would strengthen the development of EF in typically developing children and/or prevent possible delays in their development in children with various risk factors. They describe the Tools of the Mind (Tools) program as an exemplar of such an intervention, and discuss how implementing specific instructional strategies making up this curriculum impact the development of self-regulation/executive functions in young children. This discussion draws on Luria’s concept of the “extra-cortical organization of higher mental functions,” which the authors view as a logical extension of the ideas of Vygotsky regarding the interplay of natural and cultural factors in the development of the human mind. They integrate Luria’s concept with recent findings on the neuropsychological trajectories of the development of EF.

McClelland and Cameron (this volume) note that self-regulation has emerged as a key construct in children’s healthy and adaptive development. They situate self-regulation in a relational, developmental systems theoretical context, and, as such, they explain that self-regulation is a dynamic, multilevel, and interactive process. They use this theoretical frame for identifying the components of self-regulation (flexible attention, working memory, and inhibitory control) that are most important for early school success. They present evidence supporting substantive links between aspects of self-regulation and academic achievement in young
children, and they discuss the methodological challenges in reliably and validly assessing these skills. They note some recent advances in measures of self-regulation that constitute reliable, ecologically valid, and predictive measures of children’s school success.

Geldhof and Little (this volume) note that self-regulation represents a core aspect of human functioning that influences positive development across the life span. They discuss self-regulation within the context of an action-control model. They regard this model as a fundamental facet of self-regulation during the first two decades of life. In particular, they discuss the development of action-control beliefs. They note that there are at least several action-control beliefs involved in the relationships among agents (self or others), means, and outcomes/ends, and that research has primarily focused on means-ends, agency, and control-expectancy beliefs. As such, they focus on these beliefs and their links to positive development. They explain that action-control beliefs are related to physiological well-being, and thus point to the interrelation between organismic and intentional facets of self-regulation. They provide ideas about how the integration of the action-control model with other theories of self-regulation can inform understanding of self-regulation processes across the life span.

Using data derived from the 4-H Study of Positive Youth Development (Lerner, Almerigi, Theokas, & Lerner, 2005; Lerner, Lerner, von Eye, & Lewin-Bizan, 2009; Lerner, von Eye, Lerner, Lewin-Bizan, & Bowers, 2010), Gestsdottir, Urban, Bowers, Lerner, and Lerner (this volume) discuss the development of intentional self-regulation in adolescence and the implications of such development for thriving. Indexing intentional self-regulation through a measure of selection (S), optimization (O), and compensation (C;SOC) pertinent to goal choice, pursuit, and management, they summarize the results of several studies that have examined the development of the SOC processes among youth in fifth through tenth grade. They point to links among intentional self-regulation, ecological developmental assets, and thriving in adolescence, but note, as well, the need for more systematic examination of the longitudinal, bidirectional relationships among individual strengths, and contextual assets in relation to adolescent outcomes. In particular, they suggest that to advance both theory and applications to community-based programs aimed at enhancing links between intentional self-regulation and thriving, these more nuanced analyses should seek to ascertain the presence and bases of inter-individual differences in the developmental system of individual and contextual relations involving these variables.

The chapters by Bodrova and colleagues, McClelland and Cameron, Geldhof and Little, and Gestsdottir and colleagues are followed by two commentaries. One of the goals of the present volume is to extend the theory and research about intentional self-regulation during childhood and adolescence to fit within a life-span approach that integrates both
intentional and organismic self-regulation processes. As a consequence, Maniar and Zaff (this volume) extend the ideas about the development of self-regulation that are presented in prior chapters by proposing a life-span, relational, public health model. Their commentary advances the idea that the role of self-regulation should be understood across transitions from childhood to adulthood and through an individual and community perspective, including the relational process between the individual, the community, and contextual factors, such as the social determinants of health. Given theory-predicated views about the importance of self-regulatory processes for healthy and positive development, Larson (this volume), an expert in community programs for youth development, discusses the implications of the theory and research presented in this volume for the design and implementation of interventions aimed at the promotion of thriving across the first two decades of life.

Conclusions

We have two aspirations about the contribution of this volume. First, we hope that the theory and research presented across the chapters in this volume will be useful for future scholarship aimed at understanding the bases and implications of intentional self-regulation in childhood, adolescence, and indeed across the life span. We hope that the work presented in this volume will be an impetus for future longitudinal research assessing how links between individuals and contexts may foster positive, healthy trajectories within and across developmental periods during and extending beyond childhood and adolescence. Second, we hope the work presented in this volume will lead to ideas about how to apply developmental science to promote positive development across ontogeny. Here our aspiration is that the scholarship presented in this volume will not only elucidate how understanding of the systemic bases of variation in developmental trajectories can be used to design policies and programs, but also may be coupled with effective actions enhancing the likelihood of adaptive developmental regulations and the promotion of positive human development.

References


**RICHARD M. LERNER** is the Bergstrom Chair in applied developmental science at the Eliot-Pearson Department of Child Development and the director of the Institute for Applied Research in Youth Development at Tufts University.

**JACQUELINE V. LERNER** is a professor of applied developmental psychology at the Lynch School of Education at Boston College and the scientific director of the 4-H Study of Positive Youth Development.

**EDMOND P. BOWERS** is a research assistant professor at the Eliot-Pearson Department of Child Development and director of the Thrive Foundation for Youth’s GPS Project at Tufts University.

**SELVA LEWIN-BIZAN** is a research assistant professor at the Institute for Applied Research in Youth Development at Tufts University.

**STEINUNN GESTSDOTTIR** is an associate professor of developmental psychology at the School of Education at the University of Iceland.

**JENNIFER BROWN URBAN** is an assistant professor of family and child studies in the College of Education and Human Services at Montclair State University.