

Essay Review

Developmental Science and the Study of Successful Development

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Abstract

The idea of successful development is used as the conceptual platform for a proposal that three basic principles of developmental science be expanded. Specifically, we propose that (a) developmental science needs to be reframed as a guide for what successful development is and how it is manifested at different times of the life course; (b) that the integrative emphasis of developmental science needs to emphasize the intersection of developmental domains as well as the integration of concepts from other disciplines; and (c) that careful distinctions need to be made between the life span approach (i.e., research focused on processes within one moment of the life course) and the life history approach (i.e., understanding stability and change across part of the life course). It is argued that the concept of successful development can be used to enrich developmental science.

Keywords

successful development, life span, life history

We propose that the concept of *developmental science* needs to be expanded. The expansion we envision concerns three of the basic premises and principles that were ascribed to developmental science in its initial conceptualization (Cairns, Elder, & Costello, 1996). The first of these principles is the premise that the chief purpose of developmental science is to function as a guide for research on changes and developmental variations throughout the life course. The second premise concerns the recognition that the complex nature of human development necessitates an integrative approach. The initial “collaborative statement” about developmental science defines this integration according to the assimilation of concepts from a broad

set of disciplines that share a concern with the processes concerned with change across the life span. (Cairns et al., 1996). The third premise is that developmental science needs to attend to the entire life span rather than to just particular time periods along the way. It assumes that each time of the life course presents its own developmental tasks. While we agree with each of these three ideas and recognize their individual value, in this essay we would like to propose that each of them can be expanded to obtain a renewed meaning for the study of development.

The expansions we propose for each of these three principles are linked to the core idea of the *Centre de recherche en développement humain*, the research centre to which we belong. The *CRDH* is a multidisciplinary/interuniversity research centre in *Québec*. This idea is the concept of successful development. Loosely derived from the concept of successful aging (Baltes & Baltes, 1990; Schulz & Heckhausen, 1996), we define

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successful development as the capacity to effectively respond to the challenges inherent in particular parts of the life span and to be prepared to respond to the challenges of subsequent periods. Consistent with a broad array of classic life span theories of development (e.g., Erikson, 1980; Havighurst, 1948), our concept of successful development assumes that each part of the life span presents its own set of normative and, sometimes, atypical tasks and that these tasks are situated in multiple domains of functioning. For example learning language in early childhood is the result of multiple social and cognitive processes. Also, whereas language development normally involves just one language, in “atypical” circumstances children learn two or more languages at the same time. Just as the concept of successful aging was not meant to imply that there is a single ideal endpoint toward which developmental processes are aimed, our concept of successful development also eschews utopian visions of what development is and where it should go. Instead we take a modernist view that the success of developmental processes can be understood only in regard to (a) the particular needs that an individual has at one time or is likely to have at subsequent moments and (b) the functional demands placed upon the individual by the current environment and by likely subsequent environments. Given the similarities among the people of a particular age it is, of course, possible to think of normative forms of development. At the same time, given the differences between same-age individuals that derive from variations in needs, developmental histories, contextual factors, and cultural expectations it is necessary to recognize that there are also non-normative or atypical forms of development. The concept of successful development recognizes that success can have more than one flavor.

So, how can the concept of successful development be used to expand the basic premises of developmental science? First, it provides an answer to a legitimate question inherent in the premise that developmental science should be a guide for research. Without a link to a conceptual scheme about development, developmental science becomes a functional tool that does little more than offer an approach to how a topic should be studied. By linking it with a concept such as successful development it acquires greater significance and meaning as it can guide our thinking about an issue that is not an abstraction but is instead substantive in its emphasis on the domains and processes that define what it means to be a successfully developed person. In doing so, developmental science moves from being a guide

for something that is broad and abstracted to a guide for something that has a substantive goal. Moreover it raises the likelihood that research finding can be used to refine developmental theories.

This issue of substance leads us to our next target for expansion, specifically the concept of integration. No serious person would disagree that an integrative perspective is needed to understand complex and dynamic phenomena. By itself, however, integration is just a concept without a particular substance. In the initial conceptualizations of developmental science emphasis on integration referred to the importance of bringing together ideas from different disciplinary perspectives. It referred to the integration between concepts taken from biology (e.g., regulation and homeostasis) with concepts taken from socialization theory (e.g., nurturance). Although we see value in the integration of ideas and concepts we think that the integration of particular developmental domains would be just as important or even more so. In our approach to the understanding of successful development we have tried to identify the substantive domains where development happens and to understand how these domains intersect.

To this end, we have identified four developmental domains to serve as the major dimensions that would define successful development. They are (a) the acquisition and maintenance of fundamental skills, (b) physical well being and health, (c) the formation of satisfying interpersonal relationships, and (d) motivation and self perceptions. We treat these developmental domains as being integrative in two ways. First there is within domain integration. For example, several types of development are included within the first domain. They could include cognitive abilities, forms of emotion regulation, and motor skills. Within the second domain there could be the development of several forms of physiology and psychophysiology (e.g., effective immune and stress response systems). Within the third domain could be personal relationships, such as friendship, as well as social relationships (e.g., functioning within a group). The fourth domain includes aspects of the self concept, motivational structures, and goals. Our goal is not to see each type of development within a particular domain as having the same antecedents or as resulting from the same processes or experiences. Instead it is to see which processes they share and, most important, how they are related to each other. In this way we claim that a key component to understanding successful development is recognizing the integration between the types of development within each of the four domains. A second kind of integration in our four domain model of successful

development concerns the integration between the four domains. This idea of integration is hardly new. It has been a mainstay of theory about development for several decades. Our goal is to move this concept from the domain of theory into explicit models to show how the intersections between different domains function as crucial processes of successful development. We are especially interested in understanding how this intersection between domains changes across the life course (e.g., how skill acquisition and maintenance may be related to social relations in a different at different points during the life course).

The issue of how to think about the life course is the third way in which we would expand developmental science according to the concept of successful development. The idea of development occurring throughout the life course is a central component of most discussions of developmental science. In spite of this wide spread attention to the concept of the life course, many of the concepts and much of the terminology associated with the idea of the life course have been very poorly defined and specified. There have been several efforts to discuss the various terms and concepts that invoke the word “life” (e.g., Elder, 1996). In spite of these efforts there has been a failure to fully articulate what each of these life-course related terms and concepts mean. Our interest in these concepts has been focused on two distinct but necessarily complementary approaches to the life course. We refer to these approaches as “life span” and “life history.”

The life span approach is concerned with a person’s capacity to deal successfully with the particular tasks that arise at specific times in the life course. Its goal is to understand how persons successfully meet the challenges of each developmental period. This approach is predicated on the very reasonable premise that developmental tasks vary across the life course and that each part of the life course presents its own challenges. Some tasks are normative (e.g., language development in early childhood); others are near-normative (e.g., the transition from being a student to joining the work force); others are atypical (e.g., coming out as a gay, lesbian, or transgendered person in adolescence). The goal of the life span approach is to identify the processes as well as the person-related and environmental conditions that account for an individual’s successful engagement with these tasks. Research that uses a life span approach is typically focused on a particular part of the life course and can employ a wide range of observational strategies including experimental techniques, intensive naturalistic observations, and short-term lon-

gitudinal studies. Life span researchers want to know how a form of development happens and how person-related and contextual factors affect an individual’s success in a particular developmental domain at a particular time of the life course. Two examples of the use of the life-span approach by researchers in our centre are studies of how babies learn one language (Katere-los & Poulin-Dubois, 2011) and how they learn two languages (Byers-Heinlein, Burns, & Werker, 2010).

In contrast, the life history approach is concerned with the association between functioning at different times of the life course. It is especially concerned with the extent to which experiences and development during one time of the life course can affect functioning and development at a later time. This approach is predicated on the premise that the consequences of some forms of development may not be immediate but will instead have their effects at a later time. For example, the successful entrainment of the processes that make up the body’s stress response system (e.g., the hypothalamus-pituitary-adrenal axis) in early childhood may have consequences for the person’s ability to deal with emotionally arousing experiences in adolescence and adulthood (Lupien et al., 2006). The life history approach recognizes that what happens in one developmental period will affect success in subsequent developmental tasks.

Life history research is necessarily longitudinal. It needs information about the same individuals at two or more moments of the life course. The time gap between these moments does not need to be large. It could be relatively short, such as when individuals are followed across a transition when one wants to assess how pre-transition functioning (e.g., the characteristics of a child’s behavior and experiences within the peer group during primary school) affects post-transition functioning (e.g., successful functioning with peers in secondary school). This approach recognizes also that a characteristic that promotes maladaptation at one part of the life span may promote adaptation at a later time. For example, it is known that being aggressive is associated with rejection in the peer group in primary school but that it promotes attraction among peers during early adolescence (Bukowski, Sippola, & Newcomb, 2000).

Our effort to define the distinction between the “life span” and “life history” approaches is not meant to imply that these terms cover every way to think about and study the life course. Nevertheless we see them as specific forms of terminology that refer to two fundamental and mutually informative approaches to research on development. They complement each

other in several ways. Life span researchers provide information to life history about the critical forms of development which they should use as the “targets” for their longer term longitudinal studies. Life history researchers provide life span researchers with critical information about how the accumulation of experience during early developmental periods may impact successful development within a subsequent period. The reason to define these expressions carefully is because well-defined terminology can provide a powerful structure to organize thinking and action. Our point is that the idea of developmental science would benefit from a clearer conceptualization of what these two approaches are, how each functions, and how we need both of them to understand what successful development is and how it happens.

The concept of successful development is of importance to researchers as well as practitioners. For practitioners, the life span approach provides a guide for what a person needs to accomplish at a particular time of the life course and for how these developmental tasks are achieved. The life history approach shows how a person needs to be prepared to meet the demands of the next part of the life course.

In summary, the *Centre de recherche en développement humain*, the research centre to which we belong, is organized around the concept of successful development. In this essay we have shown how we have expanded or clarified the basic concepts of developmental science to promote a clearer and richer understanding of what successful development consists of and how it happens. We have proposed that the concepts of developmental science can be used in conjunction with ideas about successful development so they can provide (a) more guidance for research, (b) a more substantive meaning to the concept of integration, and (c) a more clearly articulated definition of the terms ‘life span’ and ‘life history.’

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