

DOES INFANCY MATTER?

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In this Special Section, several scholars take on the challenge of addressing the issue of the role of infancy in human development. Charles A. Nelson discusses our current understanding of change and continuity in neurobehavioral development. Nathan A. Fox and Heather A. Henderson promote the idea that infant temperament, defined as behavioral styles that appear early in life as a direct result of neurobiological factors, plays a significant role in the development and expression of social behavior. Nora S. Newcombe and Amy Learmonth take a new approach by claiming the “Radical Middle” in their discussion of change and continuity in early spatial development. In my article, I consider contextualism and also continue the discussion on the issue of continuity. Richard M. Lerner and Imma De Stefanis conclude the special section with their commentary. These articles grew out of a symposium with the same title held at the International Conference on Infant Studies in 1998. Each author has chosen different areas in which to explore the question, “Does Infancy Matter?”

Infancy research has been chosen as a period to explore questions of development for a good reason. Perhaps due to historical accident, or even the easy availability of subjects, infancy has received perhaps the most attention from developmental scientists. One might

argue that infancy, unlike other periods of development, is most important to study because of the argument for primacy—that is, what comes first will influence what comes later—or given the very rapid changes in brain structure and process, infancy is important because the brain, once influenced by early experiences, is forevermore fixed.

The study of infancy fits well within our most powerfully held view about the nature of development, namely, the organismic model, which has as its general principle at least four major propositions:

- (1) *Development is change with a direction and, therefore, has an endpoint;*
- (2) *Earlier events are connected to later ones;*
- (3) *Change is gradual—a slowly accumulative progression;*
- (4) *Events that occur within the first years of our lives produce the most long lasting and powerful effects.*

These principles, the hallmark of the organismic view of development, have been articulated elsewhere. There are of course alternatives to this view, at least one which does not stress continuity, but focuses on discontinuities, driven by the Darwinian idea of adaptation to the current context (Lewis, 1997).

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What has become clear after nearly forty years of research in infancy is that the simple notion that traits or characteristics established in infancy are continuous with later development is not supported by the data. While some relation between infancy and later life can be demonstrated, the variance accounted for is small. Perhaps even more important to our theorizing is the principle of the Simplex Model, which in the study of continuity in early development appears over again. The Simplex Model shows that the highest correlation exists between events closest in time, and the weakest correlation exists between events measured over longer periods of time.

That there is little variance accounted for by looking at infancy and later development can be explained, of course, by measurement errors and difficulties, and indeed that may be the case. However, we need to explore the possibility that our notions of development may need revision. Perhaps there is no better time than now, at the beginning of the twenty-first century, to ask again the question about development. To ask, "Does Infancy Matter?" is not simply a challenge to our research in infant development, but should be used as a challenge to the broader question of continuity, stability, and change on the one hand, and the role of the environment on the other. It is to the effects of the environment that we need to direct our intellectual effort.

Although, for the most part, we all would argue for the interaction between past events and adaptation to the current environment, our research techniques belie our reported interest in the environment. While we have created an enormous and varied set of measures of the child, our measurement of the environment lags far behind. Indeed, the one environmental measure which most predicts individual and group differences is the social class variable, a variable which we developmental scientists have borrowed from economic theory. Although we continue to work toward understanding and measuring the environment, it is clear that considerable effort needs to be ex-

pected. In terms of the social environment, we continue to struggle between the idea of the mother and her relationship to her children as the single most important aspect of the environment, and the realization that the social nexus of the child involves many more people, including fathers, siblings, peers, grandparents, aunts and uncles, teachers, and the like. Our attempts to measure the environment, starting in the late 1960s with measuring responsiveness, need to be expanded to consider more dynamic processes. We have, for the most part, focused on a didactic or direct teaching model as the most important aspect of environmental effects on the child, neglecting to consider the role of what I have called indirect effects (Lewis & Feiring, 1981). These indirect effects take into account that the child is not only the direct recipient of information and affective regulation, but exists in a social nexus in which others' behavior, not directed toward the child, has impact on the child. Through indirect processes such as imitation, incidental learning, and observational regard, a child learns not only when instructed by a parent to, for example, not paint on the wall, but also learns when his/her sibling is instructed by the parent to not paint on the wall.

Our challenge then, is to refine our theories by improving the measurement of the environment of the child so that our theories about the child and its relationship to the environment as it impacts on the developmental process is taken into account. This, indeed, is the challenge for the twenty-first century. This special issue on "Does Infancy Matter?" is, as the reader will see, an attempt to direct us toward the environment and its measurement and study in order to help us explain both stability and change.

REFERENCES

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