

The Cambridge Encyclopedia of Child Development

The Cambridge Encyclopedia of Child Development is an authoritative, accessible and up-to-date account of all aspects of child development. Written by an international team of leading experts, it adopts a multidisciplinary approach and covers everything from prenatal development to education, pediatrics, neuroscience, theories, and research methods to physical development, social development, cognitive development, psychopathology, and parenting. It also looks at cultural issues, sex differences, and the history of child development. The combination of comprehensive coverage, clear, jargon-free style, and user-friendly format will ensure this book is essential reading for students, researchers, health-care professionals, social workers, education professionals, parents, and anyone interested in the welfare of children.

Features include:

- ★ Foreword by Jerome Bruner
- ★ Comprehensive coverage
- ★ Cross-references between entries
- ★ Extensive glossary
- ★ Biographies of key figures
- ★ Companion web site
- ★ Clear, user-friendly format

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The Cambridge Encyclopedia **of CHILD DEVELOPMENT**

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EDITORIAL PREFACE

The subject matter of child development has grown exponentially over the last fifty years such that its study has become a vast multidisciplinary enterprise. The roots of this enterprise can be traced back to the 1930s, when the likes of Arnold Gesell, Myrtle McGraw, and Jean Piaget embarked on systematic programs of research, each one encompassing a variety of disciplines in different ways.

Common to these pioneering attempts at forging a multidisciplinary approach to the study of child development was an appreciation that ontogenetic development and biological evolution were somehow inextricably linked, and as such it shaped the questions being asked and the answers provided. Subsequently, and perhaps for justifiable reasons at the time, child development was studied bereft of evolutionary considerations and all things 'biological.' With the rise of molecular developmental genetics during the last decade or so, together with renewed insights into the relationships between ontogeny and phylogeny, the landscape of research on ontogenetic development has been changed irrevocably, and as a consequence that on child development will have to take into account newly emerging fields of study such as evolutionary developmental biology.

Another theme that stands out in the book concerns the impact of neuroscience on how child development, both 'normal' and 'deviant,' is presently studied. Ranging from specific animal models through non-invasive neural imaging techniques to computational modeling, the wealth of information generated about the changing nature of brain-behavior relationships during development is truly staggering. The challenge now, and one to which this book is geared, is how to integrate this plethora of new knowledge and that contained in the first theme so that progress can be made toward the provision of more unified theories of ontogenetic development that cross disciplinary boundaries.

A further theme includes the historical roots and controversies that have motivated the study of child

development and which form essential reading for understanding the two main issues that continue today: the origin problem and the change problem. The first calls for a better understanding of the ways in which prenatal development relates to that after birth, and the second for the use of longitudinal designs and associated statistical techniques for teasing out the salient features of intra-individual change in whatever domain of development. As an additional theme, this book strives wherever possible to encourage the study of child development across domains (e.g. cognitive, motor, social) rather than within domains as one means of achieving greater theoretical integration.

There is no pretense made of having covered every possible topic that might fall under the heading of 'child development.' Given the limitations of space and those imposed by our own experiences in studying child development, we have endeavored nevertheless to provide a coverage that is as comprehensive as possible. Having said this, there are no separate entries, for example, that deal with 'attachment theory' or 'qualitative research.' Despite not having dedicated slots, such topics are given consideration across a number of entries. Furthermore, the book will have a companion web site by means of which readers will be able to communicate with the editor about the structure of the book and its contents as well as make suggestions for revisions or for correcting any inaccuracies. It will also contain an extended glossary, a large number of web site addresses for relevant scientific organizations, as well as further information relevant to specific entries, and short biographical sketches of additional individuals who have, directly or indirectly, had an influence on the study of child development.

Finally, we wish to thank a number of individuals who enabled this book to come to fruition. To begin, there are the numerous referees whose reviews of the initial proposal helped us to refine both structure and content. In approaching authors for particular topics, the recommendations of Jonathan W. Hill (University of

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Brian Hopkins
Lancaster, January 2005

FOREWORD

The course of human development used to be a topic for the specialist – the pediatrician, the development psychologist, the child welfare worker, and even the anthropologist in search of the origins of cultural difference. There was also, to be sure, a wider audience of parents, in search of advice about how best to ‘raise’ their children, and the better educated among them often browsed in the technical developmental handbooks for clues about how to deal with their children’s ‘difficulties,’ like dyslexia or persistent bedwetting or failure to meet the ‘norms’ popularized in such widely read manuals as Arnold Gessell’s endlessly revised and reissued *Manual of Child Development*.

That degree of specialization is no more. ‘Child development’ and its course has, in the last quarter-century, become an issue of general, even political concern, a passionate issue. To a degree never before seen, the cultivation of childhood has become central not only in debates about schooling and parenting, but also in discussions of broader policy: anti-poverty programs in our inner cities, budgetary policy nationally, even international policy where aid for the care and education of the young has become a central issue. Indeed, there are few issues that are as publicly scrutinized as, for example, *when* and *how* ‘education’ should start, even before a child ever gets to school. *What* should schools take as their objective, and *in what ways* might the larger social environment harm or help a child’s readiness for later school learning?

Indeed, the introduction of Head Start in America in the 1960s (and comparable programs elsewhere) provoked a blizzard of debate on how and whether poverty disables a young pre-school child for later schooling. In a like vein, intense debates rage about the

possibly irreversible effects of childhood ‘deprivations’ in the Third World. As never before, the adage “The child is father to the man” has emerged into open debate about policy.

All of these concerns make it all the more urgent that there be available not only to the expert, but also to the engaged citizen, some informed and intelligent guidance regarding human growth and development. It is our hope that *The Cambridge Encyclopedia* will fill that function. It is written by distinguished specialists in child development, but written with a view to being accessible to the intelligent reader concerned with the growth and welfare of the young.

One special point needs emphasis. Over the last quarter-century, there has been a remarkable burgeoning of research on early childhood. Inevitably, this research on early growth and the factors affecting it has come to concentrate more than before on neural as well as psychological processes that might be affected by early encounters with the world. Such research is well represented in this volume, and to good effect. For many current debates swirl futilely around the issue, for example, of whether certain early experiences produce ‘irreversible’ effects on the ‘brain.’ The reader will find a well-balanced approach to this feverish issue in this *Encyclopedia*.

The contributors to this volume, as well as its editors, are to be congratulated, finally, for maintaining a happy balance between the general and the particular. For, indeed, the details of development cannot be understood without appreciating the broader contexts in which they occur, nor can general trends be grasped without reference to the specific mechanisms that make them possible. The relation between early experience and the state of the brain is, indeed, a two-way street.

Jerome S. Bruner
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