

Individual Development From 3 to 12

This book describes the findings of a long-term, comprehensive longitudinal study conducted at the Max Planck Institute for Psychological Research in Munich from 1984 to 1993. The major goal of the study was to analyze developmental changes in the cognitive, social, and personality domain and to explore possible interrelationships in developmental changes across domains. A sample of about 200 children was first tested in 1984 when they were almost 4 years old and first entering German kindergarten. Children's cognitive, social, and personality development was followed up on a regular basis (2–3 times a year) for about 9 years (until 1993). Data analyses focused on both the issue of continuity versus discontinuity of the developmental function in the various domains and on the issue of stability or variability in interindividual differences in developmental change. The study is unique in that developmental changes in several important domains were assessed simultaneously over a period of almost 10 years.

Franz E. Weinert is Director of the Center for Behavioral and Cognitive Development at the Max Planck Institute for Psychological Research. He has previously been Professor of Psychology at Heidelberg University and he has served as President of the German Psychological Association.

Wolfgang Schneider is Professor of Psychology and Dean of the Faculty of Philosophy, Education, and Social Sciences at the University of Würzburg. He has published widely on issues of cognitive development and educational psychology.



Individual Development From 3 to 12

Findings From the Munich Longitudinal Study

Edited by

FRANZ E. WEINERT WOLFGANG SCHNEIDER





CAMBRIDGE UNIVERSITY PRESS
Cambridge, New York, Melbourne, Madrid, Cape Town,
Singapore, São Paulo, Delhi, Tokyo, Mexico City

Cambridge University Press
The Edinburgh Building, Cambridge CB2 8RU, UK

Published in the United States of America by Cambridge University Press, New York

www.cambridge.org
Information on this title: www.cambridge.org/9780521176347

© Cambridge University Press 1999

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 1999 First paperback edition 2011

A catalogue record for this publication is available from the British Library

Library of Congress Cataloguing in Publication data

Individual development from 3 to 12 : findings from the Munich longitudinal study / edited by Franz E. Weinert, Wolfgang Schneider.

p. cm. Includes bibliographical references and indexes. ISBN 0-521-58042-0

1. Child development - Germany - Munich - Longitudinal studies.

I. Weinert, Franz E., 1930- . II. Schneider, Wolfgang.

HQ792.G3I53 1999 305.231 – dc21

98-42346 CIP

ISBN 978-0-521-58042-7 Hardback ISBN 978-0-521-17634-7 Paperback

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication, and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.



Contents

Contributors		page ix
1	LOGIC: Introduction and Overview Franz E. Weinert, Wolfgang Schneider, Jan Stefanek, and Angelika Weber	1
2	Development of Intelligence and Thinking Wolfgang Schneider, Josef Perner, Merry Bullock, Jan Stefanek, and Albert Ziegler	9
2a	Comment: What Individual Differences Can Teach Us About Developmental Function, and Vice Versa David F. Bjorklund	29
3	Scientific Reasoning: Developmental and Individual Differences Merry Bullock and Albert Ziegler	38
3a	Comment: "Scientific Reasoning" David Klahr	55
4	Memory Strategy Development – Gradual Increase, Sudden Insight, or Roller Coaster? Beate Sodian and Wolfgang Schneider	61
5	Memory for Events Experienced and Events Observed Angelika Weber and Gerhard Strube	78
4a and 5a	Comments: Toward an Understanding of the Development of Memory Peter A. Ornstein	94
6	Development of Memory for Texts Monika Knopf	106

v



Frontmatter More information

'i			Contents
	6a	Comment: Developmental Trends in Story Recall Walter Kintsch	123
	7	Impact of Early Phonological Processing Skills on Reading and Spelling in School: Evidence From the Munich Longitudinal Study Wolfgang Schneider and Jan Carol Näslund	126
	7a	Comment: Sound Logic Peter Bryant	148
	8	Development of Mathematical Competencies Elsbeth Stern	154
	8a	Comment: "Development of Mathematical Competencies" Susan R. Goldman and James W. Pellegrino	171
	9	Schooling and the Development of Achievement Differences Andreas Helmke and Franz E. Weinert	176
	9a	Comment: "Schooling and the Development of Achievement Differences" Richard E. Snow	193
	10	From Optimism to Realism? Development of Children's Academic Self-Concept From Kindergarten to Grade 6 Andreas Helmke	198
	10a	Comment: The Logic and Meaning of Declining Perceptions of Academic Competence Deborah Stipek	222
	11	Social-Personality Development Jens B. Asendorpf	227
	11a	Comment: Contributions to Knowledge About Social-Personality Development: The Munich LOGIC Study Kenneth H. Rubin	243
	12	Development of Moral Understanding and Moral Motivation Gertrud Nunner-Winkler	253
	12a	Comment: Caring About Morality: The Development of Moral Motivation in Nunner-Winkler's Work Augusto Blasi	291
	13	A Person-Centered Approach to Development: The Temporal Consistency of Personality and Self-Concept Marcel A. G. van Aken and Jens B. Asendorpf	301
	13a	Comment: Regarding a "Person-Centered Approach to Development" Jack Block	320



Contents		vii
14	Universal, Differential, and Individual Aspects of Child Development From 3 to 12: What Can We Learn From a	
	Comprehensive Longitudinal Study? Franz E. Weinert, Merry Bullock, and Wolfgang Schneider	324
Author Inc	lex	351
Subject Index		358



Contributors

Jens B. Asendorpf, Humboldt University of Berlin, Germany

David F. Bjorklund, Florida Atlantic University, Boca Raton, Florida, USA

Augusto Blasi, University of Massachusetts at Boston, USA

Jack Block, University of California, Berkeley, USA

Peter Bryant, University of Oxford, England

Merry Bullock, Estonian Academy of Sciences, Tallinn, Estonia

Susan R. Goldman, Vanderbilt University, Nashville, Tennessee, USA

Andreas Helmke, University of Koblenz-Landau, Landau, Germany

Walter Kintsch, University of Colorado, Boulder, USA

David Klahr, Carnegie Mellon University, Pittsburgh, Pennsylvania, USA

Monika Knopf, Max Planck Institute for Psychological Research, Munich, Germany, and J. W. Goethe University of Frankfurt/Main, Germany

Jan Carol Näslund, University of New Mexico, Albuquerque, USA

Gertrud Nunner-Winkler, Max Planck Institute for Psychological Research, Munich, Germany

Peter A. Ornstein, University of North Carolina at Chapel Hill, USA

James W. Pellegrino, Vanderbilt University, Nashville, Tennessee, USA

Josef Perner, University of Salzburg, Austria

Kenneth H. Rubin, University of Waterloo, Ontario, Canada

Beate Sodian, University of Würzburg, Germany

Wolfgang Schneider, University of Würzburg, Germany

ix



x Contributors

Jan Stefanek, Max Planck Institute for Psychological Research, Munich, Germany

Elsbeth Stern, Max Planck Institute for Human Development, Berlin, Germany

Richard E. Snow, Stanford University, California, USA

Deborah Stipek, University of California, Los Angeles, USA

Gerhard Strube, University of Freiburg, Germany

Marcel A. G. van Aken, University of Nijmegen, the Netherlands

Angelika Weber, University of Applied Sciences of Würzburg, Germany

Franz E. Weinert, Max Planck Institute for Psychological Research, Munich, Germany

Albert Ziegler, University of Munich, Germany