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978-1-107-02172-3 - Gender Differences in Aspirations and Attainment: A Life Course Perspective

Edited by Ingrid Schoon and Jacquelynne S. Eccles

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Gender Differences in Aspirations and Attainment

What is the role of parents, peers and teachers in shaping school experiences and informing the career choice of males and females? Does the school context matter, and to what extent do educational experiences influence young people's self-concept, values and their outlook to the future? Do teenage aspirations influence later outcomes regarding educational attainment and the assumption of work and family related roles? These questions and more are addressed in the chapters of this book, following lives over time and in context. The book is both innovative and timely, moving the discussion of gender inequalities forward, providing a dynamic and contextualized account of the way gendered lives evolve. Chapters address the role of institutional structures and the wider socio-historical context in helping young men and women to realize their ambitions. A unique feature is the longitudinal perspective, examining the role of multiple interlinked influences on individual life planning and attainment.

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A Life Course Perspective

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LINDA HARGREAVES is Reader in Classroom Learning and Pedagogy at the Faculty of Education, University of Cambridge, UK, where she teaches master's and doctoral students in primary education, and psychology and education. Her research interests center on classroom processes – teacher and pupil interaction, typically involving systematic observation in classrooms – and how these vary across schools (primary/secondary; rural/urban) and different classroom organizations. Major projects include the Teacher Status Project, the Cambridge Primary Review (Director Robin Alexander) and, currently, an ESRC-funded UK–Hong Kong bilateral, “Social Pedagogic Contexts in the Teaching of Mathematics” (SPeCTRM) codirected with Peter Kutnick (The University of Hong Kong), and “Children’s Personal Epistemologies: capitalizing on children’s and families’ beliefs about knowledge for effective teaching and learning,” with Dr. Rocio Garcia-Carrion (EC Marie Curie Research Fellow) and Ruth Kershner.

SARAH HAYFORD is a social demographer in the T. Denny Sanford School of Social and Family Dynamics at Arizona State University. Her areas of study include childbearing, family, and social change in the United States and in sub-Saharan Africa. Recent work examines gender differences in adolescent goals for work and family, changes in the timing of first births within marriage, and the childbearing plans of HIV-positive women.

JUTTA HECKHAUSEN grew up in Germany and received her PhD from the University of Strathclyde in Glasgow, Scotland. She joined the Max-Planck-Institute for Human Development in Berlin in 1984 and then became a post-doctoral fellow, junior and senior scientist. In 1995/1996 she was a fellow at the Center for Social and Behavioral Science at Stanford and in 1999 she received the Max Planck Research Award. In 2000, she was offered a professorship and joined the Department of Psychology and Social Behavior at the University of California Irvine. She served as Chair of the Academic Senate at UC Irvine in 2008–2009. Her work is widely published, including articles in *Developmental Psychology*, *Psychology and Aging*, *Journal of Personality and Social Psychology*, and *Psychological Review*. Her most recent book is *Motivation and Action*, published by Cambridge University Press.

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and has published widely in this field. Recent EU-funded research projects include the ‘Effects of Austerity on Active Citizenship in Europe’. In addition to her research, she leads various modules on globalization, comparative education, and statistics.

JAN GERMEN JANMAAT is Reader of Comparative Social Science at the Centre on Learning and Life Chances in Knowledge Economies and Societies (LLAKES), Institute of Education, London (UK). He teaches on the MA in Comparative Education and has published widely on the relation between education, civic values, and social cohesion. His latest book is *Regimes of Social Cohesion: Societies and the Crisis of Globalization* (co-authored with Andy Green).

JOHN JERRIM is a Lecturer in Economics and Social Statistics at the Institute of Education, University of London. Jerrim’s research interests include the economics of education, access to higher education, intergenerational mobility, cross-national comparisons, and educational inequalities. He has worked extensively with the OECD Programme for International Student Assessment (PISA) data, with this research being reported widely in the British media. Jerrim was the recipient of an ESRC Research Scholarship (2006–2010), and was awarded the prize as the “most promising PhD student in the quantitative social sciences” at the University of Southampton. He was a Fellow of the Jacobs Foundation postdoctoral PATHWAYS to Adulthood program, and in October 2011 he was awarded a prestigious ESRC postdoctoral fellowship to continue his research into the educational and labor market expectations of adolescents and young adults. Since then he has won the inaugural ESRC Early Career Outstanding Impact award and has just received an ESRC grant to study cross-national comparisons of educational attainment and social mobility.

HEATHER JOSHI is Professor Emerita at the Institute of Education, University of London, having been the Director of the Centre for Longitudinal Studies and of the Millennium Cohort Study in particular. She was also president of the European Society for Population Economics, of the British Society for Population Studies and the founder president of the Society for Lifecourse and Longitudinal Studies. She was a co-investigator on the project about single-sex schooling summarized here, which was led by the late Diana Leonard.

SARAH KENNY was a research assistant at the University of Michigan, focusing primarily on gender differences in STEM. She is currently an MA student at the London School of Economics, and plans to pursue a doctorate focusing on children and young people’s experiences of digital media at home and school.

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CAROL LYNN MARTIN is a Professor of Child Development in the T. Denny Sanford School of Social and Family Dynamics at Arizona State University. She is also a director of the Lives of Girls and Boys Enterprise, which promotes innovative research and its application to the real life issues and challenges facing girls and boys. Her research interests include gender development and peer relationships.

SARAH-KATHRYN MCDONALD, Principal Research Scientist in the Academic Research Centers at NORC at the University of Chicago, has more than 25 years' experience serving as a policy analyst, social scientist, evaluation researcher, public affairs advisor, and senior manager with governmental, for profit, and not-for-profit organizations in the US and Europe. Since 2002 she has collaborated with faculty, clients, and staff at NORC on a range of impact evaluations and educational research projects. Other organizations with which she has worked include the US Bureau of the Census; Nuffield College, University of Oxford; Birkbeck College, University of London; and the University of Chicago Consortium on Chicago School Research.

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PHILIP PARKER is a research fellow at the Centre for Positive Psychology and Education (CPPE). His research focuses on social inequality, development, personality, and wellbeing issues related to adolescents' transition from school to work or further education, and uses large longitudinal databases from Australia, the US, UK, Germany and Finland. He received a first-class honors degree in psychology from the SELF research center at the University of Western Sydney and won the Australian Psychological Society Science Prize. His PhD, at the University of Sydney, was on the role of motivational constructs and processes in the development of teacher burnout and subjective wellbeing. He has published in a number of international journals in education, psychology, and sociology, as well as a number of books, chapters and peer-reviewed papers. He was previously a Jacob's Foundation-funded postdoctoral research fellow in the PATHWAYS to Adulthood program.

LARA PEREZ-FELKNER is an Assistant Professor of Higher Education in the College of Education and Department of Sociology at Florida State University. Her research examines how young people's social contexts influence their college and career outcomes. She focuses on the mechanisms that shape entry into and persistence in fields in which they have traditionally been underrepresented. In particular, she investigates racial-ethnic, gender, and socioeconomic disparities in postsecondary educational attainment and entry to scientific career fields. She was a recent Visiting Scholar at the Center for Khmer Studies for cross-national extensions of this work and a Fellow of the Jacobs Foundation postdoctoral PATHWAYS to Adulthood program.

RICARDO SABATES is Senior Lecturer in International Education and Development at the University of Sussex. Much of his work concerns the relationship between education and wider social outcomes such as health and crime. Special interests include the application of quantitative research methods to investigate the strength in the relationship between education and outcomes in the UK and international contexts and the role of education in reducing social inequalities.

KATARIINA SALMELA-ARO is Professor of Psychology at the University of Jyväskylä, and Visiting Professor at the Institute of Education, University of London. She was Research Director of the Helsinki Collegium for Advanced Studies at the University of Helsinki, and Professor in the Finnish Center of Excellence on Learning and Motivation Research. Professor Salmela-Aro is Director of several ongoing longitudinal studies, such as FinEdu and Secretary General of the International Society for the Study of Behavioral Development (ISSBD). She is also a founding member of the PATHWAYS to Adulthood postdoctoral fellowship program. Her main topics are motivation and academic wellbeing using longitudinal studies.

CARLOS SANTOS was trained as a developmental scientist and is currently an Assistant Professor in the Counseling and Counseling Psychology program at

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Arizona State University. His research explores how social identities and categories (e.g., being a boy or a girl and Latina/o or white) intersect, and how experiences (e.g., discrimination) and attitudes (e.g., stereotypes) associated with these categories influence youths' identity, relationships, and health.

INGRID SCHOON is Professor of Human Development and Social Policy at the Institute of Education, University of London and is Director of the international postdoctoral Jacobs Foundation Fellowship PATHWAYS to Adulthood. Her research interests are focused on issues of human development across the life course, in particular the transition from dependent childhood to independent adulthood, the intergenerational transmission of (dis)advantage, and the realization of individual potential in a changing socio-historical context. Her work is published widely in peer-reviewed journals. She also has written a monograph on *Risk and Resilience* and co-edited a book with Rainer K. Silbereisen on *Transitions from School to Work*, both published by Cambridge University Press.

BARBARA SCHNEIDER is the John A. Hannah Chair and University Distinguished Professor in the College of Education and Department of Sociology at Michigan State University. Her research and teaching focus on understanding how the social contexts of schools and families influence the academic and social well-being of adolescents as they move into adulthood, with a particular emphasis on improving educational opportunities for students with limited economic and social resources. She is the co-author of 15 books, author of numerous journal articles, and previously editor of *Educational Evaluation and Policy Analysis* and *Sociology of Education*. Schneider was a Fulbright New Centuries Scholar, member of the Sociological Research Association, and Senior Fellow at NORC at the University of Chicago. She is a founding member of the Jacobs Foundation postdoctoral Fellowship program PATHWAYS to Adulthood, and was recently elected President of the American Educational Research Association (AERA).

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ALICE SULLIVAN is a Reader in Sociology at the Institute of Education, University of London. As Director of the 1970 British Cohort Study she leads the team responsible for developing the content, design, and analysis of the 1970 British Cohort Study. Her research interests are focused on social and educational

inequalities, including inequalities of social class, gender, and ethnicity. Her published work includes research on social class and gender differences in cognition and educational attainment, Bourdieu and cultural capital, school sector differences, and education policy.

JENNIFER SYMONDS' research interests are in the development of children's psychological and emotional wellbeing at school transition. Recently, she has directed the Changing Key study of musical identity at school transition for the Paul Hamlyn Foundation, investigated adolescents' school engagement as a research fellow on the Learning Futures project for the University of Bristol, and researched adolescent mental health on both the Nuffield Foundation's Changing Adolescence program and as a research fellow on the international PATHWAYS to Adulthood program at the University of Helsinki. Currently she is writing a psychology book for teachers: *Understanding Transition: What Happens to Children and How to Help Them*.

ULRICH TRAUTWEIN is a Professor for Educational Science at the University of Tübingen. His main research interests include educational transitions, the effects of different learning environments on self-concept, interest, and personality development, and the role of self-related cognitions in students' homework behavior. He has published more than 100 scholarly articles in peer-reviewed journals. Trautwein directs two longitudinal large-scale school achievement studies and several large-scale intervention projects. He is also the director of the graduate program Learning, Educational Achievement, and Life Course Development (LEAD), funded by the excellence initiative of the German Federal and State Governments, and is a member of the Jacobs Foundation post-doctoral Fellowship program PATHWAYS to Adulthood.

LORNA UNWIN is Chair in Vocational Education at the Institute of Education, University of London. She has held academic posts at the Open University and University of Sheffield, and was Director of the Centre for Labour Market Studies at the University of Leicester. Her latest books include *Contemporary Apprenticeship: International Perspectives on an Evolving Model of Learning* (co-authored with Alison Fuller and published in 2012). She is editor of the *Journal of Vocational Education and Training*.

KATJA UPADYAYA, PHD, is a research investigator at the Institute of Social Research, University of Michigan. Her research interests include teacher–student and parent–child interaction, causal attributions and beliefs, study and work engagement, academic motivation and performance, gender differences, STEM, and school and work transitions. From 2008 to 2010 she was a Fellow of the Jacobs Foundation post-doctoral PATHWAYS to Adulthood program.

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University of Pittsburgh. He received his doctoral degree in Human Development and Psychology from Harvard University, and he was a Fellow of the Jacobs Foundation postdoctoral PATHWAYS to Adulthood program at the University of Michigan. His research focuses on the impact of school climate and family socialization on adolescents' motivational beliefs and the effects of multiple ecological systems on the behavioral, social, and emotional development of youth from diverse socioeconomic and cultural backgrounds. His work emphasizes the interplay of developmental processes across both academic and social domains in adolescence, and situates these processes within family, school, and community contexts.

ELIZABETH WEBB is a Research Associate in the Department of Epidemiology and Public Health at University College London, and a member of the ESRC International Centre for Lifecourse Studies in Society and Health (ICLS).

DAVID WEISS studied psychology at the University of Kiel and the Australian National University. He completed his PhD at the University of Erlangen-Nuremberg, for which he received the Karl-Giehl Award for the most outstanding dissertation of the year. In 2009, he joined the Department of Psychology at the University of Zurich as a postdoctoral researcher. For his research on age identity, he received the Vontobel Award for Research on Age(ing) in 2011. His main research interests relate to self, identity, and stereotypes from a life-span perspective.

BETTINA S. WIESE is a Professor of Personnel and Organizational Psychology and currently the Managing Director of the Department of Psychology at the RWTH Aachen University, Germany. She received her PhD in psychology from the Free University of Berlin. Her main research interests include the influence of personal goals and self-regulatory strategies on career development and the interplay of work and family during transitions (e.g., return to work after maternity leave).

KRISTINA ZOSULS earned her PhD in Social Psychology, and is currently an associate faculty member at the T. Denny Sanford School of Social and Family Dynamics at Arizona State University.

Abbreviations (selected)

ACT	American College Testing
AGFI	Adjusted Goodness of Fit Index
AIC	Akaike's Information Criterion
A-level	Advanced level (UK)
ANOVA	Analysis of Variance
ARS	Academic Rating Scale (US)
BCS70	British Cohort Study (1970)
BHPS	British Household Panel Survey
BIC	Bayesian Information Criterion
BYS	British Youth Survey
CAB	Childhood and Beyond (Study) (US)
CAPI	Computer Assisted Personal Interview
CATI	Computer Assisted Telephone Interview
CCCI	Civic Competence Composite Indicator
CES-D	Center for Epidemiologic Studies–Depression Scale
CFI	Comparative Fit Index
CIVED	Civic Education Study
COCON	Swiss Survey of Children and Youth
CRELL	Centre for Research on Lifelong Learning
DAA	Differential Ability Analysis
DfE	Department for Education (UK)
DTI	Department of Trade and Industry
ELS	Education Longitudinal Study (US)
ELSA	English Longitudinal Study of Ageing
EOC	Equal Opportunities Commission (UK)
EU	European Union
GCSE	General Certificate of Secondary Education (UK)
GDI	Gender Development Index
GEM	Gender Empowerment Measure
GFI	General Formal Investigation (UK)
GPA	Grade Point Average
HGLM	Hierarchical Generalized Linear Model
HLM	Hierarchical Linear Model
ICC	Intra-Class Correlations

IDA	Individual Development and Adaptation Study (Sweden)
IER	Institute of Employment Rights
ILO	International Labour Organization
IPUMS	Integrated Public Use Microdata Series
IRT	Item Response Theory
ISCO	International Standard Classification of Occupations
IT	Information Technology
LPA	Latent Profile Analysis
LSYPE	Longitudinal Study of Young People in England
MA	Modern Apprenticeship (UK)
MLA	Multilevel Analysis
MRA	Multiple Regression Analysis
MSALT	Michigan Study of Adolescent Life Transitions (US)
NCDS	National Child Development Study (UK)
NCES	US National Center for Educational Statistics
NEET	Not in Education, Employment, or Training
NLS	National Longitudinal Survey (US)
NLSY	National Longitudinal Survey of Youth (US)
NS-SEC	National Statistics Socio-economic Classification (UK)
OECD	Organisation for Economic Co-operation and Development
O-level	Ordinary level (UK)
OLS	Ordinary Least Squares
ORACLE	Observational Research and Classroom Learning Evaluation (UK)
PAQ	Personal Attributes Questionnaire
PISA	Programme for International Student Assessment
PME	Physical Sciences, Mathematics, and Engineering
RMSEA	Root Mean Square Error of Approximation
SAMSAD	Secondary and Middle School Adolescent Development (Study) (UK)
SAT	Scholastic Assessment Test (US)
SDQ	Self-Description Questionnaire
SEM	Structural Equation Modeling
SES	Socioeconomic Status
SET	Science, Engineering, and Technology
SFR	Statistical First Release
SOC	Selection, Optimization, and Compensation Model
SRMR	Standardized Root Mean Square Residual
STEM	Science, Technology, Engineering, and Math
STVs	Subjective Task Values

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LIST OF ABBREVIATIONS (SELECTED)

TIMSS	Third International Mathematics and Science Study
TLI	Tucker-Lewis Index
TOEFL	Test of English as a Foreign Language
TOSCA	Transformation of the Secondary School System and Academic Careers (Germany)
UKRC	UK Resource Centre for Women in Science, Engineering and Technology
UNESCO	United Nations Educational, Scientific and Cultural Organization
VET	Vocational Education and Training (UK)