

ANNUAL REPORT 11/12



CONTENTS

INTRODUCTION	2
PATHWAYS TO ADULTHOOD: Research Summary	3
LINKING RESEARCH AND POLICY	7
ALUMNI REPORT	9
RESEARCH PROFILES	11
Post-doctoral fellows Håkan Andersson Julia Dietrich Kathryn Duckworth John Jerrim Martin Obschonka Lara Perez-Felkner Katja Upadyaya	12
Principal investigators Lars Bergman Jacque Eccles	26

Katariina Salmela-Aro Barbara Schneider Ingrid Schoon Rainer K. Silbereisen Ulrich Trautwein



INTRODUCTION

The major aim of the PATHWAYS Post-Doctoral Fellowship Programme is to stimulate innovative, interdisciplinary, and comparative research of productive youth development. Participating institutions include the Institute of Education in London, the Universities of Michigan and Michigan State, Stockholm, Helsinki, Jena, and Tübingen. The mission of the programme is to promote the next generation of researchers and facilitate a better understanding and discourse with different stake holders about how to equip young people for mastering the challenges of growing up in a changing social context.

PATHWAYS Fellows in collaboration with their mentors investigate the antecedents, processes, and long-term outcomes of youth transitions, as well as the factors and processes promoting human competences, especially among young people deemed to be at-risk. Training and mentoring is provided to the Fellows to enhance understanding of diverse approaches to the study of productive youth development and to engage in constructive debates with colleagues from different disciplines. The Programme helps to foster international and interdisciplinary research and exchange of ideas, in order to gain up-to-date skills for addressing research and policy questions that require combined approaches and a synergy of ideas.

A 'Virtual Institute Approach' has been adopted, not limiting activities to one physical location, but pooling the expertise of several partner institutions that are connected by shared research interests, projects and existing collaborations. The administrative core is based at the Institute of Education but many of PATHWAYS' activities occur at the participating sites. There are regular joint workshops and conferences, bringing together scholars from around the globe, facilitating international networking and exchange.

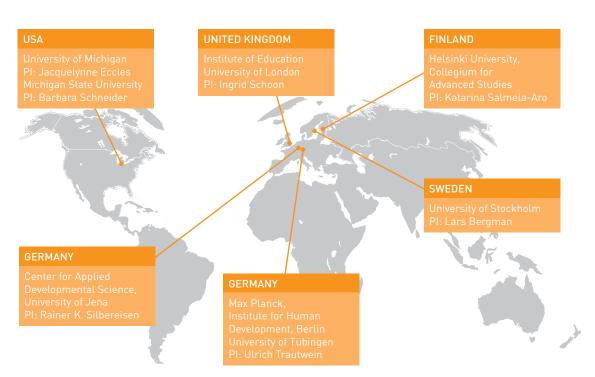


Figure 1: PATHWAYS network: Countries, Institutions, PIs

PATHWAYS TO ADULTHOOD: Research Summary



PATHWAYS TO ADULTHOOD: Research Summary

In 2012 we were granted an extension for the PATHWAYS programme phase II, enabling us to continue our collaborative activities for the next four years. We are extremely grateful to the Jacobs Foundation for providing us with the opportunity to build on the success of phase I, and to now move towards increasing visibility and sustainability of the programme.

During 2011/12 we held two international workshops, one at the University of Michigan and one at the University of Jena, and have organised two PATHWAYS symposia at international conferences, i.e. the 2012 meetings of ISSBD and EARA. The collaborative efforts between the Fellows and PIs have led to a number of co-authored papers and synergies between research labs. In particular our work has focused on transitions in the education system and the transition from school to work. Key topics addressed in the work of the PATHWAYS Fellows include motivation and engagement, career choice and unexpected outcomes.

Motivation and self regulation

How to engage young people and motivate them to succeed in the school context and beyond is of concern to both social researchers and social policy makers alike. Julia Dietrich, in collaboration with Phil Parker and Katariina Salmela-Aro, has co-written a paper on 'phaseadequate engagement at the post-school transition' which will be published in Developmental Psychology. The paper reviews and evaluates different theoretical approaches for the study of engagement in the transition from school to work or tertiary education, and outlines an integrative framework (Dietrich, Parker & Salmela-Aro, in press). Their review of the literature suggests that still too little is known about how young people's engagement is complemented and affected by the behavior of significant others and shaped by structural constraints and opportunities. In particular they indicate that research is needed that systematically addresses how, when, and for whom engaging with the demands of career transitions is adequate with respect to post-transition outcomes. In collaboration with Katariina and her research team, Julia is also involved in a couple of empirical papers on young people's engagement at career transition. This work suggests that career-related engagement is interwoven with young people's school experiences (Dietrich et al., in prep) and parents' involvement (Dietrich & Salmela-Aro, under review). Julia also collaborates with Håkan Andersson and Yi-Miau Tsai on a paper examining how individuals regulate their effort and emotional engagement with learning tasks. In particular they examine the dynamics of flow, i.e. deep task engagement where skills are optimally matched to the challenges of the task, using micro-developmental data collected from

among college students. They propose that in addition to challenge and skill, interest is a core defining facet of flow experience. Doing so, they are able to distinguish students being in a flow-like state from being in a state of concentration that is also high in challenge and skill, but lower in interest experience than flow (Tsai, Andersson, Dietrich, & Salmela-Aro, in prep.).

Career choice

Another topic addressed by the Fellows are young people's educational and career oriented choices. For example, John Jerrim has examined the wage expectations of higher education students, using evidence from the UK Student Income and Expenditure Survey (SIES). His findings suggest that higher education students do not know what they will earn in their first job after graduation (Jerrim, 2011). On average, students expect that they would earn more than they actually do in the end, and John concludes that young adults need to be better informed about the costs and benefits of higher education and the economic value of different degrees. Lara Perez-Felkner studied social inequalities in career aspirations, in particular variations in education aspirations by ethnicity and gender, arguing that for a better understanding of the factors influencing career expectations of young people one has to take into account their experiences of the socio-cultural context they grow up in (Perez-Felkner et al., 2012). She also has conducted research on factors that foster increased participation in science related education, research, and careers, a topic that is also addressed by Katja Upadyaya, who is based at Michigan University. Both Fellows identified characteristics of the school context, such as the academic school climate and teacher perceptions of ability and effort of the students, as vitally important in promoting engagement with science related choices (Perez-Felkner, et al., 2012; Upadyaya et al., 2012). Kathryn Duckworth and Martin Obschonka have conducted research on the developmental precursors of entrepreneurship, establishing early social skills as a crucial predictor for entrepreneurial intention, making the step into entrepreneurship and for successful entrepreneurship (Obschonka et al., 2011, 2012, in press; Schoon & Duckworth, 2012).

Unexpected outcomes: analysis of off-diagonals

Why do some young people achieve against the odds, in particular young people growing up in relative socioeconomic adversity, and why do others underachieve, i.e. not realise their potential? These questions are addressed by Kathryn Duckworth who examined protective factors enabling young people to avoid unemployment during the current economic recession (paper submitted). Previous academic attainment, educational aspirations and school engagement as well as the socio-demographic characteristics of the school environment appeared to reduce the risk of unemployment, after controlling for family background and cumulative risk effects. Håkan Andersson, in collaboration with Lars Bergman, is examining the long term development and career outcomes of highly intelligent children, asking if society makes "optimal" use of its talented youth, as some of young people with high IQ do not achieve the expected high level outcomes regarding educational and occupational attainment. Work on this project has just started.

DISSEMINATION ACTIVITIES

Conferences and seminars

In addition to two international PATHWAY workshops held at Michigan University and the Dornburg Castle in Jena, findings of our collaborative network have been disseminated in a number of dedicated PATHWAYS symposia at international conferences:

Symposium at the ISSBD conference in Edmonton, Canada (July 2012): 'The 'what' and the 'how' of Career Choices: The Role of Motivation at the Post-school Transition', organised by Julia Dietrich and Ingrid Schoon with contributions from PATHWAYS members Angela Chow, Jacque Eccles, Katariina Salmela-Aro, Katja Upadyaya and Ming-Te Wang. The papers presented were:

- Priority Patterns of Task Values across Subjects and Aspirations to Physical and It-related Science Fields. Chow, Angela (University of Alberta, Canada); Eccles, Jacquelynne S. (University of Michigan, USA); Salmela-Aro, Katariina (University of Helsinki, Finland)
- Pursuit of Career Goals in Secondary School and Beyond: The Role of School Engagement and Burnout. Dietrich, Julia (University of Helsinki, Finland); Salmela-Aro, Katariina (University of Helsinki, Finland); van de Schoot, Rens (University of Utrecht, The Netherlands)
- Development of Adolescents' Career Goal-related Success Expectations. Tynkkynen, Lotta (University of Jyväskylä, Finland); Salmela-Aro, Katariina (University of Helsinki, Finland); Dietrich, Julia (University of Helsinki, Finland)
- From Middle School to Higher Education Studies and Work: The Role of Parenting in Adolescents' and Young Adults' School and Work Engagement. Upadyaya, Katja (University of Michigan, USA); Wang, Ming-Te (University of Michigan, USA); Hill, Nancy (Harvard University, USA); Salmela-Aro, Katariina (University of Helsinki, Finland)

Symposium at the meeting of the European Association for Research on Adolescence (EARA) in Spetses, Greece. The symposium 'Transition to Adulthood during the Great Recession' was organised by Jacque Eccles with contributions from Mette Renta and Katariina Salmela-Aro, Martin Tomasik and Rainer Silbereisen, Kathryn Duckworth and Ingrid Schoon. The papers presented were:

- Financial resources and agency: Their role in success and satisfaction with developmental tasks in the transition to adulthood. Ranta, Metta, (Helsinki Collegium for Advanced Studies, University of Helsinki, Finland); Punamäki, R.L. (School of Social Sciences and Humanities, University of Tampere, Finland); Tolvanen, A. (Department of Psychology, University of Jyväskylä, Finland); Salmela-Aro, Katariina, Helsinki Collegium for Advanced Studies, University of Helsinki, Finland
- Youth in training and education negotiating perceived uncertainties of adult life. Tomasik, M. J.; and Silbereisen, R. K., (University of Jena, Germany)
- Beating the odds: Impact of the economic recession on young people in the UK. Duckworth, Kathryn and Schoon, Ingrid (Institute of Education, UK)

In addition, a seminar series focusing on 'Happy Schools' was organised by Katariina Salmela-Aro, with events taking place at the University of Helsinki (during October and November 2011) and at the Finnish Institute in London (February 2012). The events included key note deliveries from PATHWAYS PIs as well as presentations by PATHWAYS Fellows.

Publications

During 2011/12 fifteen papers by PATHWAYS Fellows have been published in learned journals, six papers are in press, and twenty papers have been submitted for publication. In addition nine book chapters have been published or are in press. Furthermore, three books will be forthcoming and a series of four special sections on PATHWAYS to productive youth development will be published in learned journals.

The PATHWAYS network will furthermore publish a series of special issues in different learned journals. Currently four special issues are in progress:

- "School Success". A Special Issue of *The European Psychologist*. Guest Editors: Katariina Salmela-Aro and Ulrich Trautwein.
- "Educational and Occupational Planning and Choice as Core Developmental Tasks during the Transition to Adulthood and across the Life Span." Developmental Psychology, Special Section. Editor: Jacquelynne Eccles
- "School Engagement across Developmental Periods, Contexts, and Cultures". Developmental Psychology, Special Section. Guest Editors: Ming-Te Wang, Katariina Salmela-Aro and Ingrid Schoon
- "Entrepreneurial development: Person and Context". A special issue of International Journal of Developmental Science. Guest Editors: Rainer Silbereisen and Martin Obschonka

Policy engagement

Research conducted by the Fellows and PI's has been well received and was endorsed by key policy makers, including the UK Prime Minister's Strategy Unit (see Kathryn's Duckworth report on linking research and policy); the German Federal Ministry for Education and Research; and the Finnish Ministry of Education. Our research had also attracted media attention in Germany, Finland, the UK and the USA (see for example the contribution bu John Jerrim in issue 4 of the Pathfinder newsletter).

LINKING RESEARCH AND POLICY



Linking Research and Policy

Kathryn Duckworth

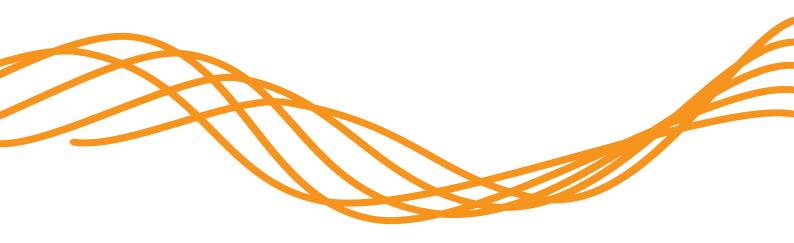
The practical application of social research has always been one of the main driving forces behind my research agenda. Having completed my PhD part-time whilst working full-time for several Government-funded research centres based at the Institute of Education, University of London much of my training and pre-doctoral experience has been based on policy-relevant questions and an emphasis on engagement with and dissemination to policy makers throughout the research process. As a PATHWAYS Fellow, my research continues to maintain strong links to policy, leading to my conducting several small pieces of consultancy work across my areas of expertise for various Government departments and ongoing engagement with policy makers and MPs interested in our research.

For example, my research with Ingrid Schoon on developmental precursors of entrepreneurship was picked up on by Chuka Umanna, MP and Shadow Secretary of State for Business, Innovation and Skills. His office was interested in our work on who becomes an entrepreneur, particularly with respect to intergenerational association. Following several meetings with policy makers from Mr Umanna's office, I was asked to be the keynote speaker at a Roundtable event on Social Mobility amongst Entrepreneurs held at the House of Commons, disseminating our research findings and conclusions to a broad audience including other policy makers, think tank experts, individuals working with young people and several entrepreneurs. Excerpts from this speech and our paper have subsequently been made in speeches, policy reviews and position papers published by Mr Umanna's office and are helping to shape their planned initiatives and policy platforms on economic recovery and growth in the UK. In turn, policy interest in our research provides a clear context for our own future work, for example, particular groups of interest, such as women or older workers, and relevant social policy issues, such as a focus on social mobility amongst entrepreneurs and historical changes in such mobility over time.

Another area of my work has examined the importance of "softer" skills-often referred to as "noncognitive" skills— such as attention-related skills, socioemotional behaviours, self-efficacy and locus of control. Following several publications in this area including in academic journals and Government research reports, as well as newspapers and practitioner magazines, I was seconded to the then Prime Minister's Strategy Unit in the Cabinet Office to lead on the evidence base for a project on young people's development and the skills needed to make a smooth transition to the work place. This placement resulted in the publication by the Department for Education of a new strategy for young people, developed my own thinking about the future directions of my research in this area and a subsequent consultancy within HM Treasury to assess the impact of spending cuts in the youth services.

There are many challenges to linking research and practice. The policy arena moves very quickly, influenced, for example, by politicians, the media and international comparisons, and demands the most current figures when describing changing transitions and patterns of participation etc. The world of academic research. however, generally moves more slowly -- driven by recent findings and an individual's own research agenda - and often has to rely on secondary analysis of previously collected data or recent, cross-sectional only, administrative data. Maintaining close links with policy colleagues throughout the research process, regularly disseminating findings to a variety of audiences and publishing in a range of outlets all help to maximise the impact of research findings their potential links to current and emerging policy areas.

ALUMNI REPORT



Alumni Report

Philip Parker

From 2010 to 2011 I was a PATHWAYS post-doctoral research fellow at the University of Tübingen, Germany under the mentorship of professor Ulrich Trautwein. My time as a fellow was critical in my development as a researcher and in shaping my growing interest in youth development. From a career perspective, my fellowship resulted in seven publications, many in leading education, personality, and developmental psychology journals. Furthermore, the mentorship from Ulrich and the other leading international scholars that were part of the programme helped me develop the research tools needed to produce world class research and an understanding of the complexities of youth development.

On a personal level, the programme developed a passion in me for the challenges that young people, particularly disadvantaged young people, face as they leave school and enter further education or the labour force. This passion has continued to shape my research as I am now working in this area of youth development. This includes conducting research on the postschool educational opportunities and outcomes of Australia's Indigenous populations, one of the most disadvantaged groups in Australia. While I have focused much of my recent research on youth in Australia, the PATHWAYS programme has taught me the importance of understanding youth development in an international context. As such, I am currently part of a research team that is contrasting the role of academic self-concept on achievement in Arabic countries with the experiences of youth in Anglo countries.

Taken together, the PATHWAYS programme provided me with a passion for research focused on understanding the challenges that youth today face as they enter adulthood. Further, the mentorship has helped me develop critical research skills that have made me a valuable member in research teams outside of my PATHWAYS experience. The networks I developed during this time have allowed me to continue doing important research from an international perspective. I am truly grateful for my time in the PATHWAYS Programme. I am a far better researcher today than I was or imagined I could be before entering the programme.

FELLOW PROFILES

Post-doctoral fellows

Håkan Andersson Julia Dietrich Kathryn Duckworth John Jerrim Martin Obschonka Lara Perez-Felkner Katja Upadyaya

Principal investigators

Lars Bergman
Jacque Eccles
Katariina Salmela-Aro
Barbara Schneider
Ingrid Schoon
Rainer K. Silbereisen
Ulrich Trautwein

12

28



Post-doctoral Fellows

Håkan Andersson



I am a Post-Doctoral Research Fellow of the PATHWAYS Programme based at the Department of Psychology, Stockholm University. I started my PATHWAYS fellowship in July, 2012, after defending my thesis. The start of my fellowship has been very positive and collaborations have been initiated with other fellows and PI's. My first project continues and extends my PhD work on self-regulation in childhood, in a related topic investigating the dynamics of *flow* in college students. In this project I worked together with two PATHWAYS Fellows, Yi-Miau Tsai and Julia Dietrich, and with Professor Katariina Salmela-Aro. During my fellowship I will also work on the research project "The adjustment of gifted children in childhood and adulthood" led by my mentor and PATHWAYS PI Lars R. Bergman.

One of my main research interests is to better understand the individual on the individual level by using intensive time-series data and mathematical models to understand the dynamics within each individual. I hope to further develop my knowledge and research within this area during my fellowship.

Current Activities

I am currently working on a project on Flow together with PATHWAYS Fellows Julia Dietrich and Yi-Miau Tsai; as well as with Katariina Salmela-Aro. The first paper: *The Structure and dynamics of flow experience: A person centered approach*, is due to be submitted in autumn 2012. The second paper: *The micro dynamics of daily flow experience*, will follow on from paper 1 and focus on the micro dynamics of the different states described in the first. Possible predictors of these dynamics will also be investigated. Before more detailed plans can be made, relevant variables from the CASS data base has to be created.

I am also working on the STINSEN Project together with Lars R Bergman. The project began in August 2012. The first paper will investigate Competence profiles, the idea is to look at important core aspects of competence and how typical competence profiles relate to adjustment in school and later attainment in adulthood.

Publications

Papers

Kiuru, N., Salmela-Aro, K., Nurmi, J.-E., Zettergren, P., Anderson, H., & Bergman, L. (2012). Best friends in adolescence show similar educational careers in early adulthood. *Journal of Applied Developmental Psychology*, 33, 102-111.

Andersson, H., & Bergman, L. R. (2011). The role of task persistence in young adolescence for successful educational and occupational attainment in middle adulthood. *Developmental Psychology*, 47(4), 950-960.

Research profiles 13

Post-doctoral Fellows

Julia Dietrich



I am a Post-Doctoral Research Fellow based at the Helsinki Collegium for Advanced Studies, University of Helsinki. Beginning in January 2011, after completion of my PhD in Developmental Psychology, I have been working part-time as a PATHWAYS Fellow with Professor Katariina Salmela-Aro. I split my time between two Universities, Helsinki and Erfurt in Germany. My work at both institutions centers on two topics: (1) educational transitions, especially the transition from schooling to working life or higher education, and (2) young people's motivation related to educational and career developmental tasks. I have found it inspiring and enriching to combine my research activities as a PATHWAYS Fellow and at Erfurt University and to capitalize on the diverse learning opportunities these activities offer.

My prior and current research concerns the notion that individuals face various education- and career-related transitions during adolescence that channel their development in many ways. In the literature, age-graded developmental tasks and transitions are commonly seen as triggers for adolescents' intentional efforts towards accomplishment of the current tasks, identity development, or vocational behavior. Various different models can be applied to the questions related to engagement at such transitions, and a major work during the first half of my Fellowship was to review these theoretical approaches, derive common principles, and discuss avenues for future research emerging from the theories' limitations. For this project I have found it a great opportunity to collaborate with PATHWAYS Fellow Philip Parker and Katariina Salmela-Aro. The paper profited from our joint but also slightly diverging areas of expertise, and from the international perspectives we could bring into the paper.

More recently, I have expanded the scope of my research to education-related engagement in a more general sense. Motivation is a core aspect of learning in educational settings, because it affects the intensity of individuals' effort with learning tasks and is related to their emotional experiences during engagement in a certain activities. An intense experience of concentration and energy, that has become a common expression in daily life, is Flow. This motivational state is likely to appear when people experience a match between their skills and the challenge of a certain task. Flow is thought to promote people's long-term commitment to an activity and thus potentially contributes to learning and, in turn, educational choices and success. Again, I have found it fruitful to collaborate with other PATHWAYS Fellows with different backgrounds but a shared interest in the study of micro-developmental data. Yi-Miau Tsai and Håkan Andersson share my interest to study the dynamics of motivational phenomena such as flow.

Finally, I have been doing research on the role of social identities in shaping young people's educational and career development. Having an ethnic minority background is one contextual factor that potentially alters motivation in educational settings. For example, having to negotiate an ethnic identity with one's other social and personal identities imposes an extra challenge for adolescents that adds onto the challenges of making a career choice and managing educational and career transitions. In this regard, I am interested in how different social identities affect the academic and career development of young people with ethnic minority backgrounds.

Current Activities

In my second year as a PATHWAYS Fellow I have continued my research on engagement at career transitions. I have been working on a series of papers with other PATHWAYS Fellows, the FinEdu team in Helsinki, and colleagues from other European universities. My review paper on Phase-Adequate Engagement at the Post-School Transition, co-authored by Philip Parker and Katariina Salmela-Aro is now in press in Developmental Psychology. Several empirical papers accompany this theoretical paper. First, I have been collaborating with Katariina Salmela-Aro and Rens van de Schoot (Utrecht University, the Netherlands) on two papers that focus on the predictors, developmental pathways, and outcomes of the engagement with career-related personal goals in adolescence and young adulthood. Another paper on parents' role in adolescents' career-goal pursuit, co-authored by Katariina Salmela-Aro, is still under review.

Second, I have been collaborating with Lotta Tynkkynen and Mette Ranta (both Helsinki University) on two papers which are as well related to young people's goals at the transition to adulthood. One paper, first authored by Lotta Tynkkynen, examines developmental trajectories of career goal-related success expectations. Another paper, first authored by Mette Ranta, examines profiles of young adults' personal goals with regard to career and romantic relationships. Third, I have written and co-authored two papers with colleagues from the Universities of Jyväskylä (Finland), Ramat Gan (Israel), and Jena (Germany). The first of these papers uses data from Israel to examine the role of personality characteristics in the development of young people's personal goals (not limited to the career domain) at the transition to adulthood. Another paper uses data from Mexico City and focuses on parents' role in adolescents' career exploration. Finally, together with Katariina Salmela-Aro I am currently working on a second review paper which, based on the phase-adequate engagement framework developed in my first theory paper, covers empirical studies on engagement in young adulthood. This review paper is planned to appear in a special issue of the new journal Emerging Adulthood.

During this second year in PATHWAYS I have broadened my research focus to other motivational phenomena and mechanisms relevant to young people's educational success. Doing so, I have started the collaboration with the PATHWAYS Fellows Yi-Miau Tsai and Håkan Andersson. The analyses for our first paper are almost completed, and a second paper is planned to build on the first. To this end, I have planned a research visit at Stockholm University with Håkan Andersson and Lars Bergman.

Moreover, I have worked on a series of studies on the role of social identities for motivation in the education and career domain. I have collected pilot data on the social identities of immigrant college students in Germany. My long-term goal is to write a grant proposal on the intersections of social and personal identities, and the consequences of such identity negotiations on young people's goals and their educational and career pathways.

Selected Publications

Papers related to PATHWAYS

Dietrich, J., Parker, P., Salmela-Aro, K. (in press) Phaseadequate engagement at the post-school transition. *Developmental Psychology*.

Dietrich, J., Salmela-Aro, K. (revise and resubmit)
Parental involvement and adolescents' career
goal pursuit during the post-school transition.
Journal of Adolescence.

Dietrich, J., Salmela-Aro, K., van de Schoot, R. (in preparation) Mastering developmental tasks in the achievement domain: Education and career during the transition to adulthood

Dietrich, J., Salmela-Aro, K. (in preparation) Emerging Adulthood and Phase-Adequate Education to Work Engagement—Review of the Decade

Current projects and planned papers

- Ranta, M., Dietrich, J., Salmela-Aro, K. (in preparation)
 Changing times—Changing goals: Emerging
 adults' developmental goals and concerns at the
 transition to adulthood
- Symonds, J., Chow, A., Dietrich, J., & Salmela-Aro, K. (under review). Effects of transition from compulsory schooling in Finland and England on adolescent mental health.
- Symonds, J., Dietrich, J., Chow, A., & Salmela-Aro, K. (under review). Adolescent mental health development across two age-graded transitions in Finland.
- Tynkkynen, L. Dietrich, J., Salmela-Aro, K. (under review)
 Career Goal-Related Success Expectations
 Across Two Educational Transitions: A 7-Year
 Longitudinal Study

Other publications

- Dietrich, J., Jokisaari, M., & Nurmi, J.-E. (2012). Work-related goal appraisals and stress during the transition from education to work. *Journal of Vocational Behavior*, 80, 82-92.
- Dietrich, J., Lichtwarck-Aschoff, A., & Kracke, B.

 (under review). Deciding on a college major:

 Commitment trajectories, career exploration, and academic well-being.
- Dietrich, J., Shulman, S., & Nurmi, J.-E. (revise and resubmit). Goal pursuit in young adulthood:
 The role of personality and motivation for goal appraisal trajectories across 6 years.
- Komes, J., Dietrich, J., Kracke, B., & Hernández-Guzman, L. (under review). Career-related parenting behaviors and exploration in Mexican adolescents: Variable- and person-centered analyses.
- Schindler, I., Ďietrich, J., & Berg, C. A. (under review).
 Why collaborate with close others when choosing a college major?

Dissemination

ISSBD conference in Edmonton (July 2012): Symposium on "The 'what' and the 'how' of Career Choices: The Role of Motivation at the Post-school Transition" and talk: Pursuit of Career Goals in Secondary School and Beyond (paper presentation)

Mplus user meeting in Utrecht (August 2012), Trajectories of Career Goal Engagement in Secondary School and Beyond (invited talk)

DGPs Conference (German Psychological Society) in Bielefeld (September 2012): Persönliche Ziele in der Berufswahl: Jugendliche am Übergang Schule – Ausbildung/Studium (paper presentation)

Post-doctoral Fellows

Kathryn Duckworth



I am a Post-Doctoral Research Fellow based at the Institute of Education, University of London working with Professor Ingrid Schoon. I began my PATHWAYS Fellowship in April 2011 following completion of my PhD in Education and Social Policy. I did my PhD part-time whilst working for several Government-funded research centres based at the IoE, including secondments to both the Cabinet Office and HM Treasury. In the second year of my fellowship, my research has continued to explore the educational and occupational choices made by young people during the transition to adulthood and across the life span, but has broadened out to encompass cross-country comparisons of the developmental precursors underpinning some of the key pathways to adulthood. My research continues to maintain strong links to policy and I have carried out several small pieces of consultancy work across my areas of expertise for various Government departments.

My interests lie in exploring the different types of transitions made by individuals as they move out of compulsory schooling and into adult life, and, taking a longitudinal perspective, investigating the precursors, consequences and the contextual constraints that may influence such development. I am principally concerned with understanding the psychological and social processes associated with educational and occupational planning and implementation. As such my research is guided by a developmental-contextual approach to individual adjustment and career development, drawing strongly on ecological models of human development which emphasize the role of multiple interacting influences, the developmental integration of earlier levels of adjustment into later ones, and the impact of socio-historical context.

My post-doctoral work continues to extend the work of my PhD which examined the relative importance of different individual competencies and their implications for later outcomes, by exploring in more detail development during adolescence and the relative importance of adolescence compared to earlier developmental periods in shaping the transition to adulthood. I am particularly interested in variation amongst certain sub-groups of the population, most notably those who follow alternative or unexpected pathways. This is reflected in my current research priorities which seek to explore (i) the development of entrepreneurship; and (ii) the transitions made (and outcomes realised) by young people not in education, employment or training (the NEET group). My interest in these groups is further influenced by the current set of constrained economic and labour market circumstances facing today's cohort of young people. In addition, much of my work examines intergenerational associations, the transmission of advantage and social mobility.

Current Activities

My second year as a PATHWAYS Fellow has been even busier than the first. I have published several journal articles, a working paper and co-authored a Russell Sage Foundation book chapter, disseminated my research at a number of conferences and events, including one at the House of Commons, and been part of several successful funding applications. The first in my planned series of papers on entrepreneurship in the British Cohort Studies has been published in Developmental Psychology, another is in press and a further one has recently been submitted. Following interest from individuals at the Department for Business, Innovation and Skills and several Members of Parliament in mine and Ingrid's work on 'who becomes an entrepreneur' (recently published in Developmental Psychology), I met with several policy makers to discuss links between our research, particularly those focussing on intergenerational associations and gender differences in entrepreneurship, and their planned initiatives and policy platforms on economic recovery and growth. Building on this, I was asked to be the keynote speaker at a Roundtable event on Social Mobility amongst Entrepreneurs held at the House of Commons, chaired by Chuka Umanna, MP and Shadow Secretary of State for Business, Innovation and Skills. Our research findings were well received by policy makers, practitioners and entrepreneurs from various sectors and reference to our emerging body of work in this area has subsequently been made in speeches, policy reviews and position papers published by Mr Umanna's office.

I have taken full advantage of the PATHWAYS collaborative research philosophy and have been working closely with another PATHWAYS Fellow, Martin Obschonka and his mentor Rainer Silbereisen, on precursors of entrepreneurship in the UK and Germany. Our paper, in press in a special issue of the International Journal of Developmental Science, investigates the role of early social competencies for entrepreneurial career choice and success across two longitudinal data sets and despite employing different study designs (one is prospective, the other retrospective) and concepts of social competence and definitions of entrepreneurship, we find consistent evidence highlighting the particular importance of early social skills for enterprising behaviour in young adulthood. In addition, I have continued my association with the Center for the Analysis of Pathways from Childhood to Adulthood (CAPCA) based at the University of Michigan and published work on the role of child skills and behaviours in the intergenerational transmission of inequality, comparing the UK, US, Finland and Sweden. This collaboration led to a successful grant award from the National Institute of Health in the US to fund a five-year programme of work exploring the role of child and adolescent skills for adult outcomes across the same four countries. Finally, I have recently published a paper examining the precursors of high school mathematics achievement in the UK and US with co-authors from Carnegie Mellon University, and the Universities of California, Michigan and Chicago. My fellowship experience is about to change, however, as I embark on a new phase in my life: motherhood. The support I have received from both my mentor and the other fellows has been invaluable as I make my own significant adult transition and the flexibility of the programme has meant that my fellowship research agenda can be put on hold, rather than cut short.

Publications

- Schoon, I & Duckworth, K. (2012). Who becomes an entrepreneur? Early life experiences as predictors of entrepreneurship. *Developmental Psychology*. DOI.10.1037/a0029168
- Siegler, R. S., Duncan, G.J., Davis-Kean, P.E., Duckworth, K. et al. (2012). Precursors of High School Mathematics Achievement. *Psychological Science*. DOI: 10.1177/0956797612440101
- Duckworth, K., Duncan, G.J., Kokko, K., Lyyra, A-L., Metzger, M. & Simonton (2012). The relative importance of adolescent skills and behaviors for adult earnings: A cross-national study.

 Department of Quantitative Social Science Working Paper 2012-03. London: Institute of Education, University of London.
- Duncan, G.J., Bergman, L., Duckworth, K., Kokko, K.,
 Lyyra, A-L., Metzger, M., Pulkkinen, L. &
 Simonton, S. (2012). The Role of Child Skills and
 Behaviors in the Intergenerational Transmission
 of Inequality: A Cross-National Study. In J.
 Ermisch, M. Jäntti, & T. Smeeding & (Eds.),
 From Parents to Children: The Intergenerational
 Transmission of Advantage. Russell Sage
 Foundation: New York.
- Obschonka, M., Duckworth, K., Schoon, I. & Silbereisen, R. (in press). Social competence in childhood and adolescence and entrepreneurship in young adulthood: A two-study analysis. International Journal of Developmental Science.

- Duckworth, K. & Cara, O. (in press). The relationship between adult learning and wellbeing: Evidence from the 1958 National Child Development Study (Research Report). London: Department for Business, Innovation and Skills.
- Duckworth, K. & Schoon, I (submitted). Developmental precursors of career success among entrepreneurs and employees.
- Duckworth, K. & Schoon, I (submitted). Beating the odds: Impact of the economic recession on young people in the UK. National Institute Economic Review
- Duckworth, K., Duncan, G.J., Kokko, K., Lyyra, A-L., Metzger, M. & Simonton (submitted). The relative importance of adolescent skills and behaviors for adult earnings: A cross-national study. American Economic Journal: Applied Economics.
- Davis-Kean, P.E., Duckworth, K., Susperreguy, M. I., & Chen, M. (in preparation). The Developmental of Maths Skills in Middle Childhood: The mediating roles of self concept.
- Siegler, R. S., Duncan, G.J., Davis-Kean, P.E., Duckworth, K. et al. (in preparation). The Developmental of Maths Skills in Middle Childhood: The mediating roles of non-cognitive skills and school structure.

- Duckworth, K. Vignoles, A. & Schoon, I. (in preparation).

 Leaky taps in post-compulsory education:

 Patterns of participation and outcomes for late dropouts.
- Schoon, I., Duckworth, K. & Bukodi, E (in preparation).
 A transgenerational model of education participation.

Dissemination

- Duckworth, K. & Schoon, I. (July 2012). Social mobility and entrepreneurship in the UK: Evidence from the 1958 and 1970 cohort studies. Roundtable on Social Mobility: House of Commons, London.
- Duckworth, K. (April, 2012). The educational and occupational experiences of London's youth: Evidence from the LSYPE. London Consultative Group, Institute of Education.
- Duckworth, K. (February, 2012). An overview of the LSYPE and what we've learnt about young people's participation. Presentation to Her Majesty's Treasury.
- Duckworth, K. (February, 2012). Beating the odds:
 The impact of economic recession on young
 people in the UK. Anglo-Finnish Conference
 on Transitions to Adulthood. Finnish Institute,
 London. 15 February, 2012.
- Duckworth, K. & Schoon, I. (September, 2011).

 Who becomes an entrepreneur? Early life experiences as predictors of entrepreneurship. Society for Life Course and Longitudinal Studies: Biennial Meeting · Bielefeld, Germany. September 26 28, 2011.

Media Coverage

- Coverage of: Siegler, R. S., Duncan, G.J., Davis-Kean, P.E.,
 Duckworth, K. et al. (2012). Precursors of High
 School Mathematics Achievement. Psychological
 Science. www.education.gov.uk/inthenews/
 speeches/a00211545/schools-minister-nickgibb-speaks-at-the-acme-conference?utm_
 source=twitterfeed&utm_medium=twitter
 www.telegraph.co.uk/education/
 educationnews/9390294/Schools-Minister-rotelearning-vital-to-boost-maths-skills.html
- "Getting on with business: Entrepreneurship and social mobility". Speech by Chuka Umunna, MP, Shadow Business Secretary. Westminster, 26th June 2012. www.labour.org.uk/chuka-umunnaspeech-to-hub-westminster, 2012-06-26

Research profiles 19

Post-doctoral Fellows

John Jerrim



I am working at the Institute of Education and have recently taken up a post as Lecturer in Economics and Social Statistics. My research interests include: Economics of education, the transition from school to higher education and the labour market, access to higher education, intergenerational mobility and cross-national comparisons and educational achievement and inequalities.

Current activities

Over the last year I have been successful in both publishing my work in academic journals and disseminating results to a wide audience. I have also obtained external funding from the British Academy to work on a new project entitled 'University access amongst socio-economically disadvantaged groups – A comparison across Anglophone countries'. This has involved close collaboration with other members of the PATHWAYS Programme, including those from the University of Michigan and Michigan State University. The PATHWAYS programme has been instrumental in the success I have had over the past year, and will continue to play an important role in my career development. This year the BBC and the Financial Times have both covered my research and I have also been interviewed on BBC Radio 5.

Publications

- Jerrim, J. (2011). The wage expectations of UK students: are they realistic? *Fiscal Studies*. 32(4), 483 509.
- Jerrim, J. (2012) "The socio-economic gradient in teenagers' literacy skills: how does England compare to other countries?", Fiscal Studies, 33 (2), 159 – 184.
- Jerrim, J. and Micklewright, J. (2012) "Parental socioeconomic status and children's cognitive achievement at ages 9 and 15: how do the links vary across countries?", in J. Ermisch, M. Jantti and R. Erikson (eds) Inequality from Childhood to Adulthood: A Cross-National Perspective on the Transmission of Advantage, New York: Russell Sage Foundation.
- Jerrim, J. and Vignoles, A. (in press) "Social mobility, regression to the mean and the cognitive development of high ability children from disadvantaged homes", Journal of the Royal Statistical Society (series A).

Dissemination

Dissemination activities have included presentations at the Institute for Fiscal Studies (www.ifs.org.uk/publications/6223) I have also presented findings at the Sutton Trust social mobility summit, which was attended by a number of leading British MPs (Nick Clegg, Michael Gove and Ed Miliband).

Media coverage

- The BBC: "Bright pupils from poor backgrounds lag two years behind rich", June 2012, www.bbc.co.uk/news/education-18644830
- BBC Radio 5 on the Victoria Derbyshire show, 29th June 2012, www.bbc.co.uk/programmes/b01k75f2
- Financial Times: "Unemployment set to impede social mobility", 29th June 2012, www.ft.com/cms/s/0/3eabaab0-c12f-11e1-8179-00144feabdc0. html#axzz24vsj6qQ6
- The BBC: "'No evidence' for England's schools falling behind", 7th December 2011, www.bbc.co.uk/ news/education-16054654

Post-doctoral Fellows

Martin Obschonka



I am a Post-Doctoral Research Fellow based at the Center for Applied Developmental Science, University of Jena, Germany working with Professor Rainer K. Silbereisen. I began my PATHWAYS Fellowship in January 2011 following completion of my PhD in Psychology (Title: "Entrepreneurship as developmental outcome: The entrepreneurial process and the life span perspective of human development"). In my dissertation I examined developmental pathways towards successful entrepreneurship in adulthood, with a special focus on early developmental precursors in adolescence (e.g., early entrepreneurial competencies), the personality structure, and stimulating contexts (e.g., parenting style, role models).

In my post-doctoral work within the PATHWAYS programme I extend my PhD work and continued to explore developmental aspects of entrepreneurship and possible precursors in adolescence. Informed by developmental-contextual perspective that bases on a modern understanding of developmental science, after which human development is characterized by transactions at and between all levels of human development (biological, neural, behavioural, and contextual levels), I am working on both the theoretical advancement and empirical studies to deduce practical implications (e.g., concerning early promotion of entrepreneurial mindsets). I conducted several cross-national comparison studies (e.g., using datasets from the U.S., the UK, and Germany) in order test the cultural validity of theories and to replicate findings in different contexts.

The PATHWAYS programme enabled me to use different (longitudinal) datasets from various countries (e.g., provided by the PI's), to improve my statistical skills with respect to longitudinal analyses, structural equation modelling, and cross-national comparisons (e.g., by offering workshops), to attend (and present my research at) international conferences, and to participant in larger international networks (e.g., research collaborations). These fantastic resources have put my research career and my work on entrepreneurial development across the life span on a higher level and I am grateful for this support.

Current activities

Together with Rainer K. Silbereisen, I am publishing a Special Issue on entrepreneurial development, with contributions by entrepreneurship researchers, developmentalists, sociologists, economists, and psychologists. This Special Issue is another PATHWAYS production (with contributions by three PI's and two fellows). Within my current PATHWAYS work I will have a research stay at the University of Stockholm, Sweden, and will work with Lars Bergman on the IDA longitudinal dataset, which covers childhood, adolescence, and early and middle adulthood of a Swedish cohort. Using this dataset, I will investigate new research questions dealing with entrepreneurial development across the life span.

Another research area that I became interested in during my post-doctoral studies is social and economic change and human development. Together with Rainer K. Silbereisen, I have written articles on the positive side of the current macro-trends (e.g., increasing learning opportunities, more self-determination), using large-scaled datasets from Germany and Poland. Focussing on these two countries, I have also conducted a cross-national comparison study to look at patterns of new everyday demands arsing from social and economic change. Together with a work sociologist, I am currently working on the topic of job insecurity and everyday demands of social and economic change.

Beside my research, I have been engaged in several other activities during my fellowship. For example, I co-organized a workshop for the International Union of Psychological Science (IUPsyS) and the German Academic Exchange Service (DAAD) on bereavement research and practice in Tbilisi, Georgia. Other activities included teaching at my university and reviewing for international journals and national science foundations (Dutch and Romanian science foundations). My key research findings on entrepreneurial development were disseminated to a broader audience in a research review published in Academy of Management Perspectives and in a German newspaper article (Thüringer Landeszeitung).

Publications

- Obschonka, M., Silbereisen, R. K., & Schmitt-Rodermund, E. (2012). Explaining entrepreneurial behavior: Dispositional personality traits, growth of personal entrepreneurial resources, and business idea generation. *The Career Development Quarterly,* 60(2), 178-190.
- Obschonka, M., Silbereisen, R. K., & Wasilewski, J. (2012).
 Constellations of new demands concerning careers and jobs: Results from a two-country study on social and economic change. *Journal of Vocational Behavior*, 80, 211-223.
- Obschonka, M., Goethner, M., Silbereisen, R. K., & Cantner, U. [2012]. Social identity and the transition to entrepreneurship: The role of group identification with workplace peers. *Journal of Vocational Behavior*, 80, 137-147.
- Obschonka, M., Silbereisen R. K., & Schmitt-Rodermund, E. (2011). Successful entrepreneurship as developmental outcome: A path model from a life span perspective of human development. European Psychologist, 16 (3), 174-186.
- Goethner, M., Obschonka, M., Silbereisen, R. K., & Cantner, U. (2012). Scientists' transition to academic entrepreneurship: Economic and psychological determinants. *Journal of Economic Psychology*, 33 (3), 628-641.
- Stuetzer, M., Obschonka, M., & Schmitt-Rodermund, E. (in press). Balanced skills among nascent entrepreneurs. *Small Business Economics*. doi: 10.1007/s11187-012-9423-2
- Obschonka, M. & Silbereisen, R. K. (submitted)
 Psychological adjustment and the work life
 in times of social and economic change: The
 interplay between negative and beneficial
 everyday manifestations of change.
- Obschonka, M., Duckworth, K., Silbereisen, R. K., & Schoon, I. (submitted) Social competencies in childhood and adolescence and entrepreneurship in young adulthood: A two-study analysis.
- Obschonka, M., & Schmitt-Rodermund, E. (submitted)
 The Big Five traits and the gender gap in
 entrepreneurship.
- Obschonka, M., Schmitt-Rodermund, E., Silbereisen, R. K., Gosling, S. D., & Potter, J. (submitted)
 The regional distribution and correlates of an entrepreneurial personality profile in the U.S., Germany, and the UK: A socioecological perspective.

- Obschonka, M., Silbereisen, R. K., Cantner, U., & Goethner, M. (submitted) Self-identity and entrepreneurial intentions.
- Obschonka, M. & Silbereisen, R. K. (submitted).

 Entrepreneurship from a developmental science perspective. Editorial for the Special Issue "Entrepreneurial development: Person and context".
- Stuetzer, M., Obschonka, M., Brixy, U., Sternberg, R., & Cantner, U. (submitted) Examining the black box between regions and individual early-stage entrepreneurship: The role of opportunity perception
- Krause, A., Obschonka, M., & Silbereisen, R. K. (in preparation) Social change and individual job insecurity: Investigating the role of new demands of social change.

Dissemination

- 30th International Congress of Psychology (ICP) 2012 (July 2012), Cape Town, South Africa: Obschonka, M., & Silbereisen, R. K. "The interplay between positive and negative individual-level effects of social and political change". (Talk)
- Babson College Entrepreneurship Research Conference (June 2012), Fort Worth, TX, USA: Obschonka, M., Schmitt-Rodermund, E., Silbereisen, R. K., Gosling, S. D., & Potter, J. "Towards a geography of entrepreneurial personality".
- Babson College Entrepreneurship Research Conference (June 2012), Fort Worth, TX, USA: Stuetzer, M., Obschonka, M., & Schmitt-Rodermund, E. "Balanced skills among nascent entrepreneurs".
- European Association of Work and Organisational Psychology (EAWOP) Small Group Meeting "Advances in the Psychology of Entrepreneurship" (June 2012), Sheffield, UK: Obschonka, M., Stuetzer, M., & Goethner, M. "An entrepreneurial Big Five profile matters, but why?".

Media coverage

Thüringer Landeszeitung: "Studie der Uni Jena zum Erfindergeist auf der Schulbank" 28th June 2011, http://www.tlz.de/startseite/ detail/-/specific/Studie-der-Uni-Jena-zum-Erfindergeist-auf-der-Schulbank-1837693927

Post-doctoral Fellows

Lara Perez-Felkner



I am a new Assistant Professor of Higher Education in the Department of Educational Leadership and Policy Studies in the College of Education at Florida State University in the United States. I am also a Research Affiliate with the Population Research Center and the Joint Centers for Education Research at NORC at the University of Chicago. My research examines the social context of schools in relation to adolescents' college and career outcomes, with a particular focus on the mechanisms underlying racial-ethnic and gender disparities in postsecondary educational attainment and entry to careers in STEM fields.

Recently I completed my tenure as an Associate Fellow of the PATHWAYS Programme, working under the mentorship of Barbara Schneider at Michigan State University. My postdoctoral research focused on transitions to higher education and careers. During my fellowship year, I held an American Educational Research Association Research Grant to examine my dissertation research findings using nationally representative longitudinal data and was recently a semi-finalist for the NaEd/Spencer Postdoctoral Fellowship Program.

I am extremely appreciative of the support that I have gained for methodological and theoretical development in my fellowship. It has been tremendously helpful to make these connections to both junior and senior colleagues around the world who are at the top of the field in expertise in youth development. Although geographical and family commitments did not allow me to participate in the PATHWAYS workshops until Fall 2011, I have learned a tremendous amount in this past year and am engaged in new and on-going collaboration with colleagues in the programme, as well as being better positioned now to pursue additional collaborations through my connections at my new university. The support I have received from my mentor, the other junior fellows, and the senior fellows has been tremendously valuable, and I hope to pay this forward and share what I have learned in the training of my own mentees.

Current activities

The postdoctoral research primarily pertained to factors that either impede or foster increased participation of underrepresented groups in STEM education research and careers. In particular, I have led a programme of empirical research utilizing ELS and NELS data to explore gendered differences in factors that influence females' and underrepresented minority high school students' interest and persistence in STEM education and careers. A series of papers investigate gender differences in STEM disciplines.

"What Happens to High-Achieving Females after High School? Gender and Persistence on the Postsecondary STEM Pipeline" by Perez-Felkner, McDonald, and Schneider is forthcoming in Gender Differences in Aspirations and Attainment (edited by Schoon and Eccles). A second paper by this team (and Erin Grogan), "Female and Male Adolescents' Subjective Orientations in Mathematics and Their Influence on Postsecondary Majors," has been published in a 2012 special issue of Developmental Psychology (ISI Impact Factor: 3.412). A third paper, "It's Not 'Leaking Out' but 'Switching In'" is in preparation for submission to Science. I am also leading an extended version of this study, with more complex models, which we will submit in fall 2013 to Educational Researcher. In addition, we are revising a manuscript based on conference papers presented in 2011 and 2012 that examined the differential effects of engagement, math engagement in particular, on females' and males' pathways to specific scientific and technical majors.

Turning from gender to race-ethnicity, issues pertaining to underrepresented minorities are addressed in a chapter published in Black Educational Choice in a Climate of School Reform: Consequences for K-12 Student Learning and Development (published November, 2011 from Praeger Press). In "The Changing Landscape for Educational Opportunity: Enhancing the Public Option for Black Youth," Perez-Felkner, Schneider, and Hedberg examine the effect of expanded school choice on matriculation to four-year colleges, finding that, nationally, students in schools of choice do not have greater access to these colleges than their peers in traditional public schools. I also received an invitation to revise and resubmit a paper on underrepresented students' transitions to college for Teachers' College Record.

The findings from this research activity on U.S. adolescents' postsecondary opportunities have been and continue to be presented at national and international conferences.

Publications

- Perez-Felkner, L., McDonald, S., Schneider, B., and Grogan, E. [2012]. "Female and Male Adolescents' Subjective Orientations in Mathematics and Their Influence on Postsecondary Majors." Special issue on "Occupational planning and choice as developmental tasks across the life span." Developmental Psychology.
- Perez-Felkner, L. (submitted) "How Youth Experience Social Support: Building Underrepresented Adolescents' Resilience for the Transition to College.", Teachers College Record.
- Perez-Felkner, L. (submitted) "Tempering Stereotype Threat: Aspirations toward Higher Education among Latino Leadership Students." Race, Ethnicity, and Education.
- Perez-Felkner, L., Felkner, J., Taub, R.P., and Papachristos, A. (in revision) "Evaluating Neighborhood Integration in Chicago, 1970-2000." American Journal of Sociology.
- Perez-Felkner, L., Nakamura, J., and Schneider, B.

 (under review) "Conceptualizing Engagement:
 Implications for Understanding Gender
 Differences in Mathematics-Related Fields."
 , selected for submission to special issue
 of European Psychologist.Book / Handbook
 Sections

Book chapters

Perez-Felkner, L. (2013, expected). "Occupational Aspirations/Expectations." J. W. Ainsworth & G. J. Golson (Eds.), *Sociology of Education*. Thousand Oaks, CA: Sage Publications.

- Perez-Felkner, L. (2013, expected). "Racial Inequality: Returns to Educational Investments." J. W. Ainsworth & G. J. Golson (Eds.), Sociology of Education. Thousand Oaks, CA: Sage Publications.
- Perez-Felkner, L. (2013) "Socialization in Childhood and Adolescence." In J. DeLamater (Ed.), *Handbook* of Social Psychology, 2nd edition: Springer Publishing.
- Perez-Felkner, L. "Achievement Differences and Gender in Science Education." In R. Gunstone (Ed.), Springer Encyclopedia of Science Education. New York: Springer Publishing.
- Perez-Felkner, L. "Attitude Differences and Gender in Science Education." In R. Gunstone (Ed.), Encyclopedia of Science Education. New York: Springer Publishing.
- Perez-Felkner, L., Hedberg, E.C., and Schneider, B. (2011).

 "The Changing Landscape for Educational
 Opportunity: Enhancing the Public Option
 for Black Youth" in Black Educational Choice:
 Assessing the Private and Public Alternatives to
 Traditional K-12 Public Schools. Eds.: SlaughterDefoe, D., Stevenson, H., Arrington, E., and
 Johnson, D. Praeger Press.
- Perez-Felkner, L., McDonald, S. and Schneider, B.
 (Forthcoming). "What Happens to HighAchieving Females after High School? Gender
 and Persistence on the Postsecondary STEM
 Pipeline" in *Gender Differences in Aspirations*and Attainment. Eds: Schoon, I. and Eccles, J.
 Cambridge University Press.

Dissemination

Perez-Felkner, L. (2012) "Viewing their Potential through the Actions of Others: Underrepresented Minorities and the Path to College." American Sociological Association Annual Meeting, Denver, CO.

Perez-Felkner, L., McDonald, S., and Schneider, B.

(2012) "Gendered Differences in Engagement
and Pathways to STEM Careers." American
Educational Research Association Annual
Meeting, Vancouver, Canada.

I presented papers at the 2011 American Sociological Association Meeting, 2012 Eastern Sociological Society Meeting, 2012 AERA Annual Meeting, the fall 2011 and spring 2012 Pathways to Adulthood Fellows Workshops, and multiple invited presentations at research universities. Further dissemination at major conferences is planned for this summer and the coming year. I am awaiting a decision about a paper submission for the October Society for Research on Child Development special meeting on Transitions to Adulthood. Additional conference paper submissions are planned for the 2013 AERA and ASA annual meetings as well as the 2013 Society for Research in Educational Effectiveness (SREE) meeting.

Research profiles 25

Post-doctoral Fellows

Katja Upadyaya



I have been working as a research investigator at the Achievement Research Program, Research Center for Group Dynamics (RCGD), Institute for Social Research (ISR), University of Michigan where my focus is on the contextual factors influencing students' STEM-related motivation and career aspirations. I am focusing especially on the role of teachers and classroom environments on students' motivation and aspirations in STEM. At the same time I am continuing my research at the University of Helsinki where I have been conducting research on school engagement among Finnish adolescents and young adults. The focus has been especially on the transition from post-comprehensive studies to higher education or work, and how students' engagement develops over the transition, and what student- and family-related factors may predict students' engagement.

Current activities

I have prepared and further submitted several manuscripts concerning my research at the University of Michigan and University of Helsinki. Next year I am planning to attend some international congresses, such as SRCD where I am planning a symposium with my international collaborators.

Publications

Upadyaya, K., Viljaranta, J., Nurmi, J.-E., Lerkkanen, M.-K., & Poikkeus, A.-M. (2012). Cross-lagged relations between preschool teachers' causal attributions and children's interest value and performance in math. Social Psychology of Education: An International Journal, 15, 181-206.

Salmela-Aro, K. & Upadyaya, K. [2012]. School engagement inventory: Reliability and validity. European Journal of Psychological Assessment, 28, 60-67

Principal Investigators

Lars Bergman



Lars Bergman is professor emeritus in longitudinal methodology and research strategy at the Department of Psychology, Stockholm University. He also is the former head of the Stockholm Laboratory for Developmental Science and the longitudinal research programme, Individual Development and Adaptation (IDA).

Current activities

A new project is currently underway and is financed mainly by a research grant from the Swedish Royal Academy of Sciences. It is also supported by the PATHWAYS Programme through funding of PATHWAYS Fellow Håkan Andersson. The project concerns the long term development and career outcomes of highly intelligent children. Four broad aims of the project can be summarized by the following research questions: 1. Does society make "optimal" use of its talented youth? 2. To what extent do their careers depend on gender and parental socioeconomic status?, 3. How do these highly intelligent children adjust through development in comparison to normally intelligent children?, and 4. What is the role of recurrent education in picking up "wasted talents"? IDA data will be used that are highly suitable for the purpose for several reasons, the main ones being a. A large representative sample (about 1300 children) is studied with very low sample attrition, b. The design is longitudinal with an unusually long follow up from age 10 to midlife with numerous data collections also covering adolescence and early adulthood, and c. The availability of highly reliable IQ measurements from several ages, also before any streaming in school has occurred. The project group consists of Lars Bergman, Håkan Andersson, Ola Andersson, Jelena Corovic, Peter Zetterström, Laura Ferrer Wreder, and Linda Wänström. The project is now in full gear and cooperation is planned with other PATHWAYS senior researchers and post docs using both IDA data and British databases.

As part of a PATHWAYS collaboration using Rainer Silbereisen's and Martin Obschanka's research on entrepreneurship, Dr Obschonka, PATHWAYS Fellow at University of Jena, will come to Sweden in October to enlarge their project by analyzing IDA data in collaboration with Stockholm (especially with Magnus Sverke).

During the past academic year, Professor Bergman has continued his collaboration with Katariina Salmela-Aro and her former PATHWAYS Fellow, Miia Bask. Based on IDA data we examine gendered expectations regarding educational and occupational outcomes in middle adulthood. In Stockholm the lead in this work is now taken by Dr. Laura Ferrer Wreder with a new focus being on the importance of the interaction between the parents' and the children's own expectations for career outcomes.

In collaboration with, among others, Andras Vargha, Reformed Church University, Budapest, Alexander von Eye, Michigan State University, and Jari-Erik Nurmi, University of Jyväskylä, Professor Bergman has for many years carried out methodological research concerning the development and implementation of person-oriented methods aimed to be used in PATHWAYS research. Such methods enable us to study developmental patterns and capture more of the functioning individual "as a whole" than is possible with standard variable-oriented methods. An empirical research field within PATHWAYS that will especially profit from these methodological developments is the study of the long-term importance of children's competence profiles. For instance, recent research based on data from the Swedish IDA program has pointed to the primary importance of high task persistence in the competence profile for men's vocational career. This area is now a central part of Håkan Andersson's post doctoral work.

Reflections on Phase I of the PATHWAYS Programme

Phase I of the PATHWAYS Programme has been very rewarding for us in several ways. Promising collaborative research has been started, especially concerning the role of parental aspirations for career outcomes and the study of the long-term development of highly intelligent children. In addition to myself, two of the researchers in my group (Håkan Andersson and Laura Ferrer Wreder) have been included in the PATHWAYS network and brought into close contact with the exciting research within the field of youth development conducted by the Programme. I have no doubt that this will lead to several productive research collaborations that will advance the field beside the ongoing collaborations mentioned previously. I believe the benefit also has been mutual since our methodological work about the person-oriented research can enhance productivity in a new direction where the growing individual is set in the center and not the variable, as is the case in mainstream research. After all, it is the individual and not the variable that develops. Especially for the PATHWAYS Fellows it is important to add such methods to their toolbox. The Swedish IDA database is also almost tailored to the research needs of the Programme since it contains data from a large representative cohort of Swedish youth, followed from age 10 to midlife. A stronger emphasis on the developing individual is also important from a policy perspective simply because it makes common sense and because findings emerging with this orientation are more communicable to policy makers, etc.

Selected Publications

- Bergman, L. R. (2012). Advancing developmental science: Some challenges and obstacles. *International Journal of Developmental Science*, 6, No. 1-2, 41-43
- Bergman, L. R. (2011). The interpretation of single observational units' measurements. In M.
- Carlson, H. Nyquist, & M. Villani (Eds.), Official statistics:

 Methodology and applications in honour of Daniel
 Thorburn, (pp. 37-49). Stockholm: University
 of Stockholm
- Bergman L. R, Nurmi J-E, & von Eye, A. A. (2012).

 I-states-as-objects-analysis (ISOA): Extensions of an approach to studying short-term developmental processes by analyzing typical patterns. International Journal of Behavioral Development, 36, 237-246.
- Modig, K. & Bergman, L. R. (2012). Associations between intelligence in adolescence and indicators of health and health behaviors in midlife in a cohort of Swedish women. *Intelligence*, 40, 82-90
- Andersson, H. & Bergman, L. R. (in press). The role of task persistence in young adolescence for successful educational and occupational attainment in middle adulthood. *Developmental Psychology*.

Principal Investigators

Jacque Eccles



Prof. Jacquelynne Eccles is the McKeachie/Pintrich Distinguished University Professor of Psychology and Education at the University of Michigan. She is also director of the Achievement Research Laboratory at the Institute for Social Research, where she directs three large-scale longitudinal studies on youth development – which are used by the PATHWAYS Fellows in comparative studies to similar projects in Finland, the UK, and Germany. She and Dr. Schneider continue their collaborative and comparative work with a new NSF grant which studies the developmental trajectories linked to STEM and other occupational choices. This grant will allow the work begun in 2011 with an NSF REESE grant to continue and expand. The grant funds collecting follow up data on Eccles' data set. The work on these three projects continues to involve Yi-Miau Tsai former PATHWAYS Fellow and Katja Upadyaya former associate PATHWAYS Fellow.

Current activities

Eccles continues to work directly with the PATHWAYS Fellows and associate fellows. She has also edited a special section for the journal Developmental Psychology on educational and occupational pathways in which several PATHWAYS projects are reported. The special section should be published by the end of 2012. She has also continuing work with Ingrid Schoon on the edited book on Gender Roles and Life Span Development that is due to be published in 2013.

This year she received an Honorary Degree from the University of LAVAL in Quebec City, Canada and became an fellow of the IOE at the University of London. She was a plenary keynote speaker at the biennial meeting of European Society for Child Development held in Bergen Norway and gave the keynote address at the European Association for Research on Adolescence in Greece in August 2012 and another keynote address at the VhTo meeting of Gender and Stem Network being held in Amsterdam in September 2012. Finally, she was elected President-Elect of Division 7 (Developmental Psychology) of the American Psychological Association.

Reflections on Phase I of the PATHWAYS Programme

It has been a wonderful experience for me to participate in the PATHWAYS Programme. It has given me the opportunity to develop stronger ties with the other faculty members, as well as to work with an outstanding set of Post-Doctoral Scholars. The research we are doing has opened up new areas of study for me and I have learned a great deal from the other faculty and scholars in the programme. I want to thank the Jacobs Foundation for giving me and all of us these opportunities.

Publications

- Sainz, M. & Eccles, J. (2011). Self-concept of computer and math ability: Gender implications across time and within ICT studies. Journal of Vocational Behavior, 80, 486-499.
- Wang, M. T., & Eccles, J. S. (2012). Adolescent behavioral, emotional, and cognitive engagement trajectories in school and their differential relations to educational success. *Journal of Research on Adolescence*, 22, 31-39.
- Wang, M. T., Willett, J. B., & Eccles, J. S. (2011). The assessment of school engagement: Examining dimensionality and measurement invariance across gender and race/ethnicity. *Journal of School Psychology*, 49, 465-480.
- Fuller-Rowell, T. E., Cogburn, C., Brodish, A.B., Peck, S., Malanchuk, O., & Eccles, J. S. (in press). Racial discrimination and substance use: Longitudinal associations and identity moderators. *Journal of Behavioral Medicine*.
- Brodish, A. B, Cogburn, C. D., Fuller-Rowell, T.E., Peck, S., Malanchuk, O., & Eccles, J.S. (in press). Perceived racial discrimination as a predictor of health behaviors: The moderating role of gender. *Race and Social Problems*.
- Fuller-Rowell, T. E., Doan, S. N., & Eccles, J. S. (in press). Differential effects of perceived discrimination on the diurnal cortisol rhythm of African Americans and Whites. *Psychoneuroendocrinology*

- Wang, M. T., & Eccles, J. S. (in press). Social support matters: Longitudinal effects of social support on three dimensions of school engagement from middle to high school. *Child Development*.
- Wang, M. T., Brinkworth, M., & Eccles, J. S. (in press).

 The moderation effect of teacher-student relationship on the association between adolescents' self-regulation ability, family conflict, and developmental problems.

 Developmental Psychology.
- Fredricks, J. A., Alfeld, C., & Eccles, J. S. (in press).

 Developing and fostering passion in academic and non-academic domains. *Gifted Child Quarterly.*

Invited Addresses

- Keynote address at the Annual Jacobs Foundation Young Fellows Retreat (April 2011)
- Annual International Collegium Lecture at the Helsinki Collegium for Advanced Studies (April 2011)
- Keynote address, Festschrift for Aletha Huston, Austin Texas [May 2011]
- Keynote address, 6th Biennial Self Conference, Quebec City (June 2011)
- Presentation to the School of Engineering at UM on Expectancy Value Model
- Keynote address 2nd World Congress of Positive Psychology, Philadelphia (July 2011)
- Keynote address at Annual Policy Forum at Macalester College, Minneapolis, Minn. (October 2011)
- November Hannah Lecture, Michigan State University (November 2011)
- Invited Lecture, UC, Irvine (February 2012)
- Invited Lecture, Dundee University, Dundee Scotland [March 2012]
- Keynote Address at Pre-meeting of Jean Piaget Society Biennial Meeting, Toronto, Canada (May 2012)
- Brofenbrenner Award at APA, Orlando, Florida (August 2012)
- Keynote address, EARA, Greece (August 2012)

Principal Investigators

Katariina Salmela-Aro



Prof. Katariina Salmela-Aro is professor and Research Director in the Helsinki Collegium for Advanced Studies. She is director of two longitudinal studies FinEdu and HELS on school and work engagement, transitions, burnout and transition to the labour market or tertiary education. She is also a PI in the several intervention studies such as TOWARDS WORK LIFE and LINNEA.

Prof. Salmela-Aro's main research interests include life transitions, motivation, wellbeing, burnout, engagement and related interventions. In addition she has developed several methods for research and intervention purposes such as school burnout and engagement scales.

Current activities

Over the last year, Prof. Salmela-Aro has mentored Julia Dietrich; as well as Angela Chow and Jennifer Symonds who completed their fellowships at the end of 2011.

She organised a series of three Happy School seminars and one methodological workshop which involved many of the PATHWAYS Fellows. The seminar series was supported by the Jacobs Foundation, Academy of Finland and the Finnish national Graduate school of Psychology. The first seminar "Peers and School" took place in the Helsinki Collegium for Advanced Studies in the University of Helsinki in October 2011. The seminar brought together prominent and emerging researchers to share new methodological ideas, innovative approaches and advances in the current topic of peer relationships, processes and the influences of selection, who influences whom.

The second seminar focused on the School context and took place at the Helsinki Collegium for Advanced Studies in November 2011. Two outstanding keynotes were given by Professor Jürgen Baumert, from the MPI Berlin and Professor Ulrich Trautwein, University of Tuebingen, Germany. The third seminar looked at "Adolescence in the 21st century - Current debates in Finland and the UK." It took place in February 2012 at The Finnish Institute in London. The aim of the seminar was to bring together researchers and policy makers from Finland and the UK working with topics related to adolescence in the 21st century. The seminar addressed the questions of how adolescents negotiate their paths to adulthood in the two countries, and how policy and media approach these issues. There are many challenges at the moment which hit the younger generation hard, such as recession, unemployment, immigration, and challenges related to school and further education and thus it was very timely topic. Finally, a methodological seminar on Structural Equation Modeling (SEM) was held in 2012 in the Helsinki Collegium for Advanced Studies given by Amiram Vinokur from the ISR, University of Michigan.

Policy Contributions and media coverage

Prof. Salmela-Aro continues to collaborate with the Ministry of Education and Institute of Occupational Health. Salmela-Aro's work has also been covered in the media and had an article published on the front page of Helsingin Sanomat about school burnout in August 2012.

Reflections on Phase I of the PATHWAYS Programme

My team and I have been very busy and engaged with the PATHWAYS Programme over the last four years and we really appreciate the academic activities and the network for young scholars. The networking is certainly an enriching experience and it would be worthwhile to develop a model on the mentoring process of young scholars across cultures at the postdoctoral level.

Publications

- Feldt, T., Hyvönen, K. & Kinnunen, U., Salmela-Aro, K. (2012). Do work ability and job involvement channel later personal goals in retirement? An eleven-year follow-up study. International Archives of Occupational and Environmental Health, 85 (5), 547-58
- Kiuru, N., Burk, W.J., Laursen, B., Nurmi, J.-E., &. Salmela-Aro, K. (2012). Is depression contagious? A test of alternative peer socialization mechanisms of depressive symptoms in adolescent friendship networks. Journal of Adolescent Health, 50 (3), 250-5
- Kiuru, N., Salmela-Aro, K., Nurmi, J., Anderson, H. & Bergman, L. (2012). Best Friends in Adolescence Show Similar Educational Careers in Early Adulthood. Journal of Applied Developmental Psychology, 33 (2), 102-111
- Marttinen, E. & Salmela-Aro, K. (2012). Personal goal orientations and subjective well-being of adolescents. *Japanese Psychological Research*, 54 (3), 263-273
- Parker, P.D. & Salmela-Aro, K. (2011). Developmental Processes in School Burnout: A Comparison of Major Developmental Models. *Learning and Individual Differences* 21(2), 244-248.
- Pyhältö, K., Pietarinen, J. & Salmela-Aro, K. (2011).

 Teacher-working environment fit as a framework for burnout experienced by Finnish teachers. *Teaching and Teacher Education*, 27 (7), 1101-1110
- Salmela-Aro, K., Read, S., Nurmi, JE, Vuoksimaa, E. Siltala, M., Dick, D., Pulkkinen, L., Kaprio, J. & Rose, R. (2012). Personal Goals and Personality Traits among Young Adults: Genetic and Environmental Effects. *Journal of Research in Personality*, 46 (3), 248-257
- Salmela-Aro, K. & Tynkkynen, L. (2012). Gendered Pathways in School Burnout among Adolescents. *Journal of Adolescence*, 35 (4), 929-939
- Salmela-Aro, K., Ek, E., Taanila, A. & Chen, M. (2012) Role configurations in young adulthood, antecedents, and later well-being among Finns born in 1966, Journal of Longitudinal and Life course studies, 3 (2)
- Salmela-Aro, K., Read, S. Korhonen, T., Vuoksimaa, E., Rose, R. & Kaprio, J. [2012] Young Adults Developmental Task-related Goals Modify the Association between Self-focused Goals and Depressive Symptoms. *Applied Psychology: Health and Well-Being*, 4 [1], 106-125

- Salmela-Aro, K., Mutanen, P. & Vuori, J. (2012). Promoting career preparedness and intrinsic work-goal motivation: RCT Intervention. *Journal of Vocational Behavior*, 80 (1), 67-75
- Salmela-Aro, K. (2012) Transition to parenthood and positive parenting: Longitudinal and intervention approaches. European Journal of Developmental Psychology, 9 (1), 21-32
- Salmela-Aro, K. & Upadyaya, K. (2012). Schoolwork engagement inventory – energy, dedication and absorption (EDA). European Journal of Psychological Assessment, 28 (1), 60-67
- Salmela-Aro, K., Feldt, T., Rantanen, J., Hyvönen, K. & Tilleman, K. (2011). Bergen Burnout Inventory (BBI) Reliability and Validity among Finnish and Estonian Managers. International Archives of Occupational and Environmental Health, 84 (6), 635-45
- Tomasik, M. & Salmela-Aro, K. (2012). Knowing when to let go at the entrance to university: Beneficial effects of compensatory secondary control after failure. *Motivation and Emotion*, 36 (2), 170-179
- Tuominen-Soini, H., Salmela-Aro, K. & Niemivirta, M. (2012) Achievement Goal Orientations and Academic Well-Being across the Transition to Upper Secondary Education. *Learning and Individual Differences*, 22 (3), 290-305
- Tuominen-Soini, H., Salmela-Aro, K., Niemivirta, M. (2011). Stability and change in achievement goal orientations: A person-centered approach. Contemporary Educational Psychology, 36, 82-100.
- Chow, A., Eccles, J. & Salmela-Aro, K. (in press). Task value profiles across subjects and aspirations to physical and IT-related sciences in the United States and Finland. *Developmental Psychology*.
- Dietrich, J., Parker, P. & Salmela-Aro, K. (in press)
 Phase-Adequate Engagement at the PostSchool Transition, *Developmental Psychology*.
- Kähönen, K., Näätänen, P. & Salmela-Aro, K. (in press).
 Development of Sense of Coherence during Two
 Group Interventions. Scandinavian Journal of
 Psychology.
- Ranta, M., Punamäki, R., Tolvanen, A & Salmela-Aro, K (in press). The Role of Financial Resources and Agency in Success and Satisfaction Regarding Developmental Tasks in Early Adulthood Contemporary Perspectives of Family Research.
- Rodrigo, M., Reed, S. & Salmela-Aro, K. (in press).
 Individual and group effects in a community-based implementation of a parenting program.
 Research on Social Work Practice.

- Salmela-Aro, K. (in press). Academic expectations and wellbeing from school to work during the economic downturn. New Directions for Youth Development.
- Tolvanen, A., Kiuru, N., Hakkarainen, K., Lonka, K., Inkinen, M & Salmela-Aro, K. (in press)
 Estimation of Nonlinear Growth Component in Multilevel Modeling: A Research Application in the Daily Dynamics of Competence, Challenge and Affects. International Journal of Behavioral Development.
- Tynkkynen, L., Tolvanen, A. & Salmela-Aro, K. (in press).
 Trajectories of Educational Expectations from
 Adolescence to Young Adulthood in Finland.
 Developmental Psychology.
- Tynkkynen, L., Vuori, J. & Salmela-Aro, K. (in press).

 The Role of Psychological Control and
 Socioeconomic Status in Parents' Educational
 Aspirations for Their Adolescent Children.
 European Journal of Developmental Psychology.
- Vasalampi, K., Nurmi, J.-E., Jokisaari, M & Salmela-Aro, K. (in press). The Role of Goal-Related Autonomous Motivation, Effort and Progress in the Transition to University. European Journal of Educational Psychology.

Presentations

Prof.Salmela-Aro gave several invited talks, such as in the ISSBD 2012 on life-span development. She also gave several talks in Finland, such as "How to promote engagement during career?" and the Jubilee keynote at the Large scale Career counselling society. She organized several symposiums, including School engagement at EADP in Bergen where many of the PATHWAYS Fellows presented their work; and one at the EARA conference in Greece.

Research profiles 33

Principal Investigators

Barbara Schneider



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. Dr. Schneider is the principle investigator of the College Ambition Program (CAP), a study that tests a model to create a STEM college-going culture in four treatment and four control high schools that encourages adolescents to pursue STEM majors in college and occupations in these fields. She is also co-principal investigator of the Michigan Consortium for Educational Research (MCER), collaboration between the Michigan Department of Education, Michigan State University, and the University of Michigan to assess the implementation and impact of two key reforms in Michigan designed to work in tandem to promote college attendance and workplace success. These two reforms involve increasing the number of required rigorous academic courses students are expected to complete in high school and a college scholarship program for students meeting specific academic and admission test score criteria. This collaboration uses state administrative data and also includes an intensive study of 150 high schools in the state that were selected to represent a generalizable sample of schools and students in the state of Michigan.

Dr. Schneider worked for 18 years at the University of Chicago, holding positions as a Professor in Sociology and Human Development and as a senior researcher at NORC. Currently, she continues to hold an appointment as a senior fellow at NORC, where she is the principal investigator of the Center on Advancing Research in Communication (ARC) in Science Technology, Engineering, and Mathematics funded by the National Science Foundation (NSF). ARC provides technical assistance to NSF investigators and works collaboratively with NSF staff on a variety of projects, the most recent to develop a set of standards for improving the methodological rigor of federally funded educational research projects in STEM. Recently, she was awarded funds to continue to develop metrics for measuring high quality research and its impact within the academy, in practice, and policy arenas. In spring 2012 she was voted president- elect of the American Educational Research Association (AERA) and will begin to server her term as president in spring 2013.

Current Activities

Dr. Schneider has mentored and worked with PATHWAYS associate fellow Dr. Lara Perez-Felkner. Her particular area of interest is the determinants of underrepresentation of females and minority groups in specialized fields in postsecondary education. Funding for Perez-Felkner's participation was contributed by Schneider through a grant at NORC at the University of Chicago. Dr. Perez-Felkner recently accepted a position as an assistant professor in the Department of Educational Leadership and Policy Studies in the College of Education at Florida State University, a Carnegie research I university. This year they worked on multiple publications and presentations that examine trends and patterns in adolescent and youth development and their transition to adulthood.

Schneider has also spent much of the last year working with her staff and graduate students at Michigan State University to further the work of the College Ambition Program (CAP). Over this summer Schneider was awarded additional funds from the National Science Foundation as well as funds from the National Institutes of Health to continue her work with CAP and will be in eight treatment and 32 control high schools in Michigan this coming school-year.

The work on MCER has brought national attention as one of the most successful collaborative consortiums working to solve major educational policy questions. In fall of 2012, MCER will be hosting a major conference presenting the first round of findings from this work.

Schneider and Professor Jacque Eccles received a grant from NSF to study early predictors of interest in STEM. This is work that exemplifies the PATHWAYS model, in that it combines datasets from two empirical studies to examine early interest in career choices through adolescents into adulthood. She and two of her doctoral students have continued to work with Dr. Eccles and her team and are preparing to launch a study using the Experience Sampling Method (ESM) to track participants of her earlier study, the Sloan Study of Youth and Social Development to examine the patterns of career trajectories among this nationally representative population. It is expected that this work will provide new insights into how early predictors of achievement, values, and social context influence adult career choices.

Schneider has also continued her work with the Center for the Analysis of Pathways from Childhood to Adulthood (CAPCA), the goal of which is to stimulate innovative, interdisciplinary analyses and interpretations of existing longitudinal datasets bearing on pathways through human development—as part of this initiative she completed a new manuscript with two other CAPCA researchers.

Policy contributions and media coverage

This fall (2012) Dr. Schneider, along with her colleagues at the State Department of Education and the University of Michigan, through the MCER project, are planning to release initial findings from the study of the Michigan Merit Curriculum that could potentially have great impact on the state's curriculum policy. Dr. Schneider's work was quoted extensively in the US media including articles in the Los Angeles Times, Science Daily and USA Today. She was also interviewed for National Public Radio in Washington D.C.

Awards

This year Dr Schneider received the University Distinguished Professor Award, the Elizabeth G. Cohen Distinguished Career in Applied Sociology of Education and is President Elect American Educational Research Association (AERA)

Reflections on Phase I of the PATHWAYS Programme

Over the course of the last four years, the PATHWAYS co-principal investigators were fortunate to work with an outstanding group of Fellows who have gone on to the next steps in their careers. The success of the original group and the opportunities it provided young scholars to work collaboratively, suggested the importance of expanding the number of fellows by including in the next phase associate fellows who would work on similar problems but be partially funded through other grants. Ms. Perez-Felkner is an excellent example of how this new policy worked and how it has positively influenced her career and collaborative work with other fellows. I hope to bring on at least one more associate fellow through the MCER grant this next year who is interested in youth development.

One of the most exciting outcomes of Phase I has been a new collaboration between the University of Helsinki and MSU. Through PATHWAYS, we were able to share not only ideas but also methodologies. In a recent initiative between the science directorates in the U.S. and Finland, major collaborative work is being undertaken. Part of this larger project will be a study between the University of Helsinki and MSU that will fund potentially two additional associate fellows and methodological work that is being developed with an engineer at Google. The interest of Google in how we understand engagement and its impact on achievement, interest, and values greatly enhances the significance of our work. The seeds of this work grew directly from the collaborative opportunities provided through the PATHWAYS project.

This summer I was also able to host a PATHWAYS associate fellow at MSU and as a result he was able to use my restricted data laboratory that contains a wide variety of restricted national and international longitudinal datasets. Providing these types of opportunities for young scholars to visit and take advantage of the resources in multiple universities will only add to our understanding of youth development into adulthood.

As president elect of AERA I hope to continue to raise the profile of the PATHWAYS project both in the U.S. and in the international AERA association and its affiliates. This programme, which began with a small number of fellows, is undoubtedly having a wider influence than I ever envisioned and I look forward to continuing to work with my colleagues and our fellows.

Publications

- Crosnoe, R., Benner, A. D., & Schneider, B. Drinking, socioemotional functioning, and academic progress in secondary school. (2012) Journal of Health and Social Behavior, 53 (2), 150-164
- Perez-Felkner, L., Hedberg, E.C., and Schneider, B. (2011). The Changing Landscape for Educational Opportunity: Enhancing the Public Option for Black Youth" in Black Educational Choice:

 Assessing the Private and Public Alternatives to Traditional K–12 Public Schools. Eds.: Slaughter-Defoe, D., Stevenson, H., Arrington, E., and Johnson, D. Praeger Press.
- Schneider, B., Judy, J. and Mazuca, C. (2012) Boosting STEM interest in high school. *Phi Delta Kappan* 94 (1): 62-65
- Judy, J., Mazuca, C., & Schneider, B. (Forthcoming).
 Solving the College Mismatch Process:
 Importance of High School Norms and Values.
 Handbook on Higher Education Admission Policy
 and Practice. New York: Peter Lang Publishers.
- Judy, J. & Schneider, B. (Forthcoming) Policy in the United States, Domain: Education. Oxford Bibliographies Online. New York: Oxford Press, http://www.oxfordbibliographies.com/
- Schneider, B., Judy, J., & Burkander, K. (Forthcoming). Schools. In J. McLeod, E. Lawler, and M. Schwalbe (Eds.), *Handbook of the Social Psychology of Inequality*. New York: Springer.
- Perez-Felkner, L., McDonald, S., Schneider, B., and Grogan, E. (in press). "Female and Male Adolescents' Subjective Orientations in Mathematics and Their Influence on Postsecondary Majors." Special issue on "Occupational planning and choice as developmental tasks across the life span." Developmental Psychology.

- Perez-Felkner, L., McDonald, S. and Schneider, B.
 [Forthcoming]. "What Happens to HighAchieving Females after High School? Gender
 and Persistence on the Postsecondary STEM
 Pipeline" in *Gender Differences in Aspirations*and Attainment. Eds: Schoon, I. and Eccles, J.
 Cambridge University Press.
- Schneider, B., Judy, J., Mazuca, C., & Broda, M.
 (Forthcoming). Trust in Elementary and
 Secondary Urban Schools: A Pathway for
 Student Success and College Ambition. In D.
 Van Maele, M. Van Houtte, & P. Forsyth (Eds.),
 Trust Relationships and School Life. New York:
 Springer.

Presentations

- Schneider, B., Judy, J., & Khawand, C. (2012, June).

 The College Ambition Program: Improving opportunities for High School Students

 Transitioning to College. Paper presented at the conference for the National Center for Scaling-Up Effective Schools, Vanderbilt University.
- Schneider, B., Khawand, C., & Judy, J. (2012, April).
 The College Ambition Program: Challenges of
 Scaling-Up With Small Samples. Presented in
 a Presidential Session at the annual meeting of
 the American Educational Research Association,
 Vancouver, B.C.
- Schneider, B. (2012, April 2). A Different View on Ogbu's Theory of Oppositional Culture. Presented at Princeton University, Princeton, NJ.
- Schneider, B. (2012, March 26). The College Ambition Program: Transitioning into Postsecondary School. Presented at New York University, New York, NY.
- Schneider, B., Khawand, C., & Judy, J. (March 2012).

 The College Ambition Program: Improving opportunities for High School Students

 Transitioning to College. Paper presented at the spring conference of the Society for Research on Educational Effectiveness, Washington D. C.

- Schneider, B. (2012, March 12). Causal Inference Workshop. Presented at the National Science Foundation, Washington, D.C.
- Schneider, B., Khawand, C., & Judy, J. [2012, January].

 Improving Postsecondary Outcomes for Low
 Income Students: The College Ambition Program.

 Paper presented at the "Transitions" conference
 for the Research Committee on Sociology
 of Education (RC04) of the International
 Sociological Association, Tampa, FL.
- Schneider, B. (2011, October 11). Transitioning into STEM
 Careers. Presented at the Reinventing Michigan
 Through Education Conference, Kalamazoo,
 Michigan.
- Schneider, B. (2011, September 26). Designing a Study for Scale-Up: The College Ambition Program (CAP).

 Presented at the University of Pennsylvania,
 Graduate School of Education, Philadelphia, PA.

Research profiles 37

Principal Investigators

Ingrid Schoon



Prof. Ingrid Schoon is the Director of the PATHWAYS International Fellowship Programme, and Research Director of the Centre for the Study of Youth Transitions (CAYT) funded by the UK Department for Education. Her research is focused on variations in transitions from dependent childhood to independent adulthood, in particular the study of transitions from school to work, social inequalities in aspirations, attainment, and health, as well as the study of risk and resilience and how to overcome potentially adverse circumstances.

Current activities

She is currently mentoring two PATHWAYS Fellows Kathryn Duckworth and John Jerrim (who has now been appointed as a lecturer in Economics and Social Statistics at the Institute of Education, University of London). During the last academic year she has co-organised a PATHWAYS workshop at the University of Michigan (with Prof. Jacque Eccles) and a workshop at the University of Jena (with Prof. Rainer Silbereisen). Together with Prof. Katariina Salmela-Aro and Ming-Te Wang she is involved as guest editor of a special section on school engagement in Developmental Psychology, and with Martin Obschonka, Rainer Silbereisen and Kathryn Duckworth she has collaborated on a paper examining social competencies in childhood and adolescence and entrepreneurship in young adulthood. Together with Julia Dietrich she has organized a symposium for the 2012 ISSBD conference in Edmonton. In collaboration with Jacque Eccles she is finalizing work on the edited book on Gender Roles and Life Span Development that is due to be published in 2013. She participated in one of the Happy School Seminars organized by Katariina Salmela-Aro.

Her work as the research director of the Centre for the Analysis of Youth Transitions (CAYT), funded by the Department of Education, involves interdisciplinary collaboration with the Institute for Fiscal Studies (Paul Johnson), the National Centre for Social Research (Carli Lessof), and colleagues from the IoE (Anna Vignoles). She is furthermore a co-applicant for the Centre for the Study of Learning and Lifechances in the Knowledge Economies (Llakes), which has received follow-on funding for the next 5 years from the Economic and Social Research Council (ESRC). Her work for the Llakes Centre is done in collaboration with Andy Green, Lorna Unwin, and Karen Evans (all at the Institute of Education), and Martin Weale (Bank of England). Together with Jennifer Maggs, Jeremy Staff (Penn State University) and John Schulenberg (University of Michigan) she has received funding from the NIH to conduct a study on 'Prevalence, Predictors, and Consequences of Alcohol Use from Childhood to Midlife'.

Advisory Roles and Policy Contributions

During the last year Prof. Schoon has provided expert advice to the Department for Education, Department for Health, and the Department for Work and Pensions.

Reflections on Phase I of the PATHWAYS Programme

Bringing together early career researchers from different countries, engaging them in collaborative research and to see their research profile expand and their national and international recognition grow is a very rewarding experience. As the world becomes increasingly interconnected, universities in different parts of the world need to be closely linked so as to reap the best benefits for education and research. The PATHWAYS Programme facilitates meetings and workshops among researchers, but the collaborative sparks must come from the ground. Due to the intensive mentoring programme and continous exchange of ideas and approaches between researchers and institutions we were able to create synergies and a team spirit, which is vital to ensure research collaborations and network building. Building on the success of the 'PATHWAYS to Adulthood' programme, we aim to create a critical mass of Fellows and associated outputs, and to place the international and comparative study of positive human development firmly on the research agenda of academic institutions and the radar of policy makers. While post-doctoral research careers are generally fragmented at local, national or sectoral level, without an integrative structure, the PATHWAYS Fellows

are part of a pioneering group of researchers building international networks and alliances for future collaborations. The programme offers mentorship and career guidance which can serve as a model for other post-doctoral training schemes, where fellows receive feedback and guidance not only from one mentor, but are exposed to international faculty at different institutions or from different disciplines.

Publications

- Law, J., Rush, R., Parsons, S., & Schoon, I. (in press).

 The relationship between gender, receptive vocabulary and literacy from school entry through to adulthood. *International Journal of Speech-Language Pathology*.
- Schoon, I. (in press). Planning for the future in times of social change. *Child Development Perspectives*.
- Schoon, I., Gutman, L. M., & Sabates, R (in press). Is uncertainty bad for you? It depends.... New Directions in Youth Development.
- Gutman, L. M., Sabates, R., & Schoon, I. [2012]. Uncertain aspirations for continuing in education:
 Antecedents and associated outcomes.
 Developmental Psychology. doi: 10.1037/a0026547
- Gutman, L. M., & Schoon, I. (2012). Correlates and consequences of uncertainty in career aspirations: Gender differences among adolescents in England. *Journal of Vocational Behavior*, 80(3), 608-618.
- Schoon, I., Chen, M., Kneale, D., & Jager, J. (2012). Becoming adults in Britain: Lifestyles and wellbeing in times of social change. Longitudinal and Life Course Studies, 3(2), 173-189.
- Schoon, I., & Duckworth, K. (2012). Who Becomes an Entrepreneur? Early Life Experiences as Predictors of Entrepreneurship. *Developmental Psychology*, doi: 10.1037/a0029168.
- Schulenberg, J.E. & Schoon, I. (2012). The transition to adulthood across time and place. Introduction to special section. *Longitudinal and Life Course Studies*, 3(2), 164-172.
- Ashby, J., Schoon, I. & Webley, P. (2011). Save now, save later? Linkages between saving behaviour in adolescence and adulthood. *European Psychologist*, 16(3), 227-237
- Cheng, H., Bynner, J., Wiggins, R. & Schoon, I. (2011). The Measurement and Evaluation of Social Attitudes in Two British Cohort Studies. *Social Indicators Research* (6 May 2011), pp. 1-21.
- Parsons, S., Schoon, I., Rush, R., & Law, J. (2011). Long-term Outcomes for Children with Early Language Problems: Beating the Odds. *Children & Society*, 25(3), 202-214.

- Schoon, I., & Cheng, H. (2011). Determinants of Political Trust: A Lifetime Learning Model. *Developmental Psychology*, 47(3), 619-631.
- Schoon, I., Jones, E., Cheng, H., & Maughan, B. [2011]. Family hardship, family instability and children's cognitive development. *Journal of Epidemiology and Community Health.* doi:10.1136/jech.2010.121228
- Schoon, I., Jones, E., Cheng, H., & Maughan, B. [2011].
 Resilience in children facing poverty and family disadvantage: Evidence from the UK Millennium Cohort, *ISSBD Bulletin*, 59 (1), 5-8
- Schoon, I., & Polek, E. (2011). Teenage career aspirations and adult career attainment: The role of gender, social background and general cognitive ability. *International Journal of Behavioral Development*, 35(3), 210-217.
- Schoon, I., & Polek, E. (2011). Pathways to Economic Well-Being Among Teenage Mothers in Great Britain. European Psychologist, 16(1), 11-20.

Research profiles 39

Principal Investigators

Rainer K. Silbereisen



Prof. Rainer K. Silbereisen is Chair of Developmental Psychology and Director of the Center for Applied Developmental Science (CADS) at the University of Jena, Germany. He is also Adjunct Professor at the Pennsylvania State University, USA. He is principle investigator in an 8 year project on the effect of social change on individual behavior and development in Germany. An affiliate project is under way in Poland and related research has been conducted in Italy and China. An additional study on obstacles against civic participation among young people is under way. Further he is Director of an international and interdisciplinary consortium on acculturation and immigration in Germany and Israel. He is involved in heading a research programme on entrepreneurship and its early antecedents, conducted together with economists. Finally, he has been in charge together with colleagues in various studies on the prevention of the use of psychoactive substances in adolescence and prevention through community empowerment. His main research interest is life span human development, framed within a biopsychosocial paradigm, with special emphases on adolescence, adulthood, and aging. Many studies have addressed the role of interpersonal, social and cultural contexts. He is Past-President of the International Union of Psychological Science (IUPsyS), the umbrella organization of about 80 national scientific organizations of psychology around the globe.

Current activities

Over the last year Prof.Silbereisen has advised and collaborated with PATHWAYS Fellow Martin Obschonka on entrepreneurship research and collaborated with a future post-doctoral fellow, Maria K. Pavlova on social change and civic engagement. He also worked as president of IUPsyS for improvement of conditions for research and practice on social change by teaming-up with foundations.

Policy contributions

Prof. Silbereisen has been developing policy recommendations concerning psychology education and training worldwide. He has enabled an international survey on the topic and organized an international conference discussing all relevant topics, from curriculum to accreditation and licensing. He has also been working on an edited book on psychology education and training that will be distributed widely, with the aim of improving the reputation of psychology among international bodies.

Awards

This year Professor Silbereisen was given the International Society for the Study of Behavioral Development (ISSBD): 2012 Distinguished Scientific Award for the Applications of Behavioral Development Theory and Research

Reflections on Phase I of the PATHWAYS Programme

I believe that the PATHWAYS Programme has been a successful coordinated activity. The next phase will invest more energy and funds to establish sustainable institutional effects on training and education.

Publications

Brenick, A., Titzmann, P., Michel, A., & Silbereisen, R. K. (2012). Perceptions of discrimination by young Diaspora migrants: Individual- and school-level associations among adolescent ethnic German immigrants. *European Psychologist*, 17, 105-119.

Pavlova, M. K. & Silbereisen, R. K. (2012). Perceived level and appraisal of the growing expectations for active ageing among the young-old in Germany. *Research on Aging*, 34, 80-99.

Pavlova, M. K. & Silbereisen, R. K. (2012). Age, cumulative (dis)advantage, and subjective well-being in employed and unemployed Germans:

A moderated mediation model. *Journal of Occupational Health Psychology*, 17, 93-104.

- Koerner, A., Reitzle, M., & Silbereisen, R. K. (2012).

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- Haase, C. N., Heckhausen, J., & Silbereisen, R. K. (in press). The interplay of occupational motivation and well-being during the transition from university to work. *Developmental Psychology*.
- Goethner, M., Obschonka, M., Silbereisen, R. K., & Cantner, U. (in press) Scientists' transition to academic entrepreneurship: Economic and psychological determinants. *Journal of Economic Psychology.*
- Michel, A., Titzmann, P. F., & Silbereisen, R. K. (in press).

 Language shift among adolescent ethnic

 German immigrants: Predictors of increasing

 use of German over time. *Journal of Intercultural*Relations.
- Obschonka, M., Goethner, M., Silbereisen, R. K., & Cantner, U (in press). Social identity and the transition to entrepreneurship: The role of group identification with workplace peers Journal of Vocational Behavior
- Obschonka, M., Silbereisen, R. K., & Schmitt-Rodermund, E. (in press). Enterpreneurial intentions as developmental outcome. *Journal of Vocational Behavior.*

- Obschonka, M., Silbereisen, R. K., & Schmitt-Rodermund, E. (in press). Successful entrepreneurship as developmental outcome: A path model from a life span perspective of human development. European Psychologist.
- Obschonka, M., Silbereisen, R. K., & Wasilewski, J. (in press). Constellations of new demands concerning careers and jobs: Results from a two-country study on social and economic change. *Journal of Vocational Behavior.*
- Pavlova, M. K., Haase, C. M. & Silbereisen, R. K. (in press).

 Early, on-time, and late behavioural autonomy in adolescence: Psychosocial correlates in young and middle adulthood. *Journal of Adolescence*.
- Pavlova, M. & Silbereisen, R. K. (in press). Dispositional optimism fosters opportunity-congruent coping with occupational uncertainty. *Journal of Personality*.
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- Pinquart, M & Silbereisen, R. K. (in press). Youth in Europe. In M. H. Bornstein (ed.), Handbook of cross-cultural developmental science. Hove, UK: Psychology Press/Taylor&Francis
- Pinquart, M., Silbereisen, R.K. & Gruemer, S. (in press).

 Perceived demands of social change and
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 Ambivalence in decisions about childbearing.

 Journal of Reproductive and Infant Psychology, 28,
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- Titzmann, P. F. & Silbereisen, R. K. (in press).

 Acculturation or development? Autonomy expectations among ethnic German immigrant adolescents and their native German agemates. Child Development.

- Tomasik, M. J. & Silbereisen, R. K. (in press). Social change and political context. In A. Michalos (ed.), *Encyclopedia of quality of life research*. Heidelberg/New York: Springer.
- Weichold, K. & Silbereisen, R. K., (in press). Peers vs. teachers as facilitators of a life skills program. Sucht.

Presentations

- R. K. Silbereisen. Social Change and Human
 Development: Recent Research on the
 Consequences of Political Change and
 Globalization. Presentation at the Caribbean
 Regional Conference of Psychology, Nassau,
 Bahamas. November 2011
- M. Spaeth, K. Weichold & R. K. Silbereisen. The
 Development of Leisure Boredom in Early
 Adolescence: Predictors and Associations
 with Problem Behaviors in a German Sample.
 Presentation at the Society for Research on
 Adolescence, 14th Biennial Meeting, Vancouver,
 Canada, March 2012.
- R. K. Silbereisen & M. J. Tomasik. Belastet und unbeschwert – Person und Kontext bei der Bewältigung von Anforderungen der neuen Zeit. SFB Abschlusskonferenz, June 2012.
- R. K. Silbereisen & A. Brenick. Leaving (for) Home:

 Understanding Return Migration from the
 Diaspora. Invited Symposia at the International
 Society for the Study of Behavioral Development
 2012 Biennial Meeting, Edmonton, Canada, July,
 2012.
- R. K. Silbereisen. Social Change and Human Development. IUPsyS Presidential Address at the International Congress of Psychology, Cape Town, South Africa, July 2012.
- R. K. Silbereisen & P. F. Titzmann. Acculturation of diaspora migrants. IUPsyS Presidential Symposium at the International Congress of Psychology, Cape Town, South Africa, July 2012.

Principal Investigators

Ulrich Trautwein



Prof. Ulrich Trautwein is professor at the Institute for Educational Science at the University of Tübingen. Trautwein is director of two multi-cohort longitudinal studies on school achievement, development of personality, and transition to the labor market or tertiary eduation: the project on Transformation of the Secondary School System and Academic Careers (TOSCA) and the study on Tradition and Innovation in the structure and organization of schooling (TRAIN). He is also a PI in the German National Educational Panel Study (NEPS). Trautwein's 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.

Current activities

Over the last year, Prof. Trautwein has been mentoring Philip Parker, the PATHWAYS post-doctoral fellow based at the University of Tübingen, and two PhD candidates Anna-Lena Dicke and Richard Göllner. Several collaborative projects with PATHWAYS PIs and Fellows were started or continued, including collaborations with the University of Helsinki, the Institute of Education London, the University of Jena, and the University of Michigan. Several papers are now in press or are under review by leading journals in the field. Trautwein's PATHWAYS related work primarily focuses educational transitions as well as the effects of different learning environments on achievement, aspirations, and choices.

This year Prof. Trautwein's published several new papers on PATHWAYS related topics, especially from obligatory school to work/post-secondary education and collaborative ties with other PATHWAYS PIs were strengthened. A new research project was started that will compare transitions in Switzerland and Germany. Trautwein is also chair of a new educational research network in the State of Baden-Württemberg which will focus school-to-work transitions. There was also major progress in terms of capacity building; most importantly Prof. Trautwein was successful in a grant application for a Graduate School within the Excellence Initiative of the Federal and State Governments in Germany.

Policy contributions and media coverage

The ongoing research programme has not only resulted in a number of publications over the last year but has also had direct policy implications and has been covered extensively in the German print media. Over the last year, there was a special emphasis on (1) the results of a study that compared the transition to traditional university vs. more practically oriented higher education institutions and (2) the results of a study that examined the impact of military service on personality development.

Trautwein serves as a member of an expert group that reports to the Federal Ministry of Education and Research and the Standing Committee of the State Ministers for Education which is, among other things, overseeing the progress of the Nationale Bildungsbericht (National Report on Education).

Reflections on Phase I of the PATHWAYS Programme

PATHWAYS Programme Phase I was a highly successful, inspiring work period. There were several aspects that positively impacted our work at Tübingen, including the international focus, the interdisciplinary context, the support for post-doc students; and the concentration on highly important, policy relevant research questions. PATHWAYS Phase I was a perfect possibility to explore highly innovative ways of post-doc training, an issue that is largely neglected in Germany.

Publications

- Dumont, H., Trautwein, U., Lüdtke, O., Neumann, M., Niggli, A. & Schnyder, I. [2012]. Does parental homework involvement mediate the relationship between family background and educational outcomes? Contemporary Educational Psychology, 37, 55-69.
- Goetz, T., Nett. U. E., Martiny, S. E., Hall, N. C., Pekrun, R., Dettmers, S., & Trautwein, U. (2012). Students' emotions during homework: Structures, self-concept antecedents, and achievement outcomes. *Learning and Individual Differences*, 22, 225-234.
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- Marsh, H.W., Lüdtke, O., Nagengast, O., Trautwein, U., Morin, A. J. S., Abduljabbar, A.S. & Köller, O. (2012). Classroom climate and contextual effects: Conceptual and methodological issues in the evaluation of group-level effects. Educational Psychologist, 47, 106-124.
- Becker, M., Lüdtke, O., Trautwein, U., Köller, O., & Baumert, J. (in press). The differential effects of school tracking: Do academic-track schools make students smarter? *Journal of Educational Psychology*.
- Goos, M., Schreier, B., Knipprath, H., De Fraine, B., Van Damme, J., Trautwein, U. (in press). How can cross-country differences in the practice of grade retention be explained? A closer look at national educational policy factors. Comparative Education Review.
- Jackson, J. J., Thoemmes, F., Jonkmann, K., Lüdtke, O., & Trautwein, U. (in press). Military training and personality trait development: Does the military make the man or does the man make the military? *Psychological Science*.
- Kramer, J., Zettler, I., Thoemmes, F., Nagy, G.,
 Lüdtke, O. & Trautwein, U. (in press).
 Stellen Hochschultypen differenzielle
 Entwicklungsmilieus dar? Eine PropensityScore-Analyse zu den Effekten des
 Hochschulbesuchs. Zeitschrift für
 Erziehungswissenschaft.
- Neumann, M., Trautwein, U., & Nagy, G. (in press). Do central examinations lead to Greater Grading comparability? A study of frame-of-reference effects on the university entrance Qualification in Germany. Studies in Educational Evaluation.

- Nagy, G., Trautwein, U., & Maaz, K. (in Druck).
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 Ende der Sekundarstufe I: Struktur,
 Spezifikation und der Zusammenhang
 mit Gymnasialzweigwahlen. Zeitschrift für
 Pädagogische Psychologie.
- Parker, P. D., Lüdtke, O., Trautwein, U., & Roberts, B. W. (in press). Personality and relationship quality during the transition from high school to early adulthood. *Journal of Personality*.
- Parker, P. D., Schoon, I., Tsai, Y.-M., Nagy, G., Trautwein, U. & Eccles, J. (in press). Achievement, agency, gender, and socioeconomic background as predictors of postschool choice: A multi-context study. *Developmental Psychology*.
- Sälzer, C., Trautwein, U., Lüdtke, O. & Stamm, M. (in press). Predicting adolescent truancy: The importance of distinguishing between different aspects of instructional quality. *Learning and Instruction*.
- Trautwein, U., Marsh, H.W., Nagengast, B., Lüdtke, O., Nagy, G. & Jonkmann, K. (in press). Probing for the multiplicative term in modern expectancy-value theory: A latent interaction modeling study. *Journal of Educational Psychology*.
- Zettler, I., Kramer, J., Thoemmes, F., Nagy, G. & Trautwein, U. (in press). Welchen Einfluss hat der Besuch unterschiedlicher Hochschultypen auf den frühen beruflichen Erfolg? Eine explorative Untersuchung. Zeitschrift für Pädagogische Psychologie.

Presentations

Trautwein gave a large number of presentations for researchers, politicians, school authorities, school headmasters, and teachers. He also gave a talk in Prof. Salmela-Aro's "Happy School" series.



PATHWAYS 7th workshop in Jena, Germany in May 2012









The mission of the Pathways to Adulthood Programme is to stimulate innovative, interdisciplinary, and comparative research of productive youth development.

