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and social research
Institute of Education
University of London



Writing Workshop
16-22 May 2011
Villa Lante al Gianicolo, Rome



Meeting Sponsored by the Jacobs Foundation

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Welcome

Dear Colleagues

On behalf of the Jacobs Foundation I like to welcome you to the fifth Pathway Workshop at the Institutum Romanum Finlandiae, at the Villa Lante in Rome. The aim of the workshop is to engage with the work of the post-doctoral Fellows, to provide feedback and support, and to plan future collaborative work.

This time we welcome our second cohort of Fellows and look forward to their ideas and presentations of their work. Thanks to the support from the Helsinki Collegium for Advanced Studies we were able to book this marvelous venue for a week-long workshop to actively engage in collaborative and comparative research. In preparation for the meeting the Fellows have already started conversations via email, and have linked up in regular 'virtual' meetings using skype. We now have the opportunity to meet in person in order to clarify issues and finalize joint papers, planning the dissemination of outputs and developing future projects.

Doing comparative research is a challenging task, and it is great to see us move more into this direction, actively addressing issues on a comparative basis, generating more generalisable findings and evidence, especially regarding issues of school engagement, teenage career aspirations and subsequent career development in four countries. In addition to the discussions and presentations of collaborative work, John Jerrim will give a hands-on introduction to using PISA data for comparative research, which can be useful in providing an empirical, comparative backdrop to the individual projects.

The workshop will offer ample opportunity for discussion and networking, for developing and finalizing joint papers as well as for planning future activities. I hope you will have a happy, productive and rewarding time amidst the beauty of the eternal City and the beautiful Villa Lante.

Ingrid Schoon



List of Participants

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Meeting Programme

Monday 16 May

- Arrival
- 15:00 - 18:30 Meetings with collaborators
- Planning
- Small group meetings
- 19:00 Dinner at Villa Lante

Tuesday 17 May

- 09:00 - 11:00 Using Pisa data for comparative analysis, presentation by John Jerrim (details & abstract below)
- 11:00 - 11:30 Break
- 11:30 – 12:30 Paper presentation using PISA data: The language achievement of disadvantaged children in England, Germany, and the US
- 12:30 – 13:30 Lunch
- 13:30 – 15:30 Hands-on Workshop using Pisa data
- 15:30 – 16:00 Break
- 16:00 – 17:00 Presentation by Ming-Te Wang on school engagement
- 19:00 Dinner at Villa Lante



Using the Pisa data for comparative analysis by John Jerrim, Institute of Education

The presentation will be structured by three thematic blocks:

- A 30 minute introduction to PISA session where John talks about the data, do's and don'ts etc followed by a question and answer section, where he answer questions anyone has on PISA (+ PIRLS or TIMSS)
- A 30 minute presentation of John's work using PISA (see abstract below).
- Hands-on experience of Fellows using the Pisa data (John has already circulated sample data sets and a work sheet)

Paper presentation by John Jerrim, Institute of Education, University of London

The language achievement of disadvantaged children in England: Are they stuck to the floor or unable to reach the ceiling?

Abstract

A number of studies have recently explored the link between family background and children's achievement in an international context. A common finding is that there is a stronger association in England than other parts of the developed world. Rather less attention has been paid, however, to England's comparative position at different points of the conditional achievement distribution. Is it that socio-economic gaps are comparatively large at the "bottom", or is it that children from disadvantaged homes struggle to make it to "the top"? I explore this issue using the PISA 2000 and 2009 datasets. In contrast to the existing literature, I find little evidence of heterogeneous family background effects across the ability distribution in England. Yet the same is not true in a number of other developed countries. I also find that the socio-economic gap in children's reading ability may have declined over the past decade, particularly at the bottom end of the achievement distribution. I discuss the implication of these findings for social mobility and educational policy in the UK.



Wednesday 18 May

09:00 - 12:00	Collaborative group meetings with PI's Workshop on reviewing and preparing funding proposals (Jacque Eccles, Katariina Salmela-Aro, Ingrid Schoon)
12:00 – 13:00	Lunch and travel to Vatican
13:00	Sightseeing Tour of Vatican and Sistine Chapel (optional)
19:00	Dinner

Thursday 19 May

09:00 - 11:00	Collaborative group meetings with PI's
11:00 - 11:30	Break
11:30 - 13:00	Collaborative group meetings with PI's
13:00 - 14:00	Lunch
14:00 - 15:30	Collaborative group meetings with PI's
15:30 - 16:00	Break
16:00 - 17:00	Collaborative group meetings with PI's
19:00	Dinner

Friday 20 May

09:00 - 11:00	Presentation of papers and feedback
11:00 - 11:30	Break
11:30 - 13:00	Presentation of papers and feedback
13:00 - 14:00	Lunch
14:00 - 17:00	Presentation of papers and feedback
19:00	Dinner



Saturday 21 May

09:00 - 12:00	PI Steering group meeting Fellow discussions
12:30 - 13:30	Lunch
13:30 - 15:30	Planning for the future
15:30 - 16:00	Break
16:00 - 17:00	Wrap up
19:00	Dinner

Sunday 22 May

Final meetings if necessary
Departure



Friday 20th May

The contributions are ordered in alphabetical order. The sequence of the presentations will be decided at the first meeting in Rome on Monday 16th May. The summary shows the name of the presenter(s) only as well as the titles of the comparative papers.

- Angela Chow Multiple Goal Trajectories of Highly-Educated Women from Emerging Adulthood to Young Adulthood: A 16-year Study
- Julia Dietrich/Phil Parker Adolescent Engagement and the Post-School Transition
- Kathryn Duckworth Cross-country comparisons of education and training systems
- Kathryn Duckworth/
Martin Obschonka Productive youth development and entrepreneurship in adulthood: Early entrepreneurial competence and interests in adolescence
- John Jerrim The cognitive ability of disadvantaged adolescents in England: Are they stuck to the floor or unable to reach the ceiling? (*presenting on Tuesday 17th May*)
- Jennifer Symonds Transition from Compulsory Schooling in Finland and England: An international comparison of effects on adolescent mental health
- Ming-Te Wang School Engagement Trajectories and Their Differential Predictive Relations to Academic Achievement, School Dropout, and College Enrolment (*presenting on Tuesday 17th May*)



Multiple Goal Trajectories of Highly-Educated Women from Emerging Adulthood to Young Adulthood: A 16-year Study

Angela Chow, Julia Dietrich, Jennifer Symonds and Katariina Salmela-Aro

Abstract

The last two decades of the twentieth century have witnessed a drastic increase of women entering higher education in many industrialized countries. Research has well-acknowledged that adjusting their lives around the multiple tasks of career development, family responsibilities and maintaining a healthy-life style is particularly challenging for these women (Ranson, 1998). However, there is a lack of longitudinal studies documenting how well-educated women balance and handle multiple development tasks across emerging adulthood (Arnett, 2000) and how these adjustment processes relate to outcomes at a later stage of life. From a goal perspective (Salmela-Aro, Aunola, & Nurmi, 2007), we attempt to address this deficiency by examining the trajectories of achievement-, family- and health-related goals in a sample of female university students over a time span of 16 years (age 20 to 36). More specifically, this study (a) investigates the prospective changes of these three types of goals in two steps (from age 20 to 25 and then from age 25 to 36), (b) investigate the relationships among the achievement-, family-, and health-related goals of well-educated women from age 20 to 25 and then from 25 to 36, and (c) examines whether initial levels and alterations in each type of goals are predictive of life-satisfaction at age 36.

A total number of 238 first year university students completed the revised Personal Project Analysis (PPA; Little, 1983) for seven times over 16 years and filled in the Satisfaction with Life scale (Diener, Emmons, Larsen, & Griffin, 1985) at the last measurement. Trivariate piecewise growth modeling was applied to examine goal trajectories from age 20 to 25 and then from age 25 to 36 respective to the number of achievement-, family- and health-related goals reported by each respondent at each measurement point.

A negative correlation was found between achievement- and health-related goals during emerging adulthood. Health-related goals during emerging adulthood facilitated the increase of family-related goals from age 25 to 36. Family-goals remained low and constant across emerging adulthood, but increased from age 25 to 36. The increase of family-related goals from age 25 to 36 was found to be predictive of life satisfaction at age 36. These results indicated that although the women tended to delay the pursuit of family-related goals, they made an adjustment in this aspect during age 25 to 36, and this adjustment was critical to their life satisfaction at age 36.



References

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- Ranson, G. (1998). Education, work and family decision-making: Finding the "right time" to have a baby. *Canadian Review of Sociology and Anthropology*, *35*(4), 517-533.
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Adolescent Engagement and the Post-School Transition

Julia Dietrich, Philip Parker, Katariina Salmela-Aro, & Ulrich Trautwein

Abstract

The transition from high school to college or apprenticeship presents a number of developmental challenge and life changes for adolescents. The task of coping with these challenges depends on individual capacities (agency or individual regulation), the behaviours of others in their social context (co-agency or co-regulation), and societal and institutional constraints (structure). This paper will review and integrate theories and models of motivation, identity, education and career development, into a unifying model of adolescent phase-adequate engagement. It is argued that this approach provides a fruitful ground for future investigations where research on phase-adequate engagement has progressed from different theoretical perspectives largely in isolation from each other. In addition, we note the focus of previous research on adolescents' engagement and its outcomes. We suggest this picture is limited where little is known about how phase-adequate engagement is complemented and affected by the behavior of significant other persons. To address this gap, we review and discuss the recent development of literature on co-regulation relevant to the study of adolescent phase-adequate engagement. Implications for research and practice are discussed.



Productive youth development and entrepreneurship in adulthood: Early entrepreneurial competence and interests in adolescence

Kathryn Duckworth, Martin Obschonka, Ingrid Schoon, Rainer Silbereisen

[authorship order TBC]

Abstract

What channels a person's vocational development towards successful entrepreneurship in adulthood? Consistent with more general theories on vocational development (Super, 1980; Vondracek, Schulenberg, 1986, & Lerner, 1986) and longitudinal research on entrepreneurial development (Schmitt-Rodermund, 2007; Schoon & Duckworth, submitted; Zhang & Arvey, 2009), productive adolescent development seems to play a crucial role here. Drawing from Schmitt-Rodermund's developmental model of entrepreneurship (Figure 1), this paper focuses on the role of adolescent competence and interests as precursors of successful entrepreneurial activity in adulthood. Our central aim is to better understand the mechanisms involved in the competence growth processes and development of vocational interests and examine whether they differ across two European countries.

To achieve this aim, we analyze two datasets, one from the UK and one from Germany, each consisting of lifespan data on vocational development. The first dataset, the 1970 British Cohort Study (BCS70), comprises data collected from a large sample of individuals born in a single week in 1970 in the UK who have been followed from birth to adulthood. Data collection sweeps for BCS70 have taken place when the cohort members were aged 5, 10, 16, 26, 30, 34 and most recently 38 years (Elliott & Shepherd, 2006). Occupational information has been gathered for all cohort members providing detail on employment status, job type and industry sector, as well as wages and job satisfaction and security. In line with others studies, the measure of entrepreneurial status used here is defined as those individuals who are self-employed full-time and own their own business (N = 561, 23% female). These entrepreneurs constitute 7% of the economically active sample at age 34 (for further detail on this sample, see Schoon & Duckworth, under review). Information on individual development and family circumstances were collected during childhood and adolescence using achievement tests, individual self-report, as well as maternal and teacher reported data on competencies, behaviours and parenting. Previous analysis of these data highlights the particular importance of high levels of self esteem and prosocial behaviour at age 10, as well as entrepreneurial values expressed at age 16, in particular the preference to work for oneself, in differentiating entrepreneurs from employees.

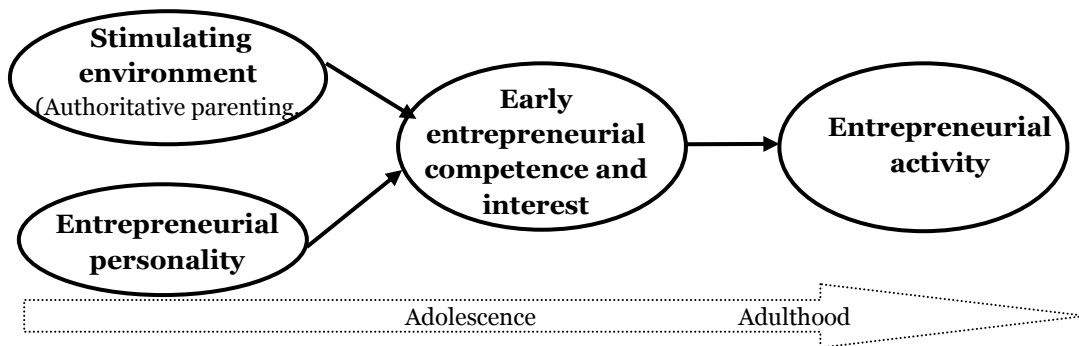
The second dataset stems from the Thuringian Founder Study, an interdisciplinary German research project conducted by economists and psychologists. This dataset focuses on the venture creation process as prototypical entrepreneurial behaviour in adulthood and further



includes retrospective information on adolescent development and career patterns. The sample contains detailed economic characteristics of a person's entrepreneurial success in adulthood, such as business performance and progress in the founding process. The retrospective information on adolescent development and career patterns were collected by means of the Life History Calendar method to ensure data quality. Supporting Schmitt-Rodermund's developmental model, past research utilizing this dataset indicates that age-appropriate entrepreneurial competence in adolescence (indicated by inventive activities, leadership roles, and commercial behaviours) operates as a central precursor of the entrepreneurial process of venture creation (Obschonka, Silbereisen, & Schmitt-Rodermund, 2010, in press-a, in press-b; Obschonka, Silbereisen, Schmitt-Rodermund, & Stuetzer, in press). The sample comprises information on nascent founders who were in the process of starting an innovative new venture at T1 and were then prospectively followed along the founding process (across 12 months until T2, N = 100), and founders who had already started an innovative new venture between 1994 and 2006 (retrospective survey, N = 531).

Based on the model shown in Figure 1, our study draws on shared properties of both datasets: i) socio-demographic background of the two samples; ii) early vocational competencies and interests; and iii) entrepreneurial success outcomes in adulthood, and will implement common analytic procedures across the two studies in order to compare the development of early entrepreneurship. Comparing the two country datasets in this way provides a unique opportunity to investigate pathways towards successful entrepreneurship in adulthood by drawing from both prospective lifespan data (normal population) that allows for more causal interpretations of developmental processes and elaborate economic outcomes of a person's entrepreneurial activity (selected samples of [potential) entrepreneurs). This methodological component to our paper will help further advance theories of entrepreneurship which has been built largely on cross-sectional associations or on longitudinal dataset with very limited information on entrepreneurial activity in adulthood. Moreover, in our analysis we will also focus on socio-historical contexts surrounding both samples by targeting differences and similarities in the roles early entrepreneurial competence and interests play in adolescence in Germany and the UK with respect to entrepreneurship in adulthood.

Figure 1: Schmitt-Rodermund's (2004, 2007) developmental model of entrepreneurship



Cross-country comparisons of education and training systems

Kathryn Duckworth, Ingrid Schoon & others

Abstract

Comparative research methods have long been used in cross-cultural studies to identify, analyse and explain similarities and differences across societies. Such research attempts to take into account variations of socio-cultural settings and context and tries to establish whether shared phenomena can be explained by the same causes. Despite its intuitive appeal, however, there are many challenges to comparative research, including differences in fundamental concepts and definitions, lack of comparative measures and different samples.

In the field of education measures such as the International Standard Classification of Education (ISCED-97), for example, have been developed in order to overcome such issues. The ISCED was designed by UNESCO in the early 1970's to serve 'as an instrument suitable for assembling, compiling and presenting statistics of education both within individual countries and internationally', though not to provide a comprehensive definition of education. As a consequence, much of the comparative research in education has focussed on differences in qualifications gained at various stages of the life course. Application of the ISCED criteria, however, is complicated by differences in factors such as school starting ages, the timing of key transitions, variations in tracking options and the balance of academic versus vocational routes and so we know far less about the country specific variations in the education systems themselves.

This paper describes in detail the education and training systems in the UK, United States, Germany and Finland, and compares the educational routes available to young people as they pass through - and return to - them. Our discussion pays particular attention to the vocational education and training opportunities after compulsory schooling is completed and the connections between education, employment and training routes.

The paper provides valuable contextual detail for the other papers presented in this volume/special issue. We present official participation data from each of the four countries covering the relevant periods covered in all our major studies in order to provide baseline information for more detailed comparison of trends over time. Figures from our four focus countries are also compared with those from other OECD members.



Statistics presented for each country will include, where possible, numbers/% young people:

- In full-time education
- In full-time education with part-time (paid) work
- In school-based vocational and technical programmes
- In combined school and work-based vocational and technical programmes
- In work-based vocational and technical programmes
- In full-time jobs without training
- Not in education, employment or training (NEET)



The cognitive ability of disadvantaged adolescents in England: Are they stuck to the floor or unable to reach the ceiling?

John Jerrim

Abstract

A body of research has highlighted how the UK (and England in particular) tends to stand out in terms of intergenerational educational mobility. In a widely cited paper, Schutz et al (2008) finds that the strength of association between a measure of family background (books in the home) and children's performance on an internationally standardised maths assessment is stronger in Britain than any other developed country (see Figure 2). Jerrim and Micklewright find a similar result (at least for England) using the PISA 2003 data – the association between years of parental education and children's performance on a maths assessment seems to be strong in comparison to other nations (see Figure 3). Likewise, the OECD (2010) recently found the socio-economic gradient in England to be above the member-nation average in the latest round of PISA assessment.

Although this large socio-economic gradient in England is now well-known, very little research has considered whether there are particular parts of the distribution in which we stand out. For instance, is it the case that the socio-economic gap is particularly big at the *bottom* of the ability distribution in England (thus implying that “advantage” acts as a kind of safety net that stops high SES children falling down the social ladder). Or is it the case that that disadvantaged children in England have particularly little chance of reaching the *top* of the ability distribution (so “disadvantage” acts as a barrier to obtaining higher levels of cognitive skills). This question has very important implications for social mobility. For instance, if the socio-economic gap is particularly big at the top of the ability distribution, it implies that disadvantaged children in England have little chance of obtaining the skill levels required to enter prestigious universities and professional jobs. This would, in turn, imply that policy interventions may need to be put in place to help get more disadvantaged children who are performing “OK” (i.e. around the national average) at age 15 to the top.

As noted, very little attention has been paid to why the UK tends to stand out in the international ranking. There is, however, some reason to believe family background to have heterogeneous effects across the ability distribution. For instance, the OECD (2010) recently suggested that the UK has very few “resilient” teenagers from disadvantaged homes. In other words, that very few disadvantaged children in the UK manage to reach the top quartile of the national reading distribution, compared to in other countries. Moreover, against what may be conventional wisdom, they suggest that this is much *less* or an issue of boys and more so for girls. The only other academic study I am aware of on this topic is Woessman et al (2004), who uses similar techniques to those that I am proposing on a different international dataset (the TIMSS study). A



selection of his results can be found in Figure 4. In particular, these authors note that the socio-economic gap increases as one moves from the lower to the upper percentiles (i.e. the big average socio-economic gap in English children's test scores is mainly being driven by differences at the top of the ability distribution). Indeed, they note that the socio-economic gap at the 10th percentile of the test distribution is 69 points, compared to 147 points at the 90th percentile. Moreover, this seems to be a somewhat unique feature to England – the same pattern does not occur (or is far less pronounced) in other countries.

Despite the potential importance and interest of the above finding, it has received very little attention (to my knowledge) in the academic and policy literature (particularly in comparison to the *average* effect of SES). One reason for this may be that the measure of family background used in the aforementioned study is very questionable (children's reports of the number of books in the family home). Jerrim and Micklewright (forthcoming) illustrate that this variable suffers from potentially large amounts of measurement error – and cross-national estimates/rankings of countries are highly sensitive to this problem. Although, Woessman uses a regression specification that also includes a measure of parental education, this information was not collected for England (where he instead relies solely upon books in the home). Hence running a model with different parameters for England (i.e. by not including parental education information) could be driving his result.

The original contribution I intend to make in this paper is to thoroughly investigate the issue raised above. In doing so, I will not attempt to estimate any sort of “educational production function” or the causal impact of any particular parameters. Rather this work will concentrate on obtaining robust estimates of the issue raised above. In doing so, I hope to improve English academics and policymakers understanding of where the gap between advantaged and disadvantaged children is greatest, and where we are particularly falling behind other developed nations.



Transition from Compulsory Schooling in Finland and England: An international comparison of effects on adolescent mental health

Jennifer Symonds, Angela Chow, Julia Dietrich, Katariina Salmela-Aro

Abstract

After compulsory schooling, many adolescents transition to more personally specified environments which may encourage the development of wellbeing by incurring better stage-environment fit. The current study tests for this in the FinEdu study and the Longitudinal Study of Young People in England using the multidimensional construct of complete mental health. Analyses of variance revealed that post-transition destinations related to mental health development independently of SES and gender. Adolescents transitioning to full-time non-academic destinations had the greatest mental health gains and all groups transitioning to full-time destinations reported increased eudaimonia. Those becoming unemployed or part-time workers in England exhibited general mental health deterioration whilst students in both countries reported the highest levels of, and increases in, strain compared to other groups.



School Engagement Trajectories and Their Differential Predictive Relations to Academic Achievement, School Dropout, and College Enrolment

Ming Te-Wang, Jennifer Symonds and Angela Chow

Abstract

One of the most effective ways to address the problem of low academic performance is to increase students' school engagement (Connell & Wellborn, 1991; Klem & Connell, 2004). Engaged students learn more, retain more, enjoy school activities, and experience school success more than their disengaged peers (Akey, 2006; Newmann, 1991). Unfortunately, rates of school disengagement in United States are very high, particularly during the secondary school years (Finn & Voelkl, 1993; Marks, 2000; McDermott, Mordell, & Stolfus, 2001). To gain a better understanding of the processes linked to disengagement, it is important that we study its course of development, and the association of its developmental trajectories with indicators of success.

There is a rich correlational literature on the relationship between school engagement and critical school outcomes, such as persistence in school and school failure (e.g., Appleton, Christenson, Kim, & Reschly, 2006; Finn & Rock, 1997). Much of this research, however, has relied on a uni-dimensional measure of school engagement (e.g., Daly, Shin, Thakral, Selders, & Vera, 2009; Perry, Liu, & Pabian, 2010; You & Sharkey, 2009) and rarely considered the nature and course of its development (e.g., Murray, 2009; Skinner, Kinderman, & Furrer, 2010). The current study moves beyond both of these limitations by using a multidimensional perspective on school engagement and by investigating the association of changes in school engagement with changes in educational outcomes in order to better capture the dynamic nature of the processes related with both school engagement and school success.

In addition, we will examine the similarities and differences in longitudinal trajectories of student engagement during secondary school years and the effects of such developmental trajectories on adolescents' educational outcomes (i.e., academic achievement, high school dropout, and college enrolment) across three distinct culture contexts—the U.S., Finland, and United Kingdom. This research could help uncover similarities and differences between Europe and US youth at this developmental stage and compare the effects of school engagement on the educational success of adolescents in the U.S., Finland, and United Kingdom. The cross-cultural and national comparison among the three countries will allow us to understand which developmental processes in student engagement are unique to a particular context and which processes are not. The inclusion of non-American adolescents in developmental studies will help us to have a better grasp on school engagement across contexts and fully comprehend the ecological context of adolescent development.



