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PATHWAYS Workshop
18-22 October 2011
University of Michigan



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 sixth PATHWAYS Workshop at the University of Michigan, in Ann Arbor. 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. We also have to think about how to move the Fellowship programme into its second phase.

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 discuss publications in the forthcoming special issues on occupational planning, school motivation, and entrepreneurship. In preparation for the phase II application we also ask the Fellows to take some time and reflect on their experiences in the programme, and to make suggestions of how they want the programme to move forward.

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, career planning and career development in four countries. In addition to the discussions and presentations of collaborative work, we also have the opportunity to participate in a training workshop run by Todd Little on factorial invariance and the modeling of contextual effects in longitudinal data.

The meeting 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 productive and rewarding time within the vibrant surroundings of this high caliber University and amidst the beautiful autumn landscape of Ann Arbor.

Ingrid Schoon



List of Participants

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Meeting Programme

Monday 17th October

Arrival and group dinner

Group Dinner - 7pm Guy Hollerin restaurant at the Holiday Inn



Tuesday 18th October

PATHWAYS Meeting 9.00 – 17.00 (*Room 6006 - Founders Conference room*)

- Fellow presentations (15 min presentation, 15 min discussion):

9.00-9.15 Welcome

- 9.15-9.45 Katja Upadyaya
- 9.45-10.15 Yi-Miau Tsai
- 10.15-10.45 Lara Perez-Felkner
- 10.45-11.15 Julia Dietrich

Break 11.15-11.45

- 11.45-12.15 John Jerrim
- 12.15-12.45 Kate Duckworth
- 12.45-13.15 Martin Obschonka

Lunch 13.15-14.15

- 14.15-14.55 Ming Te Wang/Jennifer Symonds
- 14.55-15.25 Håkan Andersson

Break 15.25-16.00

16.00-17.00 Roundup

Pls present that day: Jacque Eccles, Barbara Schneider, Rainer Silbereisen, Ingrid Schoon, (Katariina Salmela-Aro arriving 6pm).

PI Dinner – 6.30pm Raja Rani (400 South Division #1)

Fellow Dinner – 6.30pm Raja Rani (400 South Division #1)



Wednesday 19th October

CAPCA Training Workshop (*Room 6050*) - All Fellows attending

Workshop held by Todd Little on longitudinal modeling:

9.00 – 12.00 Factorial Invariance in Longitudinal Models

Lunch

3.00 – 5.00 Modeling Contextual Effects

In Parallel there will be a Steering Group Meeting for the PIs:

9.00 – 12.00 Steering Group Meeting (*room 6080*)

15.00 – 17.00 Steering Group Meeting (*room 6080*)

Rooms booked for PATHWAYS meetings:

6080 South Conference room 8:00 – 12:00

6080 South Conference room 13:00 – 17:00



Thursday 20th October

CAPCA Meetings

- All Fellows and PI's not attending CAPCA to arrange own collaborative meetings to work on papers etc.

No rooms are available to book but people can meet either at the cafeteria (Top of the I on 6F) or GARP bay (5F - where a few desk top computers are available).

Friday 21st October

CAPCA Meetings

- All Fellows and PI's not attending CAPCA to arrange own collaborative meetings to work on papers etc.

Rooms booked for PATHWAYS meetings:

6006 Founders Conference room 10:30 – 17:00

Group Dinner - 6.30pm Palios (347 South Main)



Saturday 22nd October

PATHWAYS Meeting 9.00 – 17.00

- 9.00- 12.30 PI Steering Group Meeting – Phase II Bid (*Room 6006 Founders Conference room*)
- 9.00 – 12.30 Fellow collaboration Meetings (*Room 6050 Large Conference room*)

Lunch 12.30 – 13.30

- 13.30- 16.00 Fellow presentations (10 min presentation, 5 min discussion/feedback):
 - o 13.30-13.45 Katja Upadyaya
 - o 13.45-14.00 Yi-Miau Tsai
 - o 14.00-14.15 Julia Dietrich
 - o 14.15-14.30 John Jerrim
 - o 14.30-14.45 Kate Duckworth
 - o 14.45-15.00 Martin Obschonka

Break 15:00-15:30

- o 15.30-15.45 Ming-Te Wang
- o 15.45-16.00 Håkan Andersson

- 16.00 – 17.00 Final discussion and feedback from PI's and round up (*room 6050*)

PIs present that day: Jacque Eccles, Lars Bergman, Ingrid Schoon, Katariina Salmela-Aro, Rainer Silbereisen

Rooms booked for PATHWAYS:

6050 Large Conference room 8:00 - 17:00

6006 Founders Conference room 8:00 – 17:00

Group dinner – 6pm Real Seafood (341 South Main)



Sunday 23rd October

Final meetings

Departure



Presentations

Tuesday 18th October

The contributions are listed in order of presentation. The summary shows the name of the presenter(s) only.

- Katja Upadyaya
Development of schoolwork engagement: the role of self-esteem and parenting styles
- Yi-Miau Tsai
Fluctuating Competence Perception: Does It Predict Long-Term School Performance?
- Lara Perez-Felkner
Female and Male Adolescents' Subjective Orientations in Mathematics and Their Influence on Postsecondary Majors
- Julia Dietrich
Pursuit of Career Goals in Secondary School and Beyond: The Role of School Engagement and Burnout
- John Jerrim
Social class differences in children's educational expectations: A cross-national analysis of primary and secondary effects
- Kathryn Duckworth
Educational and Occupational Choices in the Transition to Adulthood
- Martin Obschonka
Entrepreneurship and the positive side of social and economic change
- Ming-Te Wang & Jennifer Symonds
School Engagement Trajectories and Their Relations to Educational and Psychological Outcomes
- Håkan Andersson
The contribution of hot and cool self-regulation in early childhood for later academic achievement



Development of schoolwork engagement: the role of self-esteem and parenting styles

Katja Upadyaya

University of Michigan

Abstract

The present study aimed at investigating the development of students' schoolwork engagement, and particularly how students' engagement at post comprehensive education is later on transmitted to engagement towards work. The present study is part of the Finnish Educational Transitions (FinEdu) longitudinal study, in which a total of 1530 (769 girls, 761 boys) adolescents from 13 post-comprehensive schools (6 upper secondary high schools; 7 vocational schools) participated. Students filled in a questionnaire concerning their school engagement once during their first and second year of post-comprehensive school (Time 1 and Time 2), and once two years after their post-comprehensive school (Time 3). Moreover, students answered to questions concerning their parents' parenting styles, their self-esteem, and other personal characteristics once during their ninth grade (Time 0). The results were analyzed by using LGM and mixture analyses. Four groups of students could be identified according to their schoolwork engagement trajectories: high-increasing, low-increasing, high-decreasing, and low-stable groups. Adolescents with high self-esteem were more likely to belong to the high-increasing or low-increasing group than to the low-stable group. Moreover, adolescents whose parents exhibited a high level of affect in their parenting more likely belonged to the high-increasing than low-stable group, whereas adolescents whose mothers and fathers showed a high level of affect and a low level of monitoring in their parenting more likely belonged to the low-increasing than to the low-stable group.



Fluctuating Competence Perception: Does It Predict Long-Term School Performance?

Yi-Miau Tsai

University of Michigan

Abstract

Transitions pose challenge for adjustment and adaptation. Past research has shown that middle school transition is a phase when student's competence perception decreases and anxiety rises. This study examined the relationships between test anxiety, self-perception instability and school performance. We hypothesized that both test anxiety trait and a vulnerable self-perception (manifested in higher short-term fluctuating in competence perception) is associated with lower school performance one year after the transition. Findings showed that the competence perception of high test-anxious students tended to be less stable. A set of regression analyses showed that higher instability in competence perception, as well as higher test anxiety predicted lower grades 1 year later. This study provides real-life evidence between the relationship between instable self-perception and school outcome. Also, it reveals that individuals showing higher anxiety in test-specific situations also tend to have instable self-perception and both heightened students' vulnerability for post-transitional adaptation.



Female and Male Adolescents' Subjective Orientations in Mathematics and Their Influence on Postsecondary Majors

Lara Perez-Felkner

University of Chicago

Abstract

Although important strides towards gender parity have been made in several scientific fields, females remain underrepresented in the physical sciences, engineering, mathematics, and computer sciences (PEMC). This study examines the effects of adolescents' subjective orientations, coursetaking, and academic performance on the likelihood of majoring in PEMC in college. Comparisons across majors reveal that, for females, observed math ability predicts social and behavioral sciences majors while perceived math ability positively predicts PEMC majors. Within PEMC, results show important gender differences with respect to adolescents' subjective orientations and mathematics ability. While mathematics course taking also considerably influences majoring in PEMC, especially for females, subjective experiences interact with course taking such that females more closely resemble males. Course taking appears to assist females in selecting PEMC majors; however these females are entering a field where their abilities, at least on some indicators, may not be as strong as those of their male counterparts.



Pursuit of Career Goals in Secondary School and Beyond: The Role of School Engagement and Burnout

Julia Dietrich^{1,2}, Katariina Salmela-Aro¹, & Rens van de Schoot³

¹University of Helsinki, ²University of Erfurt, ³University of Utrecht

Abstract

During transition periods, such as the post-school transition, individuals can engage in a variety of goal-directed behaviors which benefit their success in dealing with the demands of the transition. Age-graded normative transitions also guide young people in selecting broad developmental goals, which typically reflect the developmental tasks of adolescence. Thus, the most common goals during adolescence are related to education and occupation. While prior research has shown that young people benefit from placing high importance on and engaging in the pursuit of career-related personal goals, knowledge about developmental trajectories of such goal appraisals is missing. In the current study, we therefore focus on the development of career-related goal importance and effort, and examine overall mean changes, typical trajectories, and the role of developmental predictors related to schooling. School engagement and burnout could provide positive or negative learning experiences which transfer to the career domain.

843 Finnish adolescents (48% girls) were assessed three times: at age 16 (the beginning of tracked secondary education), age 17, and age 20 (after school graduation). At each time point, adolescents reported one career-related goal they currently pursued and rated its importance and the effort they invested in goal pursuit. At age 16, youths also reported on their school engagement and burnout. We used bivariate growth mixture modeling to model overall change and identify trajectory classes of goal appraisals which we then predicted by school engagement and burnout.

The results showed that in secondary school and beyond, on average the importance of career-related goals increased while goal effort remained on the same level. However, the results suggest three different developmental patterns. The majority of adolescents highly emphasized their career-related personal goals (normative trajectory), which is in line with developmental regulation models, according to which such goals reflect the age-graded developmental task of career choice. However, some youths followed other pathways and showed either a late starter or a disengaging trajectory. Both adolescents' school engagement and burnout were developmental antecedents for their career goal-related pathways, although only school engagement remained as a predictor of trajectory class when considering all effects simultaneously. Where adolescents' school engagement at age 16 was low, they neither emphasized career-related goals at this age very much as compared to youths showing the normative developmental pattern. However, over time these youths increased the importance they attached to and the effort they invested in the pursuit of career-related goals.



Social class differences in children's educational expectations: A cross-national analysis of primary and secondary effects

John Jerrim

Institute of Education

Abstract

In the last 50 years research on social stratification in educational and status attainment have observed considerable declines in gender inequality in tertiary education (Goldin, Katz, & Kuziemko, 2006; OECD, 2010), and large declines in achievement gaps by race (Nisbett, 2005; Reardon, in press). In contrast, attainment differentials by social class have increased or remained stable in the United States (Reardon, in press), while a concerning gap has remained in many European countries (Breen et al., 2010; Nash, 2003).

These attainment differentials in the work of Boudon (1974) are considered to arise from two sources, referred to as primary and secondary effects¹. Primary effects [refer to the effect of context, development, and resources availability that lead to social classes having different levels of academic achievement. Secondary effects, on the other hand, refer to the choice behaviors of young people at and leading up to educational transitions, and which influence young people's destinations net of that which can be explained by differences in academic achievement.

In the current research we focus on both the total effect of class differentials by country and the proportion of that effect explained by primary versus secondary effects in relation to students' expectations of receiving only a ISCED 2 level of education. We do this in a cross-nationally comparative perspective, using the PISA database to compare highly stratified (in which school tracking occurs before the ISCED 2 decision needs to be made) versus largely comprehensive (in which no or late tracking occurs) schools



Educational and Occupational Choices in the Transition to Adulthood

Kathryn Duckworth

Institute of Education

Abstract

My presentation provides a brief summary of my fellowship work to date, my current collaborations and sets the scene for two potential symposia I hope to organise for next year's SRCD conference on Transition to Adulthood (18-20 October 2012, Tampa Florida). The overarching theme of my research can be broadly described as examining the educational and occupational choices made by young people during the transition to adulthood and across the life span. My interests lie in exploring the different types of transitions made by individuals as they move out of compulsory schooling, and, taking a longitudinal perspective, investigating the precursors, consequences and the contextual constraints that may influence such development. I am particularly interested in variation in 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 those who opt out of the traditional, post-16 academic route. 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.



Entrepreneurship and the positive side of social and economic change

Martin Obschonka

University of Jena

Abstract

The talk will present two studies on individual level manifestations of today's social and economic change, with a particular focus on entrepreneurship, gains in self-determination, new learning demands at work, and psychological adjustment. In these studies, Rainer K. Silbereisen and I analyzed data from the "Jena Study on Social Change and Human Development", which is a large-scale research project on psychological adjustment in times of social and economic change in Germany and Poland. The overall aim of the studies has been to shed light on the interplay between negative manifestations of change (e.g., increasing uncertainties concerning careers and jobs) and positive manifestations (e.g., gains in self-determination), and on expected differences between self-employed and wage-earners in these effects. Our results indicate that today's social and economic change indeed brings with not only negative manifestations, but also positive everyday consequences. In particular we found that self-employed, compared to wage-earners, appeared to experience more positive and less negative effects. In the two countries studied (Germany and Poland), we found a similar distribution pattern of "winners" and "losers" of social and economic change, which we will present and discuss in detail.



School Engagement Trajectories and Their Relations to Educational and Psychological Outcomes

Ming-Te Wang¹, Jennifer Symonds¹, Angela Chow², Katariina Salmela-Aro³

University of Michigan & University of Helsinki

Abstract

One of the most effective ways to address the problem of low academic performance is to increase students' emotional engagement. Emotionally engaged students are those who develop a sense of belonging at school. This belonging is carved by supportive relationships with friends, the wider peer group and teachers. Also these students identify with and value schooling outcomes. Emotionally engaged students learn more, retain more, enjoy school activities, and experience school success more than their disengaged peers. Unfortunately, many students become less emotionally engaged with school as they transition into secondary school. Their sense of anonymity rises, they feel pressurised by increasing schoolwork and homework and some develop the affliction that school experiences have little bearing on their future. Gradually these students withdraw from school life, and become disaffected from school. To gain a better understanding of the processes linked to emotional engagement, it is important that we study its course of development, and the association of its developmental trajectories with indicators of educational success.

In this study, we will examine the similarities and differences in longitudinal trajectories of student emotional engagement during the secondary school years and the effects of such developmental trajectories on adolescents' educational and psychological outcomes (i.e., academic achievement, educational aspiration, college enrolment, depression, and self-esteem) across three distinct culture contexts—the U.S., Finland, and the United Kingdom. This research could help uncover similarities and differences between European and US youth at this developmental stage and compare the effects of emotional engagement on the educational success and mental health of adolescents cross-nationally. By comparing data across three countries we are able to observe which developmental processes in student emotional engagement are unique to a particular context and which processes are not. Thus the study will help us to better understand the ecological context of adolescent development.



The contribution of hot and cool self-regulation in early childhood for later academic achievement

Håkan Andersson¹, Adam Grabell², & Sheryl Olson²

¹University of Stockholm & ²University of Michigan

Abstract

Children's emerging self-regulatory skills in early childhood have been shown to contribute to later academic achievement in middle and late childhood. Most studies have investigated what can be termed cool (emotionally and motivationally neutral) aspects of self-regulation. This longitudinal study investigated the contribution of both hot (e.g., tasks involving rewards) and cool aspects of self-regulation at age 3 in a sample of 235 children for later academic achievement at age 6 and 10. Cool regulation was uniquely related to achievement at age 6, whereas hot regulation was uniquely related to achievement at age 10, controlling for reactive temperament, parents' SES, age, and IQ at age 3. The findings suggest that early interventions should target children's self-regulatory skills, and highlight the importance of differentiating between hot and cool regulatory problems, as early problems with hot regulation may not affect academic achievement until late childhood.



