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PATHWAYS to ADULTHOOD

Theme Title:

Adaptation in Different Contexts

PATHWAYS 11th International Workshop
20 – 23 May 2014
Cumberland Lodge, Windsor, UK



Meeting Sponsored by the Jacobs Foundation

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Welcome

Dear Colleagues

On behalf of the Jacobs Foundation I welcome you to the 11th PATHWAYS Workshop at Cumberland Lodge in Great Winsor Park, UK. The aim of the workshop is to give the PATHWAYS Fellows the opportunity to present their recent research, to discuss with their mentors and international colleagues, and to plan future papers, projects, and activities.

The theme of the 11th workshop is: 'Adaptation in different contexts'. The Fellows have chosen a variety of modes to present their latest findings and ideas for new projects. The mix of paper presentations, posters, and project proposals promises exciting new insights regarding issues of adaption to social change, in the class room, and regarding school and employment transitions. Notably, a number of Fellows are engaging in comparative research, comparing findings across different countries and across different socio-historical contexts. It is wonderful to see that teams are building, addressing similar concerns and forging a future research agenda. Finding common themes and common patterns across context generates valuable insights into generalizability of findings as well as context specific issues, and expands the current evidence base.

Another important issue for this meeting is the preparation of our international conference at Marbach Castle, near Lake Constance, in November this year. In addition to discussions of the papers presented over the next few days, I would like the Fellows to rethink their planned papers and to consider how each contribution is linked within the wider picture of issues related to the study of transitions to adulthood.

To sharpen our minds, we also have organized a methods workshop on fixed effects – hoping to stimulate some interdisciplinary discussion. It is my great pleasure to welcome Jake Anders, who not only has great experience in quantitative data analysis, but who is also closely linked to policy debates and the application of findings in real world settings.

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 at Cumberland Lodge, the house of ideas, and the splendid surrounding of Windsor Great Park. And of course, we arranged for the perfect spring weather for you to enjoy the flowering rhododendrons, azaleas and trees in their new and shiny spring dresses.

Ingrid Schoon



List of Participants

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Meeting Programme

All sessions will be held in the Library unless otherwise indicated

Tuesday, 20th May 2014

- 17:00 – 18:00 Arrival and Welcome
- 18:00 Pre-workshop meeting
- 19.15** **Dinner** (*Dining Area*)

Wednesday, 21st May

- 09:00 – 10:30 Fellow presentations: Papers (15mins presentation; 15mins discussion for each paper)
- Adaptation in different contexts**
09:00 – 09:30 Clemens Lechner
09:30 – 10:00 Mark Lyons-Amos
10:00 – 10:30 Martin Obschonka
10:30 – 11:00 John Jerrim
- 11:00 – 11:30** **Coffee Break** (*The Bar*)
- 11:30 – 13:00 Collaborative Meeting Time with PIs
- 13:00 – 14:00** **Lunch** (*Dining Area*)
- 14:00 – 16:00 **Fixed Effect workshop – Jake Anders**
14:00 – 16:00 PI Steering Group Meeting (*Clarke Room*)
- 16:00 – 16:30** **Coffee Break** (*The Bar*)
- 16:30 – 18:30 Fellow Presentations: Posters (3 minutes to present each poster, followed by time for individual consultations and questions)
- (i) Anna-Lena Dicke* *(v) Rukmen Sehmi*
(ii) Julia Moeller *(vi) Justina Judy*
(iii) Clemens Lechner *(vii) Richard Göllner*
(iv) Jenna Cambria
- 19:15** **Dinner** (*Dining Area*)



Meeting Programme

Thursday, 22 May 2014

- 09:00 – 11:00 Fellow presentations: Papers (contd)
Adaptation in different contexts
09:00 – 09:30 Meeta Banerjee
09:30 – 10:00 Katyn Chmielewski
10:00 – 10:30 Julia Moeller
10:30 – 11:00 Florencia Sortheix
- 11:00 – 11:30 Coffee Break** (*The Bar*)
- 11:30 – 12:30 Planning for Marbach
- 13:00 – 14:00 Lunch** (*Dining Area*)
- 14:00 – 14:30 Fellow presentations: Grant Proposal
Julia Dietrich
- 14:30 – 15:30 Collaborative Meeting time with PIs
- 15:30 – 18:00 Field Trip: Boating on the River**
- 19:15 Dinner** (*Dining Area*)

Friday, 23rd May, 2014

- 09:00 – 11:00 Navigating Academia
09:00 – 11:00 PI Steering Group Planning Time (*Clarke Room*)
- 11:00 – 11:30 Coffee Break** (*The Bar*)
- 11:30 – 12:30 Feedback on Conference
- 12:30 LUNCH** (*Dining Area*) and Departure



Presentations

21 - 22 May 2014

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

Session 1: Paper presentations

- Clemens Lechner
Psychological perspectives on the role of religiosity in changing societies: A review of recent research and directions for future research
- Mark Lyons-Amos
Macro-Micro interactions in fertility transitions: Differential responses in first birth behaviour to economic recession in the United Kingdom
- Martin Obschonka
Social and economic change and entrepreneurial careers and regions
- John Jerrim
Income inequality, intergenerational mobility and the Great Gatsby Curve: is education the key?

Session 2: Poster presentations

- Anna-Lena Dicke
Increasing students' subjective task value in mathematics: Applying an utility value intervention in the classroom setting
- Julia Moeller
Disentangling person-specific and activity-specific determinants of performance-relevant motivation for STEM subjects. An Experience Sampling Method Approach
- Clemens Lechner
Do Goal Engagement and Disengagement in Dealing With Occupational Uncertainty Predict Career Outcomes?
- Jenna Cambria
Frame-of-reference Effects of Peer Achievement on Students' Values in Mathematics and English



Presentations

Session 2: Poster presentations (contd)

- Rukmen Sehmi
Does acculturation help to explain ethnic variations in developmental outcomes?
- Justina Judy
Stress, Anxiety, and Science Engagement in High School Students: A Comparative Study of Finnish and American Daily Experiences
- Richard Göllner
School-Based Prevention of Depressive Symptoms

Session 3: Paper presentations

- Meeta Banerjee
Occupational and Home-Level Predictors of Job Satisfaction and Burnout in Early Adulthood
- Anna Katyn Chmielweski
Do Socioeconomic Achievement Gaps Persist in Adulthood? Evidence from 50 years of International Assessments
- Julia Moeller
Looking Beyond the Dual Model of Passion: General Degree versus Types of Passion in Variable-Oriented versus Person-Oriented Approaches
- Florencia Sortheix
Values and Well-being in Context: An analysis of country and group influences

Session 4: Project Proposals

- Julia Dietrich
Studying Individual Development: Matching Method and Theory



Abstracts

Psychological perspectives on the role of religiosity in changing societies: A review of recent research and directions for future research

Clemens Lechner

Center for Applied Developmental Science, Jena, Germany

Abstract

In many societies worldwide, trends of secularization, individualization and globalization have spurred an intense and often fierce debate about religion. Encompassing diverse issues such as church-state relations, the place of religion in public life and education, or the rights of religious minorities, much of this debate revolves around whether religion “helps” or “harms” individuals and societies. Some have vociferously accused religion of being at best a delusion unnecessary to the good life, or even of being the root of a range of societal ills from racism to child abuse to bigotry. Others, taking a more favorable stance towards religion, have pointed to the various benefits that religion confers on individuals and societies, from the promotion of resilience to the provision of values and prosocial behaviors.

More often than not, however, this debate is plagued by a lack of empirical evidence. In this chapter, I therefore review recent psychological research pertinent to this debate. Drawing on evidence from my own research and from various other investigative lines, I seek to answer the question of how religiosity may contribute to psychological adaptation, for better or worse, in the life of people in current societies that are marked by the abovementioned trends of secularization, individualization and globalization. Leveraging the uncertainty/insecurity perspective prominent in much of contemporary theorizing on religion, my focus will be on two specific issues.

First, I discuss how current societal conditions shape individual religiosity. The main argument here will be that conditions of heightened uncertainty, such as economic crises or terrorism, tend to increase religiosity because religions offer uniquely effective means of reducing perceived uncertainties. This perspective allows resolving the puzzle of why the world is witnessing growing religious fundamentalism despite ongoing trends of secularization.

Second, I will take a closer look at the specific ways in which religiosity fosters or impairs successful coping with the various uncertainties that people face in modern societies, and thus influences individual well-being and resilience. The main argument here will be that while religiosity is indeed a resource conducive to coping with a broad range of challenges, it is not a panacea for stress. Some uncertainty-inducing aspects of modern life, I will argue, are particularly challenging for traditional believers to confront, rendering religiosity a risk factor rather than resource. As I discuss extant evidence, it will thus become clear that the answer to whether religion “helps” or “harms” individuals and societies is a nuanced and complex one and depends on a range of contextual and individual factors.

In closing, I will point to significant gaps in this literature and delineate directions for future research. Although it seems obvious that religions have been powerful forces in human cultures throughout



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history, the nature of their influence on many important outcomes such as values, political attitudes and activism, or civic engagement, is still something of a conundrum. By identifying a number of important, yet unanswered questions, this chapter hopes to contribute to a better understanding of the role of religion as a psychological factor involved in these issues.



Macro-Micro interactions in fertility transitions: Differential responses in first birth behaviour to economic recession in the United Kingdom

*Mark Lyons-Amos
Institute of Education*

Abstract

External economic shocks have influenced birth rates throughout history, for example, following the great depression or collapse of Eastern European socialism. However, while the UK experienced dramatic economic stress following the 2008 Great Recession, the demographic situation was somewhat different due to a prior upward fertility trend and increasing proportion of births in cohabitation. This paper examines the effect of the Great Recession on fertility behaviour, recognising that the effect may result from economic influences at macro or micro level. Regrettably, previous work on the effect of the recession on fertility behaviour has either concentrated on macro level rates, or where individual level data have been used, has assumed an homogenous response. This analysis builds on these previous papers but also addresses their limitations by examining the interaction between the recession, regional labour markets and the differential effects of individual characteristics on fertility responses.

This paper focusses on the transition to motherhood measured by the age at first birth. Becoming a mother is a major life transition, and one that is particularly sensitive to exogenous social and economic influences, both at an individual level and a regional level. Individual variation in fertility behaviour is closely linked to individual characteristics, albeit in a nuanced manner: for example while educational participation tends to depress fertility, the exit from higher education is associated with a more rapid transition to motherhood than among lower educational groups. Accounting for individual circumstances is vital in understanding responses to recession: for example, while aggregate patterns have shown that fertility rates are pro-cyclical, involuntary unemployment can, in contrast, accelerate fertility behaviour at an individual level.

We use a longitudinal sample from the BHPS and Understanding Societies surveys to track individual women and measure the variation in first birth rates. The influences on first birth rate are operationalised as being recessionary, macro and individual. Recessionary influences are captured by the use of regression discontinuity, with fertility rates being allowed to vary before and after the 2008 cut-point. While this will capture differences in pre- and post-recession fertility, controls for both regional unemployment rates and regional wealth are included in the model as macro-level effects to explain the direct effect of worsening labour market and economic conditions. Latent Classes are used to evaluate differential effects across socio-economic groups at an individual level. Vivaly, the effect of the discontinuity will be allowed to vary between latent classes to determine the differential effects of economic stress on fertility behaviour.

Initial results suggest some evidence of a changing fertility profile for younger cohorts, and evidence of a discontinuity in fertility rates following the 2008 crash which is significant even in the presence of control variables. Also of significance is the variation in fertility patterns according to both education, and in particular, income: the latter showing a net positive influence on fertility rates in the presence of controls for regional income.



Abstracts

Social and economic change and entrepreneurial careers and regions

Martin Obschonka
University of Jena

Abstract

In today's changing world, entrepreneurship has a unique position because it is intimately interconnected with the massive change occurring at the macro level such as globalization, technological progress, and political change. Entrepreneurship can be understood as a driver of change, for example because it spurs innovation and technological progress. It can also be understood as an adaptive response to the ongoing societal changes. For example, at the individual level, entrepreneurial thinking and acting is now widely regarded as a crucial skill for a successful and productive life and for dealing with the new challenges arising from the change (e.g., high youth unemployment rates in many countries due to the recent global economic crisis). At the regional level, policy makers are seeking to promote regional entrepreneurial vitality (e.g., higher startup rates, entrepreneurial firm clusters) to ensure the region's competitiveness in view of dramatic economic fluctuations and challenges such as global recessions.

Taking a psychological perspective, this chapter will present empirical research on the nexus between social and economic change on the one side, and entrepreneurship of individuals and regions on the other. The first part of the chapter will summarize research results on concrete everyday demands of social and economic change in entrepreneurs vs. non-entrepreneurs, thereby drawing from the Jena Model of Social Change and Human Development (Pinquart & Silbereisen, 2004), which models the cascading-down of the macro-level change towards the single individual. Research results from Germany and Poland suggest that entrepreneurs face the more positive aspects of the change (e.g., new learning demands) whereas non-entrepreneurs often face the more negative demands (e.g., increasing career uncertainties). This group difference in the affectedness by the change accounted in part for psychological well-being disparities between entrepreneurs and non-entrepreneurs. These disparities concern the often replicated finding that entrepreneurs enjoy better psychological well-being than non-entrepreneurs.

The second part of the chapter will focus on the regional variation of an entrepreneurial spirit, assessed by means of prevalent entrepreneurial personality characteristics in the region, and whether this entrepreneurial spirit indeed fosters economic vitality in the region (e.g., higher startup rates) or whether this effect of the entrepreneurial spirit is conditional on certain economic or structural conditions in the region. The conceptual basis of this regional perspective is socio-ecological psychology and regional entrepreneurship theory. Another topic in this second part will be the differential affectedness of regions by the recent Great Recession of 2008-2009 and whether a prevalent entrepreneurial spirit in the region operates as resilience factor in terms of protection against economic slowdown (e.g., declining startup rates during the crisis). It is planned to analyze large-scaled personality datasets from the US and the UK, and to combine them with economic data to study the region-level effects of an entrepreneurial spirit in times of social and economic change.



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The chapter will conclude by bringing the two research streams (the individual-level and region-level research) together and developing implications for future research and the world of practice. It will put a special focus on the successful career development and entrepreneurial activities of young people as embedded in regions and cultures that differ in their entrepreneurial spirit and economic and structural conditions.



Abstracts

Income inequality, intergenerational mobility and the Great Gatsby Curve: is education the key?

*John Jerrim and Lindsey Macmillan
Institute of Education, University of London*

Abstract

It is widely believed that countries with greater levels of income inequality also have lower levels of intergenerational mobility. This relationship, known as the Great Gatsby Curve (GGC), has been prominently cited by high ranking public policy makers, best-selling authors and Nobel Prize winning academics. Yet relatively little cross-national work has empirically examined the mechanisms thought to underpin the GGC – particularly with regards the role of educational attainment.

This paper uses the cross-nationally comparable Programme for International Assessment of Adult Competencies (PIAAC) dataset to shed new light on this issue. We find that income inequality is associated with several key components of the intergenerational transmission process – including access to higher education, the financial returns to education, and the direct effect of parental education upon labour market earnings. Thus, consistent with theoretical models, we find inequality in access to financial resources plays a central role in the intergenerational transmission of advantage.



Increasing students' subjective task value in mathematics: Applying an utility value intervention in the classroom setting

*Anna-Lena Dicke, Hanna Gaspard, Isabelle Häfner, Brigitte Schreier, Barbara Flunger, Benjamin Nagengast & Ulrich Trautwein
University of Tübingen, Germany*

Abstract

Research has shown a decline in students' value perceptions in general, but particularly in the subject of mathematics, across the span of the school career (Fredricks & Eccles, 2002, Watt, 2004). Students' value perceptions have, however, been found to be important for students' academic choices and performance (Wigfield, Tonks, & Lutz-Klauda, 2009). Previous studies by Hulleman and colleagues (2009, 2010) suggest that declines in motivation can potentially be counteracted by encouraging students to reflect on their subjective perceptions of utility. Building on these findings and using Eccles et al.'s (1983) expectancy-value model as a theoretical backdrop, the aim of the current study was to increase students' value perceptions in mathematics through a randomized utility value intervention within the classroom setting.

The intervention study was conducted with 1978 ninth grade students in 82 mathematics classrooms in Germany. The intervention consisted of a 90-minute session in which the utility of mathematics for students' future lives was discussed. To examine the effectiveness of the given intervention, classrooms were randomly assigned to three different conditions: two intervention conditions as well as a waiting control group. In intervention condition 1, students were asked to reflect on their subjective perceptions of the utility of mathematics by writing about them in a letter to a significant other of their choice ("letter condition"). In intervention condition 2, students were presented with a variety of evaluations of the usefulness of mathematics and asked to critically reflect on these ("quotation condition"). Students in the waiting control group did not receive any intervention.

Students were asked to report their subjective task value perceptions in mathematics prior to the intervention as well as approx. 6 weeks after the intervention. Subjective task values in mathematics were assessed using 37 items tapping all four components of subjective task value (Eccles et al., 1983): interest/intrinsic value, attainment value, utility and cost value. To capture the multidimensionality of value perceptions, sub facets for all value components except for interest/intrinsic value were assessed. ESEM and CFA supported the proposed multidimensionality of the scales.

Analyses showed that students in both intervention conditions reported statistically significant higher utility value perceptions of mathematics after the intervention in comparison to students in the control condition. In addition, compared to the control condition, students in the "quotation condition" also showed statistically significant increases in their perceptions of attainment value as well as decreases in their perceptions of cost. No further statistically significant differences in value perceptions in comparison to the control condition occurred for students in the "letter condition".



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Future analyses will now investigate longitudinal effects on students' value perceptions and on further motivational variables.

In sum, the current study showed that a utility value intervention in the classroom setting can successfully increase students' utility value perceptions. Results indicate that fostering students' critical reflection on typical arguments for usefulness shows more comprehensive effects on students' value perceptions than pure self generation of arguments for the usefulness of mathematics.



Abstracts

Disentangling person-specific and activity-specific determinants of performance-relevant motivation for STEM subjects. An Experience Sampling Method Approach

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Katariina Salmela-Aro, Department of Psychology, University of Jyväskylä²

College of Education and Department of Sociology Michigan State University³

Abstract

Theory

To increase the number of individuals in science careers is an important goal of many industrial countries (EU, 2004; OECD, 2007). Therefore, the finding that many students are uninterested in STEM subjects in schools has ignited the discussion of how motivation for science learning can be increased (e.g. Lavonen et al., 2008). Previous studies found that particularly domain-specific task values and ability self-construct were related to performance and career choice in STEM domains (Marsh, Trautwein, Lüdtke, Köller, & Baumert, 2005; Wigfield & Eccles, 1992). This study investigates person-specific and activity-specific determinants of these aspects of motivation for STEM subjects among US American high school students. Experience Sampling Method measures of task values and ability self concept were applied in order to examine the situation-specific determinants of motivation in STEM lessons.

Method

Questionnaire data and Experience Sampling Method data were analyzed. The sample comprised of N = 109 US American high school students (42.2% female) from grade nine to twelve. 59 students (52.2%) attended Biology classes, 34 (30.1%) students attended physics courses, and 20 (17.7%) were chemistry students. Each of these groups was asked about their motivation in the particular STEM courses they attended. The students were assessed with paper-and-pencil questionnaires in class, and provided Experience Sampling data during one week with 8 beeps a day, including at least one beep per day during a STEM lesson.

The paper and pencil questionnaires assessed several PISA scales of motivation for STEM subjects: for instance, a scale tapping enjoyment of the attended STEM subject and a scale tapping the ability self-concept in regard to the attended STEM subject. The ESM questionnaire assessed momentary task value and momentary ability beliefs during the relevant STEM lessons, among other experiences.

Analyses

First, we identified those PISA scales and ESM measures of domain-specific and activity-specific motivation that were relevant for the in-fact performance (indicated by grades) in STEM subjects. Second, person-specific and activity-specific determinants of these performance-relevant aspects of motivation were examined. Regarding person-specific factors, the influence of gender and nationality was investigated. Regarding activity-specific factors, we analyzed how the individually



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experienced specific teaching techniques in the STEM subjects predicted the performance-relevant aspects of motivation in these subjects.

Multilevel analyses were conducted in order to take into account the nested data structure of beeps (within-level) nested in individuals (between-level).

Results

As expected, we found that domain-specific measures of intrinsic task value (enjoyment) and ability self-concept were related to the performance in the corresponding STEM subject. Both the PISA scales and the ESM measures of intrinsic value and ability self-concept were correlated with the grades in the corresponding STEM subjects, and to the teaching techniques the individuals had previously experienced.

We will show in detail how specific teaching techniques in STEM lessons (e.g. lab work on practical experiments) are related to these aspects of motivation and performance in STEM lessons, and will discuss, based on our findings, the factors that can increment the performance-related motivation for STEM learning activities.



Do Goal Engagement and Disengagement in Dealing With Occupational Uncertainty Predict Career Outcomes?

Clemens Lechner, Rainer K. Silbereisen
University of Jena

Abstract

In most societies worldwide, people are confronted with growing occupational uncertainty that can jeopardize successful career development. Simply put: can they do anything about it? The present study intends to elucidate whether control strategies of goal engagement and disengagement in dealing with occupational uncertainty predict changes in three aspects of successful development in the domain of work, namely: (1) employment status, (2) career mobility, and (3) personal income. We are going to use pooled data from both samples (younger and middle-aged adults aged 16-43; older adults aged 55-75) and all four waves of the Jena Study. Drawing on Heckhausen's motivational theory of lifespan development, our general expectation is that goal engagement predicts positive changes in the above outcomes across a 1-year period, especially if it is congruent with available control opportunities. In contrast, we expect goal disengagement to predict negative changes in these outcomes, perhaps even more so under restricted control opportunities. We will consider both subjective (e.g., perceived occupational uncertainty and perceived controllability of it) and objective (e.g., regional unemployment rate; regional net migration rate) indicators of the control opportunities.

Of central interest to our study will be the question whether it pays off to engage with growing occupational uncertainty in terms of successful career development – and under what conditions. Moreover, we seek to explore whether goal disengagement may even be counterproductive to success in these outcomes. By shedding light on these questions, we hope to advance the literature on developmental regulation in times of social change.



Frame-of-reference Effects on Vocational Choices

*Jenna Cambria, Benjamin Nagengast and Ulrich Trautwein
University of Tübingen*

Abstract

Research on the Big-Fish-Little-Pond-Effect (BFLPE) has shown that individual student achievement is positively associated with academic self-concept, but that school average achievement is negatively associated with students' academic self-concept (e.g., Nagengast & Marsh, 2012). However, it is unknown whether other motivational constructs, such as values, are prone to social comparison. That is, is being surrounded by high achieving students detrimental for the value ascribed to a subject? Typically, expectancy-value researchers have explored four task values: cost, intrinsic, attainment, and utility (Wigfield & Eccles, 2000) and from this perspective, one can examine how different aspects of students' values may be more or less affected by frame-of-referencing effects. For instance, does school-level achievement impact intrinsic value more than it would affect utility value?

Data were taken from the TOSCA study. The sample comprised 2,508 academic track students from 156 randomly selected schools in Baden Württemberg, Germany. Students were in Grade 13 and had a mean age of 19.6; 55.7% of the sample was female. Motivation scales were designed to reflect the dimensions of task values: cost (two items), intrinsic-attainment value (eight items), and utility value (two items) on a four-point Likert response scale; intrinsic value and attainment value were combined because of the high correlation between these factors. The Cronbach's alpha for each of the survey scales were .90 or greater. Mathematics achievement was measured using the achievement test from the Third International Mathematics and Science Study (TIMSS; e.g., Baumert, Bos, & Lehmann, 2000), which was scaled using item response theory and had a reliability coefficient of .88 (Nagy, Neumann, Trautwein & Lüdtke, 2010). English achievement was assessed using a shortened version of the Test of English as a Foreign Language (TOEFL), which had a KR-20 reliability of .95 (Köller & Trautwein, 2004). Using these measures, six multilevel models were tested examining each of the value beliefs. Models included individual and school average achievement as predictors for the motivational constructs. We used latent aggregation of individual achievement to the school level. A BFLPE would be present if the contextual effect of achievement, i.e. the effect of school average achievement after controlling individual achievement differences on the motivational measures was negative (Marsh et al., 2009).

Each of the models had acceptable fit: CFI \geq .95, RMSEA \leq .06, and SRMR \leq .09. The standardized coefficients and significance values are as follows: English cost $\beta = -.234$, $p < .001$, English intrinsic-attainment value $\beta = -.280$, $p < .001$, English utility value $\beta = -.152$, $p < .011$, mathematics cost $\beta = -.242$, $p < .001$, mathematics intrinsic-attainment value $\beta = -.264$, $p < .001$, mathematics utility value $\beta = -.227$, $p < .011$. For each of the variables examined, there was a significant negative BFLPE, suggesting that this phenomenon may be generalizable to task values. Practically, it is important to examine the BFLPE across constructs to understand better the nature of contextual effects in developing



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interventions designed to increase a classroom of students' values. Also, from a developmental perspective, learning whether value judgments are prone to social comparison will offer information on how value judgments are formed.

References

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Does acculturation help to explain ethnic variations in developmental outcomes?

Rukmen Sehmi

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Abstract

In the UK, the ethnic minority population often shows significant intra-group variations in developmental outcomes (e.g. Strand, 2011). Previous explanations have centered on socioeconomic disadvantage (Ballenger, 2009), teacher perceptions (Burgess & Greaves, 2009) and the influence of cultural orientations (Louie, 2001). However, these explanations are not fully comprehensive. The thesis therefore proposes that acculturation may contribute to understanding of why ethnic variations in outcomes exist. Acculturation is 'the modification in the attitudes and/or behaviours of people that occur as a result of contact with a new culture' (Padilla, 2003). As a result of the acculturation process, there may be variations in the degree to which the mainstream and/or heritage cultures are endorsed, which consequently may shape developmental outcomes (Berry, Phinney, Sam and Vedder, 2006). The thesis therefore aims to test if, and to what extent, acculturation helps to explain ethnic variations in developmental outcomes whilst embedded amongst relevant family, sociodemographic, and community factors. Using a longitudinal perspective, the thesis also examines if acculturation can explain greater gains in developmental progress made by some ethnic minorities after school entry at age 5.

The role of acculturation is assessed embedded amongst rich contextual information found in the Millennium Cohort Study (MCS). The MCS is a nationally representative longitudinal study of children born in the UK in 2000-2002, with a boosted sample of UK born ethnic minorities. The data source is therefore suited to exploring the emerging, distinct, and understudied non-first generation ethnic minority population in the UK. The sample consists of 4215 ethnic minority children belonging to the Mixed, Indian, Pakistani, Bangladeshi, Black African, Other Ethnic, or White (with a migrant background) group. Longitudinal data is extracted from three sweeps when children are 3, 5, and 7 years old. OLS regression and latent growth curve modeling techniques are used to explore acculturation-outcome relationships.

Results show that acculturation is able to help to explain ethnic variations in developmental outcomes. This is particularly the case in cognitive domains at age 3, where acculturation has greater independent explanatory power than all other family, sociodemographic and community factors. Furthermore, acculturation does explain changes in the rate of developmental progress after school entry. Sole endorsement of heritage culture is associated with the greatest cognitive disadvantage at age 3, but also the greatest associated increases in the rate of developmental progress in the first two years of school. Overall, the results suggest that acculturation is an important explanatory factor in helping to explain developmental outcomes amongst ethnic minorities, particularly in cognitive domains.



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Stress, Anxiety, and Science Engagement in High School Students: A Comparative Study of Finnish and American Daily Experiences

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Abstract

Given the demand to increase interest in science, technology, engineering, and mathematics (STEM) throughout the educational system, the high school can serve as a critical part in supporting students' interest in STEM. As students develop future educational and occupational plans, engagement experiences in their courses and outside of school can shape their interest in the types of majors and careers to pursue. This period of adolescence consists of fluctuating school engagement and well-being as well as disengagement and distress. The non-uniform experiences of students motivates this research, which examines data from an international study in Finland and the United States that uses the Experience Sampling Method (ESM) to gain a better understanding of how these adolescent experiences—including the potential negative influences of stress and anxiety—shape engagement: (1) in science courses; (2) in non-science courses; and (3) outside of school. Using the ESM provides a way to capture the moments of an individual's daily life—immediate activities and emotions at random intervals, and because engagement experiences are shaped by what is going on around the student, it is measured within the context of the classroom, within the specific content area of science, and outside of school.

While there is a substantial and growing body of research on engagement, this study uniquely analyzes the different affective states associated with engagement, specifically the role of stress and anxiety experienced with engagement and tests how these moments of stress and engagement vary across students and their contextual environments. The ESM data are analyzed using cluster analysis in addition to two-level hierarchical generalized linear models (HGLM) to understand the variation in the contextual conditions present when students are engaged, with momentary repeated measures (level 1) nested within students (level 2). Using a multi-level approach accounts for the variation of engagement and stress both within students and across students in varying contexts.

This study contributes to understanding the occurrence of stress and anxiety associated with student engagement in science as well as in other classes, which helps bring clarity to the relationship between these potentially negative affective states and engagement across contexts. Understanding this relationship between engagement and stress is helpful in uncovering patterns of varying positive and negative experiences in differing contexts, which inform instructional approaches that support student engagement, pursuit of advanced education or employment and training following secondary school completion.



School-Based Prevention of Depressive Symptoms

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Abstract

Adolescent depression is a common and recurrent disorder associated with significant impairment in various fields of life (McLeod & Kaiser, 2004). In order to prevent the onset of depression in adolescents, school based intervention programs show promising results (Horowitz & Garber, 2006). Most of these programs reveal positive effects compared with a no-intervention control group. For instance, the school-based program, LARS&LISA (Pössel, Horn, Seemann & Hautzinger, 2004), showed that adolescents (aged 15) participating in a 10- week cognitive– behavioral intervention reported significantly lower levels of depressive symptoms (CDI) as compared with youth in a non-intervention control group. These effects remained stable at follow-up (4, 8- and 12-month after the intervention).

Despite these promising results, depression prevention programs that demonstrate positive effects are rarely incorporated into school and little is known about the effectiveness of most programs when delivered by the individuals who work in these settings. In addition, it is usually not investigated whether the found effects are depended on the quality and level of program implementation.

The current study directly addressed these issues. Built on previous work, we re-evaluated data from the LARS&LISA program in a large sample of German adolescents taking into account treatment adherence and instructional quality during intervention (Hamre & Pianta, 2010). Treatment sessions were delivered by psychologists and trained classroom teachers. Preliminary results showed that intervention effects were quite similar for both groups whereas different underlying mechanisms might lead to success.

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Abstracts

Occupational and Home-Level Predictors of Job Satisfaction and Burnout in Early Adulthood

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Abstracts

Research has shown that there are multiple factors linked to feelings related to job satisfaction and burnout (Hultell & Gustavsson, 2011; McCalister et al., 2006). The aim of the current study was to investigate what factors are predictive of job burnout and satisfaction in adulthood. Two research hypotheses led the study (see Figure 1). First, we predict that occupational level factors will be associated with job satisfaction and burnout. Specifically, greater organizational support and feelings of belonging to the workplace will be positively related to job satisfaction, while negative workplace climate will be negatively related to job satisfaction. Conversely, higher feelings of negative workplace climate and perceptions of low organizational support or belonging will be associated with greater reports of job burnout. Second, we hypothesize that home level factors will be related to job satisfaction and burnout over and above occupational factors. In particular, reports of work-life balance and support from partners will be linked to more job satisfaction; whereas reports of greater work-life stress and lower feelings of work-life balance would be associated with job burnout.

The sample was comprised of 508 individuals from the Childhood and Beyond (CAB) study and the Michigan Study of Adolescent and Adult Life Transitions (MSALT). The sample was predominantly European American and is located all over the United States. The sample was diverse in their demographic background (i.e., socioeconomic status, educational level, age). Occupational level factors were assessed via three measures: organizational support, belonging in the workplace and negative workplace climate (i.e., bullying, incivility). Familial factors consisted of three measures: work-family balance, work-family stress and spouse/partner support. Job satisfaction was measured via four items that tapped into satisfaction “All in all, I am satisfied with my job”. Job burnout was comprised of six items that assessed burnout at the workplace “I feel I am losing interest in work”.

Hierarchical linear regressions were conducted to test the multivariate relationships (Table 1). As predicted in the first hypothesis, job satisfaction was positively related to greater feelings of organizational support and belonging in the workplace. Additionally, it was found that family-work balance was positively linked to job satisfaction. Furthermore, the second hypothesis was supported in that feelings of low organizational support and higher feelings of negative workplace climate were related to job burnout. In addition, it was found that feelings of family-work stress were positively linked to job burnout. Future analyses will investigate how gender interacts with home and occupational level factors with regards to job satisfaction and job burnout. Additionally, we will examine how values and beliefs surrounding family while in high school is predictive of home and work level variables, and in turn are linked to job burnout and satisfaction in later adulthood.

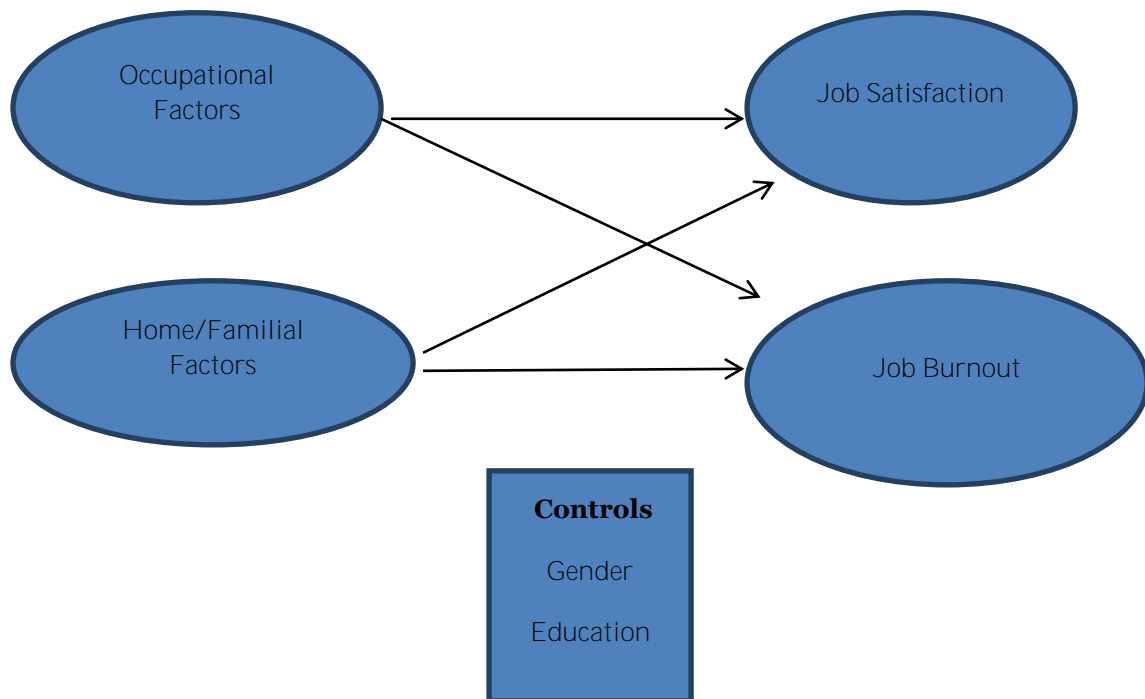


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The current study underscores the importance of focusing on multiple contexts with regards to job burnout and satisfaction. Hence, it is not only aspects related to the occupational context but also those associated with family life that are crucial to understand what predicts job burnout and satisfaction.

Figure 1.

Conceptual Model for Paper (Model 1)



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Table 1: Hierarchical Regressions on Job Burnout and Satisfaction

Variable	Job Satisfaction					
	Step 1		Step 2		Step 3	
	B (β)	SE	B (β)	SE	B (β)	SE
Gender	-0.08 (-0.07)	0.06	-0.05 (-0.05)	0.05	-0.00(-0.00)	0.05
Educational Level	0.01 (0.02)	0.01	0.01 (0.03)	0.01	0.01 (0.02)	0.01
Organizational Support			0.26 (0.40)**	0.04	0.24 (0.36)**	0.04
Belonging in the Workplace			0.12 (0.18)**	0.03	0.08 (0.12)*	0.03
Negative Workplace Climate			-0.13 (-0.13)**	0.05	-0.13 (-0.13)**	0.05
Family-Work Balance					0.12 (0.22)**	0.03
Family-Work Stress					-0.06 (-0.06)	0.04
Support from Partner					-0.01 (-0.01)	0.03
+ R^2			0.35**		0.04**	
Total R^2	0.01		0.36		0.40	
Variable	Job Burnout					
	Step 1		Step 2		Step 3	
	B (β)	SE	B (β)	SE	B (β)	SE
Gender	-0.04(-0.04)	0.05	-0.06 (-0.07)	0.04	-0.06 (-0.07)	0.04
Educational Level	0.00 (0.00)	0.01	0.00(0.01)	0.01	0.01 (0.02)	0.01
Organizational Support			-0.16 (-0.29)**	0.03	-0.15 (-0.27)**	0.03
Belonging in the Workplace			0.00 (0.00)	0.03	0.00 (0.00)	0.03
Negative Workplace Climate			0.23 (0.28)**	0.04	0.23 (0.28)**	0.04
Family-Work Balance					-0.03 (-0.06)	0.02
Family-Work Stress					0.16 (0.23)**	0.04
Support from Partner					0.02 (0.04)	0.03
+ R^2			0.29**		0.04**	
Total R^2	0.00		0.29		0.33	

** = $p < .01$; * = $p < .05$; † = $p < .10$



Table 2. Correlations, Means, Standard Deviations of Study Variables

	1	2	3	4	5	6	7	8	9
1. Gender (1=female)	-----								
2. Educational Level	0.04	-----							
3. Organizational Support	-0.02	-0.02	-----						
4. Belonging in the Workplace	-0.10*	-0.07	0.57**	-----					
5. Negative Workplace Climate	0.06	-0.06	-0.46**	-0.26**	-----				
6. Work-Life Balance	-0.21**	0.02	0.24**	0.35**	-0.10*	-----			
7. Work-Life Stress	-0.02	-0.07	-0.22**	-0.21**	0.25**	-0.10*	-----		
8. Support from Partner	0.04	0.18**	0.13**	0.10*	-0.07	0.04	-0.51**	-----	
9. Job Satisfaction	-0.07†	0.03	0.58**	0.48**	-0.35**	0.36**	-0.22**	0.12*	-----
10. Job Burnout	-0.04	0.03	-0.48**	-0.34**	-0.43**	-0.14**	0.31**	-0.15**	-0.62**

** = $p < .01$; * = $p < .05$; † = $p < .10$



Abstracts

Do Socioeconomic Achievement Gaps Persist in Adulthood? Evidence from 50 years of International Assessments

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Abstract

Secondary analyses of international assessments such as PISA and TIMSS have devoted a great deal of attention to describing and explaining cross-national variation in the size of achievement gaps between high-SES and low-SES students (e.g., Brunello and Checchi 2007; Marks 2005). These SES achievement gaps are important to the extent that skills measured “near the end of compulsory education” (OECD 2013) predict adult competencies and opportunities for educational attainment and career chances. But even though schooling ends for some students after lower secondary school, for many, formal education continues for another 10 years or more, and additional learning occurs on the job and during apprenticeships. These later experiences may have compensatory effects in some countries and cumulative (dis)advantage effects in others. In this paper, we are interested in how accurately international assessments of children predict SES disparities in adults’ educational attainment and skills. In which countries are gaps mitigated in later years and in which are they magnified?

Recently released data for 22 countries participating in the Programme for the International Assessment of Adult Competencies (PIAAC) present a new opportunity to compare the results of international childhood and adult assessments. PIAAC surveys individuals ages 16-65, i.e. members of widely different birth cohorts and consequently with quite different educational experiences. A meaningful comparison of PIAAC to existing international student achievement studies therefore needs to draw on data from the entire history of international assessments dating back to the First International Mathematics Study of 1964 (FIMS). We match five PIAAC cohorts (excluding adults who immigrated after age 10) to childhood observations from 21 different childhood international assessments. To estimate socio-economic gaps in educational outcomes (student achievement, final educational attainment, and adult skills), we draw on measures of parental educational attainment, which are available in most of these assessments.

Preliminary results indicate that childhood achievement gaps are indeed positively associated with adult achievement gaps but not strongly in every case. (See Figures 1-4.) Associations are stronger for math than for reading and for more recent birth cohorts than for older cohorts. Socio-economic gaps in adult skills tend to be larger than predicted by SES gaps in childhood achievement in the United States, England, and Italy, and smaller than predicted in Korea, Sweden, and Finland. The final paper will also examine whether childhood achievement gaps are related to inequality in adult educational attainment.



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Looking Beyond the Dual Model of Passion: General Degree versus Types of Passion in Variable-Oriented versus Person-Oriented Approaches

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Abstract

This study investigates patterns of passion for activities with a person-oriented approach and scrutinizes the currently prevailing dual model of passion (Vallerand et al., 2003). Passion is a relatively new construct of the psychology of motivation that has gained increasing attention during the last decade. Passion is defined as a commitment of a person towards an activity that the person likes, wants to do all the time, finds important, invests time and energy in, identifies with, and experiences flow and high arousal affect in (Fredricks, Alfeld, & Eccles, 2010; Moeller & Grassinger, in prep.; Vallerand et al., 2003). According to the influential dual model of passion (Vallerand et al., 2003), there are two types of passion: 1) Harmonious passion which is characterized by autonomous identification with the activity, and 2) obsessive passion which is characterized by controlled, forced identification with the activity. Many variable-oriented studies have found differences between both types of passion. Harmonious passion is an adaptive experience, positively related for instances with positive affect, maintained control, well-being, deliberate practice and performance in the corresponding activity, whereas obsessive passion was found to be maladaptive, being correlated e.g. with negative affect, symptoms of dependency and impaired well-being.

These findings of variable-oriented approaches have led to the idea that passionate individuals should be distinguished into the mainly harmoniously passionate group and the mainly obsessively passionate group. However, the few studies investigating this hypothesis with person-oriented approaches failed to find these groups. Moreover, the findings of moderate to high correlations between the harmonious and the obsessive passion subscales in many studies scrutinize the dichotomy between mainly harmonious and mainly obsessive passionate individuals.

The present study investigated how individuals group in regard to the passion they experience. A person-oriented approach with latent profile analyses was applied. Three different studies with N = 1365 participants from two countries (Germany and Brazil) and different ages (adolescents and young adults) were analysed.

Passion and correlates of passion were assessed with cross-sectional questionnaires. As measures of passion, the dual model passion scale (Vallerand et al., 2003) and the commitment and passion scale (Moeller & Grassinger, in prep.) were used. As correlates of passion, we assessed positive and negative affect, dispositional approach motivation, and sport commitment.

The analyses revealed two homogenous groups of individuals: One group of individuals with high scores in all passion subscales, and one group of individuals with low scores in all passion subscales. Both groups differed strongly from each other in regard to their commitment towards the activity, in



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their positive affect experienced during the activity, and in regard to their dispositional approach motivation in general. The results were replicated in all studies.

The results show that passion is often experienced simultaneously harmoniously and obsessively. The finding that individuals primarily differ in their degree rather than their type of passion has far-reaching implications for the conceptualization of passion and for the research about inter-individual differences in regard to passion for activities. The specific usefulness of person-oriented and variable-oriented approaches will be discussed.



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Values and Well-being in Context: An analysis of country and group influences.

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Abstract

The purpose of my doctoral dissertation was to analyze the relationships between personal values and well-being, paying special attention to the contexts in which these associations emerge. Does having certain values enhance your well-being? Or does the relationship between values and well-being depend on the country where you live and your social network? The thesis examines these questions in four contexts: across 40,000 citizens in 25 European countries in 2006; between six hundred Argentine, Bulgarian, and Finnish university students; in a Finnish rural community in 1993 and 2007; and a representative sample of six hundred Finnish young adults from the Finish Educational Transitions Project (FinEdu). I will provide an overview of the four peer-reviewed articles included in my doctoral thesis. Results show that the relationship between individuals' values and well-being is influenced by country-level characteristics, by the social groups to which they belong, as well as by organizational and developmental situations.

Finally, I will present my post-doctoral research focusing on work values and engagement among youth. Young people's work values and occupational aspirations develop and change in the context of the opportunities present in the environment. It is important to study how work values and job outcomes are interrelated and to examine stability and change in youth's motivations.



Studying Individual Development: Matching Method and Theory

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Abstract

One major aim of theories and models in developmental psychology and related fields is describing the changes that happen in people's lives and explaining the mechanisms that lead to these changes. For example, during the transition to adulthood young people set and pursue a multitude of personal goals in different areas of life, such as education, work, and family.

In this context, psychological theories, such as self-determination theory (Deci & Ryan, 2000) and the self-concordance model (Sheldon & Elliot, 1999), would make predictions about the process of goal pursuit. The self-concordance model would predict that a person who is motivated to pursue her goals for inner (autonomous) reasons, that is, because the goals are important for her identity or intrinsically interesting, will invest more energy in the active pursuit of the goals which, in turn, increases the chances of success with goal attainment. Finally, attainment of her goals would increase the person's well-being and happiness.

Such mediational mechanisms (goal motivation → effort during goal pursuit → attainment → well-being) are at the core of many developmental theories. They seek to explain how individuals develop. Yet, the study designs and statistical models used to examine the proposed mechanisms often do not tap the level of individual development. Rather, the typical study design would be based on investigating inter-individual differences. That is, a longitudinal study would examine lagged associations between autonomous goal motivation and goal effort, goal effort and goal attainment, and between goal attainment and well-being. If positive associations between the constructs are found, this is often taken as evidence to support the proposed individual developmental process. However, results of aggregated group data analysis do not necessarily tell something about the development of the individual person (Bergman & Vargha, 2013; Molenaar, 2013). It is possible and likely that group level findings do apply to only a minority of individuals (see Reitzle, 2013).

Therefore, to test theories of individual development on the individual level, other types of data are more straightforward. These include intensive repeated measurements, such as standardized diary data and observational data of interactions. Such intensive data can also be combined with panel data to examine the links between short-term developmental mechanisms and long-term changes. Such data thus tap the relationship between the things that people do in their everyday lives and their development over the life-span.

While the above considerations are not new, analysis of group level data prevails in the field. We therefore propose to actually apply these ideas in research practice, and collect intensive data where intra-individual (and not only inter-individual) variation and change can be studied. In our



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own research, we plan to collect data with emerging adults on personal goals (examining, e.g., propositions of the self-concordance model, Sheldon & Elliot (1999)) and motivation (examining propositions of Eccles' (2009) expectancy x value model) in the context of studying and future career. We aim to establish and deepen collaborations to other Pathways members with a research focus on individual development.



