PATHWAYS Workshop
20-23 May 2012
University of Jena, Germany

“PATHWAYS - Career development and cultural perspective”
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome</td>
<td>2</td>
</tr>
<tr>
<td>List of Participants</td>
<td>4</td>
</tr>
<tr>
<td>Meeting Programme</td>
<td>5</td>
</tr>
<tr>
<td>Abstracts</td>
<td>7</td>
</tr>
<tr>
<td>Richard Göllner</td>
<td>8</td>
</tr>
<tr>
<td>Anna-Lena Dicke</td>
<td>9</td>
</tr>
<tr>
<td>Lara Perez-Felkner</td>
<td>10</td>
</tr>
<tr>
<td>Julia Dietrich &amp; Håkan Andersson</td>
<td>11</td>
</tr>
<tr>
<td>Heta Tuominen-Soini</td>
<td>12</td>
</tr>
<tr>
<td>Martin Obsconka</td>
<td>14</td>
</tr>
<tr>
<td>Kathryn Duckworth</td>
<td>15</td>
</tr>
</tbody>
</table>
Dear Colleagues

On behalf of the Jacobs Foundation I like to welcome you to the seventh PATHWAYS Workshop at the University of Jena. We have the wonderful opportunity to visit and stay at the Castles of Dornburg, a small medieval town, built above the river Saale near Jena. The castles provide the perfect location to celebrate the fourth anniversary of the PATHWAYS programme, and its phase II extension. We are also very happy to welcome three new Fellows to our team.

The aim of the workshop is to engage with the planned publications of the post-doctoral Fellows, to provide feedback and support, and to discuss future collaborative work. We also have to think about the intake of new Fellows as from October 2012, and discuss how to shape future programme activities. The feedback and suggestions from the Fellows are very welcome and important for our discussions. In preparation of the current meeting, the Fellows have engaged in email conversations, and have regular ‘virtual’ meetings using Skype. We now have the opportunity to meet in person, to clarify conceptual and methodological issues, and finalize joint papers. We will also plan the dissemination of outputs, discuss publications in forthcoming special issues, and the organisation of PATHWAYS symposia at national and international conferences. We want to encourage further collaborative projects, and look forward to the input from our new Fellows.

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 Fons van de Vijver (Tilburg University) on “Methodological Issues of Cross-Cultural Research: Problems and Solutions”

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 beautiful surroundings of this historical location, tracing the footsteps of Johann Wolfgang von Goethe, Friedrich Hegel, Johann Gottlieb Fichte, the brothers Schlegel, and Friedrich Schiller.

Enjoy and strive ...

Ingrid Schoon
Workshop venue: Dornburg Castle (Dornburg/Saale, Germany)
List of Participants

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Meeting Programme

**Sunday 20th May**

*Location: Center for Applied Developmental Science Jena, Semmelweisstr. 12, Jena (Team Room 1st Floor)*

- 15.00 – 17.00 Informal group meeting – initial discussions, finalise timetable for PI consultations, initial presentation discussion
- 17.00 – 18.00 PI Steering Group meeting and Fellows meeting

**19.00 Dinner at Stilbruch (Wagnergasse 2, Jena)**

**Monday 21st May**

*Location: Dornburg Castle (Library)*

- 8.30 – 9.00 Arrival and Welcome
- 9.00 – 13.00 Fellow presentations of ongoing or planned projects / PI feedback (15 in presentation, 15 min discussion):
  
  9.00-9.30 Richard Göllner
  9.30-10.00 Anna-Lena Dicke
  10.00-10.30 Lara Perez-Felkner
  10.30-11.00 Julia Dietrich & Håkan Andersson

- **11.00 – 11.30 Coffee Break**
  
  11.30-12.00 Heta Tuominen-Soini
  12.00-12.30 Martin Obschonka
  12.30-13.00 Kathryn Duckworth

- **13.00 – 14.00 Lunch**
- 14.00 – 16.00 Individual consultations with PI’s

- **16.00 – 16.30 Coffee Break**
- 16.30 – 17.30 Individual consultations with PI’s
- 17.30 – 18.00 Roundup

19:00  Dinner – no specific restaurant booked

Tuesday 22nd May

Location: Dornburg Castle (Library)

- 8.30 – 10.00 Presentation by Fons van de Vijver (Tilburg University): “Methodological Issues of Cross-Cultural Research: Problems and Solutions”
- 10.00 – 12.00 Working group meetings with Fons van de Viver
- 10.00 – 12.00 PI Steering Group Meeting
- 12.00 – 13.00 Lunch
- 13.00 – 15.45 Feedback (including feedback from steering group meeting) and discussions
- 15.45 – 16.15 Coffee Break
- 16.15 – 17.30 Final meetings
  • Planning of future activities
  • Identifying training needs
  • Short workshop on grant writing
- 17.30 – 18.00 Roundup

19:00  Dinner at Versilia (Wagnergasse 5, Jena)

Wednesday 23rd May

Location: Center for Applied Developmental Science Jena, Semmelweisstr. 12, Jena (Team Room 1st Floor)

- 09.00 – 11.00 PI Steering group meeting and fellow meeting
- 11.00 – 12.30 Final wrap up

12.30  Lunch & Departure
Presentations

Monday 21\textsuperscript{st} May

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

- Richard Göllner
  
  \textbf{Emotional Stability and Classroom Climate: Unique and Combined Effects on Perceived Peer Acceptance and Well-being}

- Anna-Lena Dicke
  
  \textbf{Institutional Effects on Students’ Interest: The Case of Mandatory Course Enrollment}

- Lara Perez-Felkner
  
  \textbf{It’s Not ‘Leaking Out’ but ‘Switching In’}

- Julia Dietrich & Håkan Andersson
  
  \textbf{The dynamics of flow experience: A person centered approach}

- Heta Tuominen-Soini
  
  \textbf{Student motivation and well-being: Achievement goal orientation profiles, temporal stability, and academic and socio-emotional outcomes}

- Kathryn Duckworth
  
  \textbf{Measuring success amongst entrepreneurs: A developmental-contextual approach}

- Martin Obschonka
  
  \textbf{Cross-national studies on the entrepreneurial personality structure}
Emotional Stability and Classroom Climate: Unique and Combined Effects on Perceived Peer Acceptance and Well-being

Richard Göllner¹, Ulrich Trautwein¹, Oliver Lüdtke², Kathrin Jonkmann¹

¹University of Tübingen ²Humboldt University of Berlin

Abstract

The importance of peer acceptance and well-being in the school context is increasingly discussed in educational psychology. The present article examined how children’s emotional stability and two dimensions of classroom climate (classroom management, teacher support) have unique and combined predictive effects on perceived peer acceptance and well-being. Using data from 2,598 sixth graders in 130 classrooms, multilevel analysis yielded four main findings: (a) emotional stability predicted both perceived peer acceptance and well-being, (b) perceived peer acceptance mediated the association between emotional stability and well-being, (c) classroom management predicted higher peer acceptance and attenuated the effect of emotional stability on peer acceptance, and (d) teacher support positively predicted peer acceptance and well-being.
Institutional Effects on Students’ Interest: The Case of Mandatory Course Enrollment

Anna-Lena Dicke, Ulrich Trautwein, Benjamin Nagengast

University of Tübingen

Abstract

Within educational settings students are typically forced to engage with certain subjects by means of mandatory course enrollment irrespective of their interest level. As mandatory course enrollment can be construed to have positive as well as negative effects on students’ interest, the purpose of this study was to investigate this issue empirically.

To this end, we examined changes in student reported interest in science subjects after the introduction of a mandatory course enrollment for basic courses in these subjects in upper secondary schools in the German state of Saxony. Using a quasi-experimental design, student reported interest in physics, chemistry and biology before (Cohort 1: \( N = 2125 \)) and after (Cohort 2: \( N = 1116 \)) the introduction of a mandatory course enrollment were compared.

Results for mean differences showed no statistically significant differences for the overall sample, but significant decreases in mean interests were found for two of the three subjects when considering course level (basic vs. advanced). Standard deviations also decreased statistically significantly for two of the three subjects in the overall sample as well as by course level. Findings, thus, indicate that mandatory course enrollment can affect students’ interest negatively. Future research should investigate processes potentially influencing the decrease in interest related to mandatory course enrollment.
It’s Not ‘Leaking Out’ but ‘Switching In’

Lara Perez-Felkner, Sarah-Kathryn McDonald, Barbara Schneider

University of Chicago, Michigan State University

Abstract

Research has shown that even adolescent females who are both highly skilled in mathematics are unlikely to select into certain scientific fields, even as some continue to maintain that female underrepresentation in the sciences is attributable to males’ greater ability in these domains. This study examines gendered differences in a longitudinal cohort of U.S. college students’ choice of undergraduate major, assessing the relative influence of ability, attainment values, and subjective orientations on male and female college students’ decisions about specific STEM majors. We find that high math ability girls pursue biological sciences, clinical and health sciences, and the social and behavioral sciences significantly more than boys do. Career attainment values differentially shape whether boys and girls go into the physical sciences, engineering, mathematics, and computer science as compared to other fields. Notably, our models show no support for the claim that mathematics ability explains the persistence of gender segregation in scientific fields.
The dynamics of flow experience: A person centered approach

Håkan Andersson¹, Julia Dietrich²,³, Yi-Miau Tsai⁴, & Katariina Salmela-Aro²

¹University of Stockholm, ²University of Helsinki, ³University of Erfurt, ⁴University of Michigan

Abstract

Flow, since its appearance as a term to describe intense concentration and energizing experience by Csikszentmihalyi (1975), has become a common expression in daily life. This scarce phenomenological state seems to occur when least expected, but theory suggests that a match between skill and challenge is the key. The present study attempts to capture flow-like experience in daily experience using a person-centered approach. 72 first-year university students in Finland provided around 2700 responses in a mobile phone assisted study, the CASS study. Participants (55 female, 17 male; mean age: 21.9 years) assessed their emotional and motivational state 3 times throughout the day across a 14-day period. We used hierarchical cluster analysis using Ward’s method on the variables of perceived challenge, confidence and interest experience. Initial findings suggest a 6-cluster solution, including a flow-like state which accounts for 11% of daily responses. Further, variation in states seems to be more situational and less trait dependent. Next, we will investigate different aspects of the dynamics of flow.
Student motivation and well-being: Achievement goal orientation profiles, temporal stability, and academic and socio-emotional outcomes

Heta Tuominen-Soini
University of Helsinki

Abstract

The purpose of this study was to examine lower and upper secondary school students’ achievement goal orientation profiles, stability and change in these profiles both preceding and across educational transitions, and academic and socio-emotional outcomes. Utilizing a person-centred approach, distinct groups of students with different motivational profiles were extracted with considerable consistency in profiles across the two academic contexts. Groups with a dominant tendency towards mastery (mastery-oriented students), performance (success-oriented and/or performance-oriented students), and avoidance (avoidance-oriented and/or disengaged students) as well as a group of students without a dominant tendency towards any specific achievement goal orientation (indifferent students) were found.

Students emphasizing mastery displayed the most adaptive pattern of academic and socio-emotional functioning. Students’ preference for performance-related goals was, in turn, related to some adjustment problems and socio-emotional vulnerability. For example, both mastery- and success-oriented students were engaged in studying, found their schoolwork meaningful, and were doing well in school, although success-oriented students’ stronger concerns with performance made them more vulnerable to emotional distress and school burnout. The indifferent students represented a typical student who acknowledges the goals of learning and doing well in school, but is at the same time trying to minimize the effort spent on studying. Their motivation for learning and studying was less than optimal but, then again, they did not seem to have any particular problems either. Students deliberately aiming at avoiding schoolwork showed the most maladaptive pattern of academic and socio-emotional functioning; they displayed relatively low engagement and academic achievement and high levels of cynicism and inadequacy.

Motivational profiles were rather stable over time. Around 60% of students displayed identical motivational profiles within and between school years and half of the students displayed identical profiles across the transition to upper secondary education. Most of the changes in the group memberships were directed towards neighbouring groups and there were only few clear changes. In conclusion, secondary school students endorse multiple achievement-related goals and outcomes simultaneously, and the patterns of these strivings are differentially associated with academic and socio-emotional functioning, yet rather stable both preceding and across educational transitions. Findings demonstrate the importance of including measures of well-being when evaluating the role of achievement goal orientations in learning and achievement.
The results show that the educational transition periods of the youth are not entirely characterized by either school disengagement and distress or school engagement and well-being. It is, therefore, crucial to focus on individual development in motivation and well-being; some students encounter declining motivation and different types of adjustment problems, some navigate through this phase without notable problems, and some even become increasingly motivated and engaged in studying.
Cross-national studies on the entrepreneurial personality structure

Martin Obschonka

University of Jena

Abstract

My presentation summarizes my current research on the entrepreneurial personality structure (assessed on the Big Five level). I will present two studies:

1) The first study explores the role of the Big Five personality traits in the gender gap in entrepreneurship. Both the single Big Five traits and the intraindividual entrepreneurial Big Five profile are investigated as mediators between gender and self-employment. The database drew from the German Socio-Economic Panel (GSOEP) and the British Household Panel Study (BHPS), two nationally representative panel studies including personality data. Whereas the German data did not reveal any mediation effect of the single Big Five traits, there was a mediation effect of openness and agreeableness in the British data. Moreover, in both countries an entrepreneurial Big Five profile mediated the effect between gender and self-employment (males scored higher on this profile, which in turn positively predicted self-employment status).

2) The second study deals with the geographic distribution of an entrepreneurial personality structure. This study utilizes personality data collected from over half a million U.S. residents as well as public archival data on state-level entrepreneurial activity (e.g., business creation). Results revealed that entrepreneurial personality is regionally clustered. This geographical distribution corresponds to the pattern that can be observed when mapping entrepreneurial activity across the U.S.. Indeed, the state-level correlations between entrepreneurial personality and activity were positive in direction, substantial in magnitude, and robust even when controlling for regional economic prosperity. These results were supported by an additional analysis at the U.S. Metropolitan Statistical Areas level. Finally, the U.S. results could be replicated in independent German (N = 19,842) and British samples (N = 15,617).
Measuring success amongst entrepreneurs: A developmental-contextual approach

Kathryn Duckworth, Ingrid Schoon
Institute of Education

Abstract

Success is a critical task of entrepreneurship. While several studies have established concurrent characteristics which promote success amongst small business owners such as proactive behavior and achievement motivation (McClelland, 1961, 1987), social skills (Baron & Markman, 2003), self efficacy (Baum & Locke, 2004) and stress tolerance (Rauch & Frese, 2007), few have assessed the developmental precursors of these competencies. This paper extends earlier work on the developmental pathways to becoming an entrepreneur and how entrepreneurs are different from employees to explore whether these factors are also related to entrepreneurial success.

Using a longitudinal approach, following the lives of 7,733 young people in the 1970 British Cohort Study from birth to age 34, we examine the role of parental social background and role modelling, as well as cognitive ability, behaviour and self concepts, and labour market experience as predictors of entrepreneurial success in adulthood. Entrepreneurship is defined by employment status (being self employment and owning one’s own business). Detailed definitions of what constitutes ‘successful entrepreneurship’ are scarce in the literature, but where there are given largely refer to different indicators of business performance. We explore both objective measures of business performance (income, profit and employing others) at age 34 amongst our group of entrepreneurs as well as compare indicators of subjective job success (job satisfaction and job security) between entrepreneurs and wage earners.

In line with previous research, our results show that women earn less and have lower profits, though they are no less likely to employ others as part of their business. However, women experience greater job satisfaction and security. Our findings also confirm recent developmental work highlighting the particular importance of social skills for entrepreneurs, for both objective and subjective measures of success. Labour market activity histories are also key predictors of both objective and subjective success, reflecting the interplay between individual characteristics and contextual experience as well as the value of work-life balance.