



### BERGISCHE UNIVERSITÄT WUPPERTAL

### Programm

### Bildungsökonomischer Ausschuss im VfS

14. und 15.03.2013

### **Tagungsort**: Bergische Universität Wuppertal Gaußstr. 20 (Rektoratsgebäude) B.06.01 (Gebäude B, Ebene 6, Raum 1)

### Generalthema:

"Bildung und Gesundheit"

Mittwoch, 13. März	
20.00 Uhr	Get-together im "Katzengold", Untergrünewalderstr. 3, 42103 Wuppertal, http://katzengold.org/
Donnerstag, 14. März	
09.00 – 09.15 Uhr	Grußwort des Dekans Prof. Dr. Michael Fallgatter Begrüßung (Kerstin Pull, Hendrik Jürges, Kerstin Schneider)
09.15 – 10.15 Uhr	Pfeiffer, Friedhelm (ZEW Mannheim) Early life adversity and children's competence development: evidence from the Mannheim Study of Children at Risk
Kaffeepause	
10.30 – 11.30 Uhr	Felfe, Christina (University of St. Gallen) Early Child Care and Child Development: For Whom It Works and Why
11.30 – 12.30 Uhr	Peter, Frauke (DIW Berlin) Day care (quality) and differences in children's health and personality characteristics

Schwebebahnfahrt im "Kaiserwagen" mit Stadtführung und Imbiss (http://www.wuppertal.de/tourismus-freizeit/schwebebahn/kaiserwagen/index.php)

14.30 – 15.30 Uhr	Schneeweis, Nicole (Johannes Kepler Universität Linz) Does schooling improve cognitive functioning at older ages?
15.30 – 16.30 Uhr	Reinhold, Steffen (Universität Mannheim) Compulsory Schooling Reforms, Education and Mortality in Twentieth Century Europe
Kaffeepause	
17.00 – 18.00 Uhr	Backes-Gellner, Uschi (Universität Zürich) Apprenticeship training and innovation: a theoretical and empirical analysis of the advantages of dual education for innovation in firms
18.15 Uhr	<ul> <li>Mitgliederversammlung</li> <li>Tagesordnung:</li> <li>Genehmigung des Protokolls der Sitzung 2012 in Zürich (elektronisch zugestellt)</li> <li>Bericht der Vorsitzenden</li> <li>Wahl des/der neuen Vorsitzenden</li> <li>Vorschläge für Gäste/neue Mitglieder</li> <li>Sitzung 2014</li> <li>Verschiedenes</li> </ul>
20.00 Uhr	Abendessen, Restaurant Taormina, Südstr. 26, 42107 Wuppertal, http://www.faidate.de/
Freitag, 15. März	
09.00 – 10.00 Uhr	Sandner; Malte (Leibniz Universität Hannover) The effects of early childhood intervention on child development, early skill formation and health outcomes. Evidence from a randomized experiment
10.00 – 11.00 Uhr	Makles, Anna (Bergische Universität Wuppertal) The effect of early childhood education on cognitive and verbal ability – Results from a quasi-experiment with preschool children
Kaffeepause	
11.15 – 12.15 Uhr	Wößmann, Ludger (Ludwig-Maximilians-Universität München und Institut für Wirtschaftsforschung) Education and Secularization: Resurrecting the "Traditional View" with Panel Evidence from German Cities, 1890-1930
12.15 – 13.15 Uhr	Bellmann, Lutz (Institut für Arbeitsmarkt- und Berufsforschung) Vocational training and university education after the Abitur: Effects on wages and various dimensions of job satisfaction

### Abstracts

# Early life adversity and children's competence development: evidence from the Mannheim Study of Children at Risk

Friedhelm Pfeiffer (ZEW Mannheim)

This paper investigates the role of early life adversity and home resources in terms of competence formation and school achievement based on data from an epidemiological cohort study following 364 children from birth to adolescence. Results indicate that organic and psychosocial risks present in early life as well as the socio-emotional home environment are significant predictors for the formation of competencies. Competencies acquired at preschool age predict achievement at school age. A counterfactual analysis is performed to assess trade-offs in the timing of interventions in the early life cycle.

#### Early Child Care and Child Development: For Whom It Works and Why

Christina Felfe (University of St. Gallen)

Many countries are currently expanding access to child care for young children. But are all children equally likely to benefit from such expansions? We address this question by adopting a marginal treatment effects framework. We study the West German setting where high quality center-based care is severely rationed and use within state differences in child care supply as exogenous variation in child care attendance. Data from the German Socio-Economic Panel provides comprehensive information on child development measures along with detailed information on child care, mother-child interactions, and maternal labor supply. Results indicate strong differences in the effects of child care with respect to observed characteristics (children's age, birth weight and socio-economic background), but less so with respect to unobserved determinants of selection into child care. Underlying mechanisms are a substitution of maternal care with center-based care, an increase in average quality of maternal care, and an increase in maternal earnings.

#### **Day care (quality) and differences in children's health and personality characteristics** *Frauke Peter (DIW Berlin)*

This paper analyzes potential effects of day care attendance and of day care quality on changes in child health and changes in personality characteristics using conditional difference-in-differences matching. In the economic literature studies so far infer the broad measure day care attendance by itself and scarcely differentiate by amount of time spent in day care or day care quality. Yet, day care facilities vary in terms of quality. In this paper structural quality, i.e., standards that address issues such as child-staff-ratio, group size, qualification of caregivers, etc. is addressed. Combining data from the German Socio-Economic Panel Study (SOEP) and regional data on day care guality from the "Kinder- und Jugendhilfestatistik" (statistics on child and youth welfare), the paper investigates how a child's day care attendance and the quality of day care facilities influence differences in children's outcomes between age three and six. Children's changes in health are captured by incidence of ear infections and eczema, and differences in personality characteristics are assessed via children's ability to concentrate and their ability to comprehend. The results of conditional difference-in-differences matching show that day care attendance at age four by itself is not significantly correlated with changes in children's outcomes. Yet, the results indicate that quantity and structural quality of day care explain part of the variation in children's health and personality characteristics. Full-time attendance significantly decreases children's ability to concentrate and children's chances of illnesses between age three and age six increase with a higher child-staff-ratio.

#### Does schooling improve cognitive functioning at older ages?

Nicole Schneeweis (Johannes Kepler Universität Linz), Vegard Skirbekk (International Institute for Applied Systems Analysis Laxenburg Austria), Rudolf Winter-Ebmer (Johannes Kepler Universität Linz)

We study the relationship between education and cognitive functioning at older ages by exploiting compulsory schooling reforms, implemented in six European countries during the 1950s and 1960s. Using data of individuals aged 50+ from the Survey of Health, Aging and Retirement in Europe (SHARE), we assess the causal effect of education on old-age memory, fluency, numeracy, orientation and the chronic disease dementia. We find a positive impact of schooling on memory. One year of education increases the delayed memory score by about 0.3, which amounts to 15% of the standard deviation. Furthermore, for female seniors, we find a negative impact of education on the incidence of dementia.

# Compulsory Schooling Reforms, Education and Mortality in Twentieth Century Europe

Christina Gathmann (Universität Heidelberg), Hendrik Jürges (Bergische Universität Wuppertal), Steffen Reinhold (Universität Mannheim)

Education yields substantial non-monetary benefits, but the size of these gains is still debated. Previous studies, for example, report contradictory effects of education and compulsory schooling on mortality - ranging from zero to large mortality reductions. Using data from 19 compulsory schooling reforms implemented in Europe during the twentieth century, we quantify the mean mortality effect and explore its dispersion across gender, time and countries. We find that men have small mortality gains from compulsory education both in the shorter and longer run. In contrast, women do not benefit from compulsory schooling reforms.

# Apprenticeship training and innovation: a theoretical and empirical analysis of the advantages of dual education for innovation in firms

Christian Rupietta (Universität Zürich), Uschi Backes-Gellner (Universität Zürich)

This paper analyzes whether apprenticeship training has a positive impact on firms' innovativeness. We argue that apprenticeship training in the form of dual education as known particularly from the German-speaking countries provides an additional source of knowledge. This knowledge source adds to a firm's knowledge production process and nurtures additional product and process innovations. Thus, we expect firms that train apprentices to be more innovative than non-training firms. Our empirical results based on the innovation survey of the Swiss Economic Institute (KOF) support our hypothesis. We thoroughly take care of endogeneity problems and use different instruments to reduce the problem. We find that the positive effect of apprenticeship training is very stable for total innovations and for patent applications.

#### The effects of early childhood intervention on child development, early skill formation and health outcomes. Evidence from a randomized experiment *Malte Sandner (Leibniz Universität Hannover)*

This paper presents results from a randomized evaluation of a home visiting program for disadvantaged first time mothers and their families implemented in three German federal states. At the end of the first year of the program, children in home visited families perform significantly better than those in the control families by 0.18 standard deviations in the Mental Developmental Index. Examination of gender differences revealed that home visited girls scored 0.30 standard deviations higher than girls in the control families, whereas boys scored similar in both groups. Results indicate no differences in the scores of the Psychomotor Developmental Index and the birth outcomes, despite 0.28 standard deviations

higher birth weight for boys in the home visited families compared to boys in the control families. We find evidence for skill self productivity but in different magnitude for boys and girls. Furthermore, we analyze possible monetary returns of the program.

# The effect of early childhood education on cognitive and verbal ability – Results from a quasi-experiment with preschool children

Anna Makles und Kerstin Schneider, Bergische Universität Wuppertal

Although the vast majority of children in Germany have visited a kindergarten before entering primary school, we observe significant differences in school readiness of children depending on family background. Using and combing different data sources and exploiting a quasi-experimental design, we analyze the causal effect of extracurricular education on the school readiness of children. More precisely, we study the effect of being a "junior scientist" (in German: Kinder-Forscher) at the Junior University (JU) in Wuppertal on the cognitive and verbal outcomes of preschool children in terms of school readiness and analyze whether additional educational programs can lead to an improvement of school relevant skills. Our results show that the JU-participants perform slightly but significantly better on the school entry exam compared their non-participating peers. However, the benefits of participation differ by gender, ethnicity, and socioeconomic status.

## Education and Secularization: Resurrecting the "Traditional View" with Panel Evidence from German Cities, 1890-1930

Sascha O. Becker (University of Warwick), Markus Nagler (University College London), Ludger Wößmann (Ludwig-Maximilians-Universität München und Institut für Wirtschaftsforschung)

Secularization is a European phenomenon of the late 19th and early 20th century that brought fundamental societal change. Despite hot academic debates, empirical evidence on the sources of this phenomenon is scarce. The "secularization hypothesis" as advanced in different versions by Hume, Marx, Weber, and Freud suggests that increased education may have been a leading source of secularization. The evidence that exists, which is mostly cross-sectional, generally dismisses the traditional view that education reduces church attendance and finds a positive correlation. However, it seems obvious that omitted variables may well drive this result; e.g., more "orderly" people may both go to church and to school. To provide new evidence on this issue, we construct a panel dataset of German cities between 1890 and 1930 that combines data on school enrollment with unique data on church attendance of Protestants that so far has not been explored with microeconometric methods. Using cross-sectional methods on our data, we replicate the existing finding that education is positively associated with church attendance. Yet when using fixed effects models and thus exploiting within-city variation only, the effect is completely reversed. Dynamic panel models support the finding that increased enrollment in advanced schools is followed by decreases in church attendance.

# Vocational training and university education after the Abitur: Effects on wages and various dimensions of job satisfaction

Lutz Bellmann, Jens Stephani (Institut für Arbeitsmarkt- und Berufsforschung)

This paper investigates the individual effects of various educational paths on wages and job satisfaction of individuals who have obtained the German upper secondary school-leaving certificate (Abitur). Based on a sample of Abitur holders from the BIBB/BAuA Employee Survey 2005/2006 we find higher earnings for university graduates with and without vocational training compared to Abitur holders with vocational training. While the overall job satisfaction of an individual seems to be unaffected by the educational path chosen, our analyses reveal significant effects of the educational path on single dimensions of job satisfaction.