



European research
network on
transitions in youth

Inequalities in Youth Transitions within and across Countries: New Insights for Policy

30th Annual Workshop

Edinburgh

6-8 SEPTEMBER 2023

Abstracts



THE UNIVERSITY of EDINBURGH
Moray House School of
Education and Sport

**Advanced Quantitative Research
in Education
Thematic Hub**



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Session 1 – Family of origin, education and health

Unexpected educational advancement in school education among young people from educationally disadvantaged families: What makes the difference?

Author: Madeleine Floiger

Abstract: In this paper, unexpected educational pathways in school education are considered. Unexpected educational advancement is understood to mean intergenerational advancement that extends over more than one educational level compared to parents and children. Based on a resource theory, it asks what factors contribute to children graduating noticeably higher than their parents? Resources can be located in the school and extracurricular context, such as a particularly conducive school environment or with peers. But school performance and personal factors such as self-responsibility, a high level of self-efficacy or the ability to learn in a disciplined manner can also contribute to overcoming an educational and sometimes resource-poor situation in the parental home.

The following central key question is determined in the study: Which influencing factors, in which form and combination, have the unexpected educational advancements in school education had a serious impact in school, extracurricular and personal areas? The investigation is carried out using the data set of the Life study (life courses from late childhood to early adulthood, authors: Wolfgang Lauterbach, Helmut Fend, Werner Georg, Fred Berger & Urs Grob). The study examined long-term effects of socialization and development from early adolescence to middle adulthood up to the age of 45. In particular, the long-term perspective, which is rare in German-speaking countries, characterizes the Life study: The central domains of educational and professional biographies, social life courses, cultural-political orientations and personality and risk developments are recorded at the same time.

On the basis of classic mobility analyses, the promotions that took place over two school levels are first analyzed descriptively. In a second step, the causes of these ascents are searched for analytically, using regression analyses. The focus is on step-by-step logistic regressions.

The first results show that a not inconsiderable proportion of children, 18.7 %, make the unexpected advancement from an uneducated family. This applies equally to girls and boys. These children finish school at least two grades higher than their parents. According to initial analyses, a combination of good or very good school performance in connection with contact with other educational milieus, outside of one's own educationally distant reality, is particularly beneficial. This contact can be in the extended family, with distant relatives, through regionally favorable conditions or in extracurricular activities, e.g. B. arise in sports or music groups. Through pronounced (self-)reflection and the critical examination of one's own origins, the first experiences of difference are formed and the desire for change and further development arises. In the case of the young people in question, personal skills such as personal responsibility, ambition and diligence are also necessary in order to be able to initiate and manage the ascent. Instead of the parents, a teacher often takes on a supporting and decisive role in the advancement process. However, the unexpected advances in school education are only realized if the factors from the various areas occur in combination.

Family structure and the risk of early school leaving: the moderating role of institutional contexts in European countries

Author: Kristina Lindemann

Abstract: This study examines how institutional contexts in different European countries moderate the risk of early school leaving among young people from single-parent families. The aim is also to explore how these moderating effects depend on a family's socioeconomic status. I focus on three aspects of institutional contexts: (1) the role of comprehensive secondary education systems, (2) the generosity of benefits to single mothers and childcare for school-age children and (3) female employment rates. Only a few previous studies have investigated how institutional contexts mitigate the effects of family structure on educational outcomes (Bernardi & Radl, 2014; Heuveline et al., 2010; Pong et al., 2003). Moreover, from a comparative perspective, little is known about secondary school dropout and leaving the educational system without a diploma.

First, I expect that the adverse effects of single parenthood on early school leaving are smaller in more comprehensive secondary education systems as such systems tend to mitigate social inequalities more (Montt, 2011; Van de Werfhorst & Mijs, 2010). For instance, Bernardi and Radl (2014) showed that parental separation affects the attainment of tertiary education more in countries where students are sorted early into different tracks. Second, I expect that generous social policies mitigate the effect of family structure as more generous benefits reduce the poverty of single mothers (Brady & Burroway, 2012). Moreover, childcare policies can alleviate work and family conflict (Misra et al., 2012) and cumulatively improve maternal employment opportunities over time (Zagel & Van Lancker, 2022). Finally, I also expect that higher labour market participation of women mitigate the consequences of family structure as the financial security of employed households is higher.

I use retrospective data from the EU-SILC 2019 ad-hoc module on intergenerational transmission of disadvantages. I focus on young people born between 1984 to 1994 (40,575 respondents from 29 European countries). The dependent variable is early school leaving, i.e. leaving the educational system without acquiring at least a vocational diploma or general upper secondary education. The contextual level variables are: (1) vocational orientation and age of tracking; (2) generosity of benefits to single-parent households and out-of-school hours of childcare; (3) employment rate of women. These data are from Eurostat and OECD. I use multilevel regression models to explore the cross-level interactions between family structure and context-level variables. I estimate these interactions also by parental education.

The first findings show that, across European countries, young people who lived in a single-mother family in their adolescence had a higher risk of early school leaving than youth from two-parent families. Contrary to the expectations, I found that the association between living in a single-parent family and low educational attainment is weaker in countries with an earlier age of tracking and a stronger vocational orientation in secondary education. Furthermore, more out-of-school hours of childcare and more generous benefits to single parents somewhat mitigate the consequences of living in a single-parent family. However, further analysis showed that this is the case only for low-SES families. Finally, the employment rates of women seem to play no role.

The effect of social origin on 15-year-olds' expectations to complete higher education in the Netherlands: The explanatory role of school performance and parental resources

Authors: Maarten Wolbers & Nicole Swart

Abstract: Several studies in the field of social stratification and mobility have established major inequalities by social origin in the development of educational expectations among pupils and students. Educational expectations are important to investigate, not only since expectations are powerful signals of what young people hope to achieve, but also because they have strong implications for their subsequent career development and choices. In other words, varying educational expectations by social origin will in the end lead to social inequalities in realized educational attainment and occupational achievement.

The aim of this paper is to determine the effect of social origin on young people's expectations of higher education in the Netherlands. More important, it attempts to contribute to the understanding of inequality in these expectations by testing specific explanations for the total social origin effect. A first mechanism that mediates the effect of social origin is related to scholarly ability. It refers to the variation in school performance that is associated with family background; in the literature often expressed as primary effects of social stratification. Students from lower socioeconomic backgrounds perform less well in school and, therefore, have lower educational expectations than their higher socioeconomic status peers. A second mechanism that explains individual differences in the expectation to complete a degree in higher education has to do with the direct effect of social origin that is independent of school performance; referred to as secondary effects of social stratification. Or, young people from lower socioeconomic backgrounds expect to choose less ambitious educational pathways than those from more advantageous socioeconomic backgrounds, even after controlling for ability. It is likely that these social differentials in educational expectations and decisions net of ability are related to differences in the possession and usage of parents' economic, cultural and educational resources.

To test these hypotheses, we used the Dutch data from the 2018 round of the Programme for the International Student Assessment (PISA) carried out by the Organization of Economic Cooperation and Development (OECD). Every PISA test assesses 15-year-olds' knowledge and skills in reading, mathematics and science, and other school performance related factors such as grades. In addition, detailed information is collected on the students' socioeconomic background, including data on their family situation, and educational and occupational expectations.

Preliminary results, based on linear probability models with robust standard errors, indicate strong effects of social origin on young people's expectations of higher education. Large part of the total social origin effect is mediated by scholarly ability and other school performance related indicators. The remaining, direct effect of social origin, net of scholastic achievement, can only to a small part be explained by differences in parents' economic, cultural and educational resources.

Growing Health Disparities in Youth Transition: The Effect of Family Affluence on Health and Well-Being

Authors: Andreas Klocke & Sven Stadtmüller

Abstract:

Thematic importance:

In the 1990s, Patrick West argued that socially segmented health inequalities are not evident during adolescence. Health equalisation was a remarkable and somewhat exceptional finding as the overall picture of the impact of social inequalities on health shows a more-or-less constant social gradient across the life course. West's main argument was that youth culture has a levelling effect and results in an equalisation in youth. This equalisation hypothesis has since been empirically tested several times, yet with inconclusive results. Based on panel data of about 10,000 students from Germany surveyed on an annual basis between 2014/2015 and 2019/2020, we provide an up-to-date contribution to the question of equalisation, going beyond previous research in many ways.

Introduction and objectives:

The paper addresses the impact of family affluence (FAS) on health and well-being between age 10 to 16. Using panel data, we can make a clear account of the changes which take place in family affluence on health and well-being during adolescence.

Method:

Data from the German survey "Health Behaviour and Injuries in School-Age – A Panel Study 2013-2020" will be used. The Panel Survey started 2014/15 with the mean age cohort 10-11 years old. Data from six waves will be analysed, with more than 34.000 observations. Social inequality is measured according to the Family Affluence Scale (FAS). In fixed-effects regression models it will be analysed in which way the effect of FAS on health and well-being varies over time. Additionally, we run random-effects models as a robustness check.

Results:

Findings show that there is quite a small effect of family affluence on health and well-being at age 11. Instead of declining with age according to the "equalisation thesis", this effect is increasing for some health-related items and most well-being variables while children are getting older. However, there are also some indications of equalisation, especially for the consumption of unhealthy foods.

Conclusion and Implications:

The paper concludes that social inequality has a small but growing effect on health and well-being in youth transition. This challenges the well-established equalisation thesis. We think that cohort effects are the answer to this change. Different youth generations (Generation X and Generation Y) show differences in the pathways to adulthood. Whereas the Generation X experienced a somewhat "protective" family guidance which did not significantly alter tendencies of unification of social classes in adolescence, the contemporary Generation Y is essentially characterized by "negotiating families" (Wyn, Cahill, Woodmann et al 2020). Here, cultural capital (Bourdieu) of families shapes nowadays life trajectories. Hence, we find socially segmented health inequalities today.

Session 2 – Uncertainty in youth transitions

What is the role of school-mediated employer engagement in concurrent school-to-work transitions?

Authors: Ingrid Schoon & Golo Henseke

Abstract: The Covid-19 pandemic and its aftermath highlighted the over-proportional employment risks young people face in today's uncertain labour markets. Against this background we ask if career preparation activities offered in schools and college can help young people, in particular those from less privileged family background, to navigate the transition from education to employment. Guided by career construction theory, this study examines if participation in school-based career preparation activities can support young people in developing a range of psychosocial resources and enable a smooth transition into the labour market during a period of economic upheaval, avoiding the experience of not being in education, employment or training (NEET). The research draws on a nationally representative longitudinal sample of 18 to 25 year-olds who participated in the Youth Economic Activity and Health (YEAH) online survey conducted in the UK between February 2021 and November 2022 (n=5278). The findings suggest that participation in school-based career preparation (for example, taking up an internship or work experience; being mentored; or receiving careers advice) is more likely among females, among those with better educated parents who did not receive free school meals (a widely used indicator of socio-economic status). Moreover, participation in school-based career preparation activities is associated with higher levels of career adaptability, self-efficacy and optimism for the future. All these factors, in turn, are associated with a reduced risk of being NEET, in particular for males and those who had received free school meals. The findings highlight the importance of school-based career preparation activities in supporting adaptive career-related behaviour among young people in times of economic uncertainty and upheaval, in particular for males and those from less privileged background.

EU youth in the UK post-Brexit: citizens in transition

Authors: David McCollum, Katherine Botterill, Daniela Sime & Sojka Bozena

Abstract: The wellbeing of migrants and ethnic minorities in Europe is a longstanding and significant concern amongst policymakers and scholars. These issues are of particular pertinence in the context of younger people, given the substantial and growing child and youth migrant population in most EU states. This paper focuses on inequalities in youth transitions of young EU migrants in the UK post-Brexit. This group merits analytical scrutiny as many young EU nationals in Britain have been vulnerable to well-documented significant achievement gaps, higher rates of early school leaving, lower access to higher education opportunities and higher proportions classified as not in employment, education or training (NEET). How these existing challenges have been exacerbated by the UK's recent withdrawal from the EU is the focus of this paper, based on quantitative data collected and analysed in the first phase of an ESRC-funded longitudinal study on European migrant youth transitions. This investigation sheds new light on the aspirations, opportunities and participation of young European migrants in education, employment and civic life in post-Brexit Britain. Drawing on interdisciplinary scholarship in geography, youth studies and migration studies, the analysis uses a framework of 'citizens-in-transition' to explore how complex, intersectional youth transitions are negotiated by European young people in post-Brexit Britain. Methodologically, the research documents their circumstances and transitions using two sources. Firstly, a UK-wide online longitudinal survey developed by the researchers which assesses youth education and employment transitions and civic and political participation across two distinct time points. The longitudinal aspect of the study design aims to elucidate how the young people experience and reflect upon these transitions as they move towards adulthood in a changing geopolitical climate. Secondly, the analysis of relevant suitable secondary datasets (Census, UKHLS and APS) to generate a profile of the attitudes, behaviours and circumstances of young Europeans with regards to education, training, employment and citizenship. These larger scale representative datasets will provide an overview of the demographic and socio-economic profile of young European migrants in Britain at specific points in time (e.g. Census) and also from a longitudinal perspective (e.g. UKHLS). Taken together, these findings will directly inform policy making and analysis aimed at enhancing European youth participation and outcomes in education,

employment and civic life. Preliminary findings thus far suggest that existing precarities of young Europeans have in many cases been exacerbated by Brexit and the covid-19 pandemic, that there are significant disparities within this cohort in terms of experiences and outcomes and that the capacity of organisations to support youth transitions has been undermined by prolonged state funding constraints.

Young people's career expectations in times of (declining uncertainty in Germany and UK – the pandemic effect

Authors: Hans Diertrich, Golo Henseke, Alexander Patzina, Ingrid Schoon & Laura Brunner

Abstract: The COVID-19 pandemic disproportionately hit young people, for example, through school closure, reduced training opportunities, and increased and prolonged youth unemployment. This study examines how young people's expectations regarding their job prospects and skills learning changed in response to the macro-level uncertainty caused by the pandemic. Specifically, the study looks at how individuals at different stages in the school-to-work-transition updated their expectations in response to the wider societal, economic and existential recovery since the vaccine rollout in early 2021.

As social background affects not only educational and social attainment, but also an individual's conceptions of their present self, and their future self (Alm 2011; Johnson & Hitlin 2017; Burger & Mortimer 2021), we are interested in how far the COVID pandemic affected the social gradient of future expectations. Young people from less privileged backgrounds tend to report lower expectations and struggle more in education and the transition to work than their more privileged peers (Andres, Adamuti-Tracheet al. 2007).

However, less is known how young people update their career and skills learning expectations in response to exogenous shocks (e.g: Parker, et al. 2016, Schoon & Mortimer 2017). Existing literature documents that career expectations vary with educational attainment (Burger & Mortimer 2021), personality and preferences e.g.: Big Five, risk aversion, self-efficacy: Alemany-Arrebola 2020; Malurean et al 2021), or social exclusion (Bandelj & Lanuza 2018; Sjøstad et al 2021). More generally, career expectations will vary with the exposure to economic uncertainty, differences in the ability to combine and process news into accurate assessments and forecasts, or systematic bias. Existing evidence suggests that young people are as capable as other demographic groups to form accurate career expectations from the signals they encounter in their social environments (Sorić et al., 2019).

This study uses the remarkable decline in macro-level uncertainty over winter 2021 to early 2022, to test how individuals update their career and job skills expectations. From a school-to-work transition perspective, the study focuses on young people who face upcoming transitional decisions regarding education and careers ('at risk'). We contrast the at-risk population with young people, currently not at risk with respect to their position in their life course. In so doing, this study explores how well young people viewed their future prospects during a period of initially heightened uncertainty to less stringent behavioural restrictions and economic recovery.

We employ individual-level data from the British and German Youth Economic Health Monitor (YEAH) survey, collected in 6 quarterly waves between January 2021 and June 2022 (Dietrich et al 2022; Henseke et al 2022). The British dataset includes 6,000 observations from 3,746 individuals, whilst the German survey delivered 1,800 observations of young people. We applied a difference in differences approach in a cross-nationally comparative analysis.

We find career and job skills learning expectations improved as macro-level uncertainties declined from early 2021 to 2022. Young people at the cusp of the school-to-work-transition held initially more pessimistic expectations but they improved quickly. We assumed a protective effect of socioeconomic status on individual expectations. However, we find no support for a protective effect of SES in Germany, whilst in the UK, those with tertiary-educated parents reported more pessimistic career and job skills learning prospects due to COVID-19 than others. Overall, the study provides novel insight into how young people updated their expectations regarding their skills learning and job prospects to changing

University to work transitions, digitalisation agenda, and institutional trust: A study of the Western Balkans

Authors: Elvisa Drishti, Ildir Duhanxhi & Zamira Shkreli

Abstract:

Aim of the paper:

This study investigates the effects of Covid19 on school-to-work (STW) transitions for the case of the Western Balkans 6 (WB6) countries (Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia, and Serbia). Using three strategic years, 2019 (pre-Covid19), 2020 (during-Covid19), and 2021 (post-Covid19) offers an interesting opportunity to capture quasi-experimental data (with three repeated measures) about what initially started as a health shock but that resulted in a fully-fledged economic shock. Across the WB6 region, there were variation in policy responses to Covid19, therefore providing a natural experiment research design to assess the effects of such event in terms of STW.

In this study we have used Albania as a reference economy as the digitalisation agenda has started earlier (since 2013) and by 2019 nearly all public services were available online. In this context, digital literacy was less affected by the Covid19 pandemics, at least compared with the other WB countries, therefore suggesting a best-fit control group.

The scope of this study is to explore the how the Covid19 situation affected the STW transitions for the WB6 where digital literacy and policy response varied across the 2019 – 2021 time span.

STW is related to the level of unemployment among young people which for the case of the WB6 is relatively at a high level (26% in all WB economies, compared to just 16.8% in the EU-27) reaching almost 50% in Kosovo*. The youth unemployment rate has increased as a result of the Covid19 pandemic, especially in the 4th quarter of 2020, reaching as high as 46.5% in Montenegro with sharp increases also in North Macedonia (to 39.2%) and Serbia (to 32.4%). Long-term unemployment affects almost two-thirds of unemployed youth in Bosnia and Herzegovina and North Macedonia, and two thirds of unemployed young women in Montenegro . This means that young people to a considerable extent find it difficult to find work that meets their expectations, remaining not included in the economic activity of the country and dependent on the social support given to them by the family, the state, and their relatives in emigration or employed in the country.

Methods and data:

Using cohort analysis, we estimate the differences in the length of time documented by the youth employment before, during, and in the exit of Covid19. We use the cross-sectional data from the 2019 to 20221 waves of the Public Opinion (Regional Cooperation Council). The data is collected in the months December of each year so it captures backward-looking perceptions and beliefs about important economic and social aspects of life in the WB6. Sample size is around 1000 for each country and the survey is repeated annually.

Control variables (i.e. individual fixed effects) include standard demographic, socio-economic information at the individual level, and labour market controls and household level controls are included. In addition, year fixed effects are also included in the model with within-country analysis using a small set of countries, which also include country fixed effects. This allows for a comparison of the performance of each of the WB6 countries with each other.

The dependent variable is the questionnaire item that asks about “how long it took you between finishing education and getting the first job?” while explanatory variables of interest include beliefs about unfair outcomes in life and in the labour market, institutional distrust, with both main and interaction effects.

Results:

The findings suggest that there are negative effects associated to the length of STW transitions for the Covid19 (2020 – 2021) period compared to the previous period (2019).

These results are robust across countries, gender, education, and labour market experience.

Covid19 prolonged labour market entry from school for young people from the WB6, during and after the pandemics.

Session 3 – The role of opportunity structures

Does the regional occupational structure have an influence on whether career aspirations match with young people's occupational interests?

Author: Lea Ahrens

Abstract: This study examines the impact of the regional supply of training places on the match between occupational interests and occupational aspirations. It analyzes whether VET candidates adapt their aspirations to their interests or rather to regional supply.

Studying occupational aspirations is important because they are a consequential precursor of the actual choice of a vocational education and training (VET). They have a lasting impact on people's lives especially in distinctive vocational education systems like in Germany, where education and later occupation are closely linked (Müller & Shavit, 2004).

Adolescents form their aspirations based on their interests, but external constraints narrow the range of possibilities and often prevent ideal placement of VET candidates. It is well known that the social and spatial environment of adolescents shapes their opportunity structure. Recent studies confirm the influence of regional occupational structures on VET entry chances (Eckelt & Schauer, 2019; Michaelis & Busse, 2021; Weßlin et al, 2015) and young peoples' occupational aspirations (Flohr et al., 2020, Hartung et al., 2019).

The contribution of this study is that it studies the effects of the regional occupational structure on the qualitative match between young people and their occupational aspirations, i.e., the match between individual interests and the interest profile of an occupation. This question has not been considered by previous research. I leverage the unequal distribution of the supply of training places in Germany, which results from Germany's market-based system of dual vocational training.

I test the hypothesis that adolescents' individual interests more strongly predict the interest profile of their occupational aspirations if the regional supply of training places better matches their own interests. Given that access to apprenticeships is limited by formal entry requirements and that career interests are highly gender segregated (Su, Rounds & Armstrong, 2009), the question of whether the regional supply of training places creates inequalities by school type and gender in the career choice process is also raised.

I use Holland's (1996) career choice theory to explain that young people choose careers that match their interests and further draw from Gottfredson's theory of circumscription and compromise formation (2002), which posits that as decision-making approaches, adolescents increasingly consider given opportunity structures and limit their choices to realistically accessible occupations.

I apply quantitative moderation analysis to test whether the relationship between individual interests and aspirations depends on the relative match of regional supply. I analyze a sample of adolescents from general education schools using longitudinal data from Start Cohort 4 of the National Educational Panel. Interest profiles of adolescents, occupational aspirations, and apprenticeships offered are all coded according to Holland's (1997) RIASEC classification based on O*Net data. The regional apprenticeship supply is generated via official statistics data.

Initial results show that the regional supply entails unequal opportunities for career choices as the supply of different interest profiles varies considerably between regions, as well as between school types and gender.

The role of regional digitalization and competition in the displacement of low-skilled youth at the transition from school to vocational training

Authors: Helen Hickmann & Alexandra Wicht

Abstract: Given the educational expansion and tertiarisation of the labour market in Germany, the share of school leavers with no or at most lower secondary education has declined sharply (Holtman, Menze & Solga, 2019). Additionally, digitalisation and new technologies have changed labour markets in terms of automation and increasing demand for high-skilled labour (Acemoglu, 1998). Numerous cohort studies have shown that because of today's knowledge society, low-skilled youths are increasingly being crowded out of vocational education and training (VET) (Kleinert & Jacob, 2013). However, little is known about the increasing importance of labour market characteristics underlying the displacement of low-skilled youth. Is it only competition between school leavers in the training market, the changing occupational structure due to digitalisation, or both? Another question is whether the displacement of low-skilled young people also has a regional dimension. An increasing number of studies show that Germany is divided into different regional labour markets, which influence youths' prospects for VET (Hillmert, Hartung & Weßling, 2017).

We examine the role of region-specific competition among school leavers and the occupational structure due to digitalisation for young people with at most a lower secondary degree. We use representative time-to-event data from starting cohort 4 of the National Educational Panel Study (Blossfeld & Roßbach, 2019) and consider transitions to VET up to three years after leaving school. To account for time dependence in the associations under study, and the clustering of observations within training market regions (Kosfeld & Werner, 2012) we apply multilevel mixed-effects complementary log-log regression. To measure regional competition, we use the annual share of new VET-contracts of high-skilled youth. Two measures capture different impacts of digitalisation on labour market structure: Digitalisation as reflecting the demand for high-skilled labour is measured as a latent construct using different indicators at the district level. Digitalisation as reflecting regional occupational structure is measured by the future automation potential of jobs (Dengler & Matthes, 2018). We exploratively examine subgroup differences by migration background, as migrants are known to have lower chances of entering VET than natives (Söhn, 2020).

The preliminary results show a negative association between the regional share of high-skilled apprentices and the probability of low-skilled youth entering VET, indicating displacement dynamics. Both digitalisation measures are positively correlated with the chances of low-skilled youth entering VET. The positive impact of digitalisation-induced demand for high-skilled labour on access to VET, though surprising at first glance, can be explained as an effect of a growing local economy, which also absorbs lower-skilled labour. The positive impact of future (unimplemented) automation potential could indicate a local employment structure favouring low-skilled labour and therefore offering good VET prospects. Exploratory subgroup analyses show that the transition probability is lower for migrants than for natives, which vanishes with rising digitalisation-driven demand for high-skilled workers. The same is true for the share of high-skilled youth in VET. Moreover, our results suggest increasing differences in transition probabilities in favour of natives with increasing automation potential. The results suggest absorption effects of growing local economies, which also benefits migrants, and selection effects of production-centred local economies. Overall, our results indicate that regional opportunity structures foster social inequalities among low-skilled youth but can also mitigate them.

Employment and Education Pathways among Majority and Minority Youths: A Sequence Analysis with a Focus on Urban Neighbourhoods in Finland

Authors: Aleksi Seger, Elina Kilpi-Jakonen & Jenni Tikkanen

Abstract:

Contextual Introduction and Theoretical Background:

Contemporary adulthood transitions are theorized to be progressively de-standardized and characterized by precarity (Lorentzen, Bäckman, Ilmakunnas, & Kauppinen, 2019). Despite Finland's low population of immigrants, residing minority ethnic youth exhibit the lowest school performances in the OECD bloc and are at risk for long-term inactivity (Ansala, Hämäläinen, & Sarvimäki, 2019; Holte, Swart, & Hiilamo, 2019; Varjo, Kalalahti, & Jahnukainen,

2020). Residence in economically marginalized and ethnically segregated urban areas can exacerbate these issues (Kauppinen & van Ham, 2019), but scholars have also argued how Finland's 'universalist' transition regime – wherein access to uniform education is ensured nationwide (Bernelius et al., 2021) – has not adapted to overarching demographic and transition trends (Holmberg et al., 2018). Utilizing sequence analysis to track educational and employment paths, we examined whether minority ethnic youth from segregated urban areas experienced more instability in their school-to-work transitions compared to majority ethnic youth, and whether social origin (e.g., parental employment and area of residence) influenced likelihoods of 'unstable' sequences – or trajectories defined by inactivity, unemployment, and low education.

Data and Methodology:

Data was sourced from Statistics Finland population registries. Education and employment trajectories of four birth cohorts (1990 to 1993) were tracked between ages 15 to 25 from 2005 to 2018, and 'social origin' was established using residential and parental records. There were three groups: majority ethnic youth born in Finland or abroad, immigrant-origin born in Finland, and immigrant-origin born abroad. Individuals who immigrated to Finland between ages 11 to 25 were excluded. The dataset was developed in Stata and sequence analyses were conducted with TraMineR package in R. Sequence analysis was chosen for its ability to illustrate the prevalence of specific outcomes and create a typology of states, or transition pathways (Brzinsky-Fay, 2007). Sequence states corresponded to membership in a single activity status and in our study, there were ten mutually exclusive sequence states.

Preliminary Findings:

The following are the preliminary activity status findings for the 1993 birth cohort at age 25 in 2018, majority ethnic Finnish (n=56,663) and immigrant-origin individuals born abroad (n=4,168). Consistent employment was the dominant outcome state at age 25 for majority ethnic Finns and minority ethnic youth born abroad, yet inactivity was likelier for the minority ethnic group. Other results indicated that when compared to majority ethnic Finns, having primary school as the highest attained education at age 25 was more common for minority ethnic groups. Yearly frequencies of inactivity as the primary activity state from ages 20 to 25 were higher among those who resided in marginalized urban areas between ages 15 to 20, with incidence rate being greater for minority ethnic groups. With both majority ethnic and immigrant-origin youths, having a parent with more than six months of unemployment at age 10 increased the likelihood of consistent employment being the primary outcome state at age 25, but parental unemployment did not appear negatively impact the likelihood of enrollment in high education.

The role of time use in young refugees' social integration

Author: Jana Kuhlemann

Abstract: In 2015/16 Germany and other European countries have experienced a large influx of young refugee men. Arriving mostly without their families, friends, and unpartnered, these refugees were in need of establishing new relationships in the host countries. Making friends or partnering with a member of the native population can thereby be considered a strong indicator of refugees' social integration. Finding a partner or friends is closely linked to how individuals use their time, insofar that the activities, they spend their time in, determine who they meet and interact with. Furthermore, time allocation to an activity can be a strategic investment to reach certain goals and might therefore be an important channel for the integration of refugees. Hence, the present paper examines the role of young refugees' time use in their social integration, specifically their probability of finding a partner or friends among the native population of the host society. I focus on refugees from the 2015/16 influx in Germany.

The allocation of time to different activities can express lifestyles or social status positions, and thereby signals values and attitudes to others. Since homophily preferences are an important mechanism in partner choice and friendship formation, the signaling of one's own values and attitudes is crucial in finding suitable partners and friends. Hence, refugees using their time similarly to natives, signals their similarity with natives. Accordingly, refugees who invest similar amounts of time in the same activities as natives, should be more likely to have partnerships and friendships with natives. Opportunity structure, which describes the possibility to meet a potential partner or friend, is also very likely to be influenced by one's time use. The people an individual meets, are limited to the activities the individual allocates time to. For refugees, this means that spending more time in activities where they meet a lot of natives, would make them more likely to have partnerships and friendships with them.

The present study uses data from a survey on the partnership formation of refugees from Syria and Afghanistan in Germany (PARFORM). The respondents were young refugee men born between 1984 and 2002, who arrived in Germany unmarried between 2014 and 2018. Time use is measured in hours spent in several activities on a usual day. Results from logistic regression analyses show that spending more time in the main activity, meaning employment or education, in which natives usually spend more time, does not increase refugees' probability to have a German partner. However, it increases their probability to have a high share of male German friends. More time investment in leisure and communication with their own family also increases refugees' likelihood to have high shares of male German friends. The probability to have a German partner seems to only be affected by more time investment in online communication. Additionally, a high share of German natives in the network only seems to have a positive effect on having male German friends if refugees invest more time in activities in the neighbourhood and in their main activity.

Session 4 – Ethnicity, migration and educational inequalities

Heterogeneous Legacies: Ethnic and gender inequalities in educational opportunities among Barcelona's youth

Authors: Laia Sanchez & Rafael Merino Pareja

Abstract: Education is fundamental for integrating children of immigrant origin into the host society, as well as their life prospects. Whereas previous research shows that, on average, children of immigrant origin tend to underperform Spanish natives, it also suggests that there is a great deal of heterogeneity among immigrant youth's educational experiences (Portes, Aparicio & Haller, 2016). Further, gender is a crucial factor around which children structure their day-to-day and along which youth of immigrant origin adapt to the host society. The process of "learning a new land" varies across gender lines and may affect both boys' and girls' educational careers in the host society (Escandell, Marí-Klose & Marí-Klose, 2015). In Catalonia, previous research suggests that first-generation girls are likely to experience gender discrimination in the treatment from their families, while second-generation may not (Vaquera & Kao, 2012). Still, little is known about how the country-of-origin context shapes the educational outcomes of boys and girls of immigrant origin.

Using Barcelona's sample of the International Study of City Youth (ISCY), our article sheds light on the intersection of gender and country-of-origin effects on the educational opportunities of immigrant youth in Barcelona. More precisely, we aim to disentangle how several characteristics of the country of origin shape the educational opportunities of children, by analyzing both their achievement in standardized tests and their enrolment in different tracks. To do so, we link macro indicators that are informative of the youth's origin country in the dimensions of human development (HDI), gender inequalities (GII), as well as the educational enrollment of both genders. By doing so, we decompose the "country-of-origin" effects rather than relying on broad categories such as region or country of origin. Thus, we avoid the use of the "other" category containing a miscellaneous of origin countries, while simultaneously pinpointing which indicators appear to be more relevant for the education of immigrant youth.

We ran separate OLS regressions for both genders and academic subjects under analysis (mathematics and Catalan). Our preliminary results suggest that gender inequalities in the country of origin are linked to academic performance at age 14. For boys, having roots in a more gender-unequal country decreases their mathematics score by 43% of a standard deviation – and no association is found in Catalan. For girls, per contra, gender inequality is positively associated with their language scores – and no significant association is found in math. This counterintuitive result may have two explanations. On the one hand, girls from more gender-unequal countries may see education as their way to gain independence, which may push them towards making a higher effort in school. On the other hand, girls' education may benefit from stricter control from parents. Boys, per contra, may enjoy more freedom due to their gender, which may not benefit their education process. Further, for girls, having roots in a highly developed country is associated with a higher score in Catalan but not in math, and no association is found for boys. In the next step of our analysis, we analyze the transition to different academic tracks of both boys and girls of immigrant origin.

Parental migration and children's education trajectory of Indonesian families: How does gender matter?

Authors: Xiaochen Zhou, Lucy Jordan & Han Zhang

Abstract:

Background:

Despite a well-recognised motivation to investigate the relationship between parental migration and children's educational outcomes, studies are lacking in understanding this association from a life course perspective of the children. A notable gap exists in the cross-sectional characteristics of either parental migration or the educational outcomes of the children — for instance, on the children's educational attainment, school performance, or tendency to drop out of school at a certain time point. A limited number of studies have focused on the longitudinal characteristics of children's education, such as their education trajectories throughout their lifetime.

Method:

This study adopts a longitudinal approach to examine how parental migration influences the education trajectories of youths. We apply data from two waves of the Child Health and Migrant Parents in South-East Asia (CHAMPSEA) project (Wave 1 in 2008, Wave 2 in 2016). Structured survey interviews with around 1,000 households were conducted for the first wave, with two cohorts of children recruited: a young-child cohort aged 3 to 5, and an older-child cohort aged 9 to 11. The current study focuses on the sample of the older cohort of children (average age at Wave 2: 18.3 years old). The Wave 2 surveys provided education history from the Wave 1 data collection up to the 2016 academic year. Using a retrospective approach, we capture the education trajectories in ten different states that recorded individual educational history on a yearly basis.

Sequence analysis was applied to describe and visualise the education trajectories of youths. A typology analysis was performed to investigate the education trajectories to identify the patterns of the children's education paths. Multinomial logistic regression was further conducted to examine the associations between parental migration and the education path.

Results: Sequence analysis was applied to describe the education trajectories of 467 Indonesian youths. Typology analysis captured three distinctive patterns: religious education system (13.28%); academic track (64.67%); early dropout (22.06%). Multivariate analysis identified the importance of parental migration in explaining the different trajectory patterns of youth's education, highlighting fathers' (long-term) migration throughout the lifetime of the youths increases the likelihood of children following the academic track in the modern education system. In addition, youths with younger siblings in the households were more likely to drop out early from school.

Discussion:

As the explorative attempt to use sequence analysis on the education trajectories of children in Indonesia, this study distinguished the heterogeneities in the characteristics of parental migration in influencing children's educational-track choices. This study highlighted how a young person's education trajectory is influenced differentially by the migration of parents and determined that children of migrant fathers were more likely to secure educational continuity in the modern education system. The current study further enriches the understanding of the longer-term influence that childhood experiences of parental migration have on youth's subsequent attainment of human capital.

The more co-ethnics, the higher mathematics achievement? Asian students and senior secondary mathematics in New South Wales, Australia

Author: Joanna Sikora

Abstract:

Introduction:

Research on occupational segregation demonstrates that jobs requiring analytical skills are more secure and better paid. Numeracy, which enhances analytical skills, opens academic pathways to many elite occupations. In immigrant-

accepting societies, such as Australia, the mathematical success of Asian immigrants has attracted considerable attention. We explore the extent to which the concept of an enclave, understood as the concentration of co-ethnics within schools, can supplement the theory of ethnic capital to understand the processes leading to the educational success of some immigrants.

Theoretical Background:

Ethnic capital extends Bourdieu's social reproduction argument. While most ethnic enclave studies focused on the labour market integration of first-generation immigrants, recently, it has been applied to the analysis of schooling outcomes. Ethnic capital theory complements strategic adaptation theory, which proposes that many immigrants view academic success as their main pathway to upward mobility. Mathematics is perceived as a level playing field, a universalist domain in which personal characteristics such as ethnicity or social origins are less likely to lead to cultural assessment bias.

Research Questions:

We build on prior research on the mathematical excellence of Asian immigrants in Australia. We focus on tiered mathematics courses that students elect to boost their ATAR score for entry into competitive university programs. For student populations in each of these courses, we ask to what extent attendance of the school with higher proportions of co-ethnics raises the obtained HSC mark above and beyond the benefits attributable to family backgrounds and individual characteristics. Family background involves parental education, occupation, and ethnolinguistic student profiles, where we distinguish Anglo, East-Asian, South Asian and Other Migrants. We also consider access to sex-segregated, private or selective schooling.

Data and methods:

We analyse administrative records of over 50,000 New South Wales students, constituting about a quarter of Australia's Year 12 student population. The data come from the New South Wales Education Standards Authority (NESA), and the information is from students who completed their Higher School Certificate (HSC) in 2017. The data is hierarchical, with students nested in schools, so the study relies on two-level linear regression models and margins.

Results:

East Asian students whose parents speak a non-English language at home dominate specialised mathematics courses with advanced content, including calculus. These students obtain higher grades, net of Year 9 mathematics achievement. Coethnics generate no additional benefit for the mathematics achievement of South Asians and Other migrants, but East Asians benefit significantly from their co-ethnics within their school.

Policy implications:

We discuss our findings in the context of the literature, which links Asian educational success to cultural strategies reliant on shadow education and aspirational competition. The literature warns against potential student burnout, societal discontent, racial and ethnic divides, and progressing ethnic and occupational segregation. We call for policy interventions to support all students and to understand the impacts of potential ethnic enclaves better while harnessing the potential of ethnic capital.

A bad decision? Majority-minority differences in consequences of unsuccessful ambitious choices for vocational training opportunities in Germany

Authors: Markus Weißmann & Jorg Dollman

Abstract: For Germany and many Western countries, research has documented a higher tendency of ethnic minority compared to majority pupils to change to academic tracks in secondary schools (Dollmann, 2017). While such ambitious choices might benefit the structural integration of ethnic minorities overall, some argue that they might also guide them into 'optimism traps' (Tjaden and Hunkler, 2017): If unsuccessful, such choices mean time lost that would have been better used to acquire vocational qualifications. Due to higher ambitions, minorities are comparatively more often affected by such unsuccessful decisions (e.g., Dollmann and Weißmann, 2020).

The paper addresses the question which consequences such dropouts after ambitious educational choices have for the future vocational careers of majority and minority students. On the one hand, higher ambitions among ethnic minorities in the first place could *ceteris paribus* result in better chances of subsequently finding training positions and might even result in obtaining higher positions (Beicht and Walden, 2019). On the other hand, minorities face greater difficulties in finding training positions in general, and if their ambitions are challenged by educational failures, they might be especially discouraged to enter the training system against these obstacles. Moreover, negative signals associated with education dropouts might be especially consequential for ethnic minorities as already discriminated groups (Patzina and Wydra-Somaggio, 2020; Schneider et al., 2014) and might therefore further decrease minorities' chances of obtaining (higher) training positions.

Our analyses will be based on CILS4NEPS, a novel data set created by harmonizing two German panel surveys: The German part of the Children of Immigrants Longitudinal Survey in Four European Countries (CILS4EU-DE) and Starting Cohort 4 of the German National Educational Panel Study (NEPS). Both studies employed a school-based sampling strategy and started at the beginning of grade 9 in the end of 2010, and data for both studies are currently available until the year 2020. For our analyses, we define a five-year observation window, from the beginning of grade 9 until one to two years after the typical end of German academic secondary education in grade 12 or 13 (end of 2015). We define dropping out of academic secondary education as leaving academic schools without a university entrance certificate and not returning to another academic school within the next 12 months. We will first assess whether ethnic minority and majority dropouts differ in their likelihood to either enter the vocational training system or returning to academic tracks within our observation window using logistic regression models. Next, we will assess whether academic track dropouts suffer from their previous failure in terms of the occupational status (ISEI) of the first observed training position using OLS regression models. Here, we compare trainees that previously have dropped out of academic tracks with academic track graduates and those from lower tracks. To assess possible minority-specific disadvantages of academic track dropout, we calculate interaction effects between migration background and previous education trajectories.

Our preliminary results suggest that ethnic minorities who have dropped out of academic tracks are somewhat less likely than their native peers to enter the vocational training system until the end of our observation period and somewhat more often remain outside of either vocational training or academic tracks. Moreover, majority apprentices that have attended academic tracks before are able to obtain training positions with higher ISEI scores compared to those from lower tracks, even if they did not complete these academic tracks. This is not the case for minority apprentices. Results are discussed against the role of non-standard education trajectories for the structural integration of ethnic minorities.

Session 5 – Higher Education

Higher education dropout and subsequent reorientation: Gender-specific effects of social origin

Authors: Nancy Kracke & Soren Isleib

Abstract: The proposed presentation examines the intersection between gender and social origin in relation to dropping out of higher education and the subsequent reorientation phase. The following research questions will be addressed: Does the influence of social origin on the dropout risk vary by gender? Are women from a lower social origin more disadvantaged than men from a lower social origin regarding educational and occupational reorientation after dropping out? Are there any other factors that influence this relationship?

These research questions arise from the fact that social origin has been identified as a persistent and significant determinant in the German education system, affecting the risk of dropping out of higher education. Gender differences, which disadvantage women, are mainly found after leaving the education system and entering the labour market. In dropout research, gender differences have not been extensively studied so far, but the few available findings suggest that while men have a higher overall dropout risk, women have a higher dropout risk than men after giving birth or in gender-atypical subjects. There is also little knowledge about the educational and vocational reorientation after dropping out, particularly regarding potential processes of social inequality in this renewed decision-making phase. Additionally, although evidence exists in other contexts that social origin does not

affect both genders equally, no studies have examined the inequalities of social origin and gender in relation to dropping out of higher education and the subsequent educational and vocational reorientation.

The proposed presentation aims first to offer theoretical explanatory perspectives for this research gap. These include rational choice theory and compensatory advantage theory, considering also gender-specific performance differences and gender role attitudes. Additionally, the previous educational and occupational choices' path dependencies are considered. The concept of intersectionality provides the framework, arguing that the simultaneous occurrence of several factors can lead to a multiplicative reinforcement of disadvantages.

To answer the research questions empirically, logistic and multinomial regressions as well as sequence and cluster analyses are carried out. The nationwide survey of exmatriculated students by the German Centre for Higher Education and Science Studies (DZHW) serves as the data basis.

The results show that individuals from a higher social origin have a lower risk of dropping out of higher education. Gender does not influence the dropout risk. However, a significant interaction between gender and social origin becomes visible: a high social origin reduces the dropout risk for women, but there is no influence of social origin for men. Concerning the subsequent reorientation, six main patterns are identified. Multinomial regressions indicate that dropouts from higher social origin have a higher probability of returning to the HE system than dropouts from lower social origin. The results further show that this origin effect only exists for women. Thus, men's decisions within this phase of reorientation are not affected by advantages or disadvantages due to social origin, whereas women's decisions are.

Geographical mobility and educational mismatch in university graduates: timing, scope, and family background

Authors: Maria Ángeles Davia Rodríguez, Nuria Legazpe & Ceillia Albert

Abstract: This paper explores how geographical mobility reduces recent university graduates' overeducation risks in Spain. We address timing (both before and after graduation mobility) and scope (mobility within Spain and overseas) in geographic mobility. Before graduation we identify whether interviewees moved to a different region to study their bachelor's degrees and whether they undertook part of their studies abroad. After graduation we capture the timing and scope for spatial mobility to their first jobs and from their first position to the one they hold four years after graduation. We also observe geographical background (based on the labour market conditions in the region of origin) and family background –parent's education, foreign born parents, and level of parental income.

According to the job search theories and human capital approaches to migration, we expect geographical mobility (particularly overseas) to contribute to graduates' professional careers by reducing their overeducation risk. Mobility before graduation is more relevant than afterwards inasmuch it increases the likelihood of ulterior transitions. Concerning geographical background, we expect graduates from regions with high levels of overeducation or unemployment to benefit most from geographical mobility. We also expect recent graduates from low-mid educated parents and low-mid income levels to benefit more from geographical mobility, inasmuch children of highly educated, high income parents will have other resources, such as social networks, that may compensate for the lack of geographical mobility.

Our hypotheses are tested on a sample stemming from the Survey of Labor Market Insertion of University Graduates 2019 (EILU), from Spanish National Statistical Office. It is aimed to describing the employment situation and labor market insertion process of university graduates finishing bachelor and master's degrees in all Spanish universities during the academic year 2013/2014, who were interviewed in 2019.

Our methodology entails the estimation of a set of simultaneous equations. Overeducation risk is our main dependent variable, explained (among other variables) by geographical mobility at different stages of the education and work career, distinguishing between within-Spain and overseas. Other very relevant explanatory variables relate to geographical and family background. Since geographical mobility after graduation strongly depends on prior geographical mobility to study, we also run a system of four equations to take these interdependencies into account: the diverse variables describing geographical mobility in equation #1 (overeducation risk) are explained by prior mobility decisions and family and geographical background.

Our results show that geographic mobility around the first job is associated with lower overeducation rates at the time of the interview. Holding a first graduate job abroad is associated with considerably lower overeducation risks, as well as moving across countries between the first and the current job. Pre-graduation mobility is very important in itself but also because it influences the chances of ulterior, one once in the labour market.

Geographical mobility reduces overeducation risks and the earlier it takes place (timing), the more influential will be. Its scope is also relevant, with international mobility being particularly rewarding. As regards family background, graduates benefit equally from geographical mobility regardless their socio-economic background. In this sense, we cannot confirm that geographical mobility contributes to reduce inequalities in labour market outcomes across graduates. On the contrary, geographical mobility contributes to reinforce those inequalities and is one of the transmission channels for income and social status across generations.

Student mobility between neighbouring countries: Ireland, Northern Ireland and Britain

Authors: Emer Smyth & Merike Darmody

Abstract: There is a growing body of research which examines international student mobility at higher education level, with many universities using international students as an important source of revenue (see, for example, Beech, 2019). Fewer studies have examined mobility between near neighbours and the way in which national institutional structures can shape the extent of such mobility (for an exception, see Raffe and Croxford, 2013). This paper examines outward mobility from Ireland to Northern Ireland and the rest of the UK as well as inward mobility to Ireland from Northern Ireland and Britain. It draws on administrative data and qualitative interviews with stakeholders to document the nature of current mobility patterns and the implications for policy.

Data from NISRA are used to document the numbers of Northern Irish students studying in institutions in Britain over the past decade, the institutions they attend, the type of courses (part-time/full-time) they take and fields of study they pursue. These data are supplemented with HESA data which provide fine-grained information on the region of Northern Ireland from which students come. UCAS data are used to look at the numbers of applications to different institutions and how these vary by domicile.

Within Ireland, data from the Higher Education Authority are used to look at the domicile of students across different institutions, types of courses and fields of study. In particular, the analyses look at the extent to which Northern Irish students in Irish HEIs are more likely to attend institutions closer to the border. Central Applications Office (CAO) microdata are used to look at patterns of applications from Northern Irish students as well as acceptance rates.

Mobility patterns are found to reflect three sets of institutional factors: the approach to school-based guidance and information provision; the nature of recognition of qualifications across jurisdictions; and the system of fees and student financial support. Brexit resulted in further constraints in student mobility in the form of fee structures. At the individual level, mobility is influenced by proximity (for example, attending higher education institutions close to the border) and aspirations to enter highly selective courses (such as medicine and related fields). Analyses of course applications and acceptances suggest that near-neighbour mobility is often used as a safety-net in case of lack of access to the preferred course locally, in keeping with Whittaker's (2014) findings on intra-UK mobility. Mobility out of Northern Ireland to the rest of the UK is found to have significant consequences for the later transition to employment, with many graduates not returning to Northern Ireland subsequently.

References:

Beech, S. E. (2019). *The geographies of international student mobility: Spaces, places and decision-making*. Springer.

Raffe, D., & Croxford, L. (2013). One System or Four? Cross-Border Applications and Entries to Full-Time Undergraduate Courses in the UK Since Devolution. *Higher Education Quarterly*, 67(2), 111-134. Whittaker, S 2014. Student cross-border mobility within the UK: A summary of research findings. Edinburgh: CREID.

Session 6 – Transition to adulthood and family formation

Early childcare, gender norms and fertility in Europe

Authors: Giovanni Minchio, Stefani Scherer & Agenese Vitali

Abstract: We study how family policies affect childbearing, and how these associations depend on other contextual factors, especially gender norms. Family formation is a crucial transition in young peoples' lives and understanding the role of policies for the decision to have a child or further children will help to design tools to support the realization of family desires, limit population aging and contribute to reduce gender inequalities. A consistent body of literature described the different dimensions family policies [1], and, more recently, started to discuss their relevance for fertility. Services, especially childcare coverage, increases both fertility [2] and mothers' employment, which in turn is positively associated with fertility [3], while parental leaves increase fertility more than allowances – at least in the short term – , but, if long, can have a negative impact on mothers' employment and on gender equality, and hence may indirectly depress fertility [3]. The interplay between social policies, employment, and gender norms seems particularly important for fertility [2]: while gender egalitarian norms have not been found to increase the effects of specific family policies on fertility per se [2], parental leaves increase childbearing intentions of gender-egalitarian mothers.

This paper studies: (1) the effects of (changes in) family policies on childbearing, and (2) how the level of gender-egalitarianism of the context of residence influence these effects. We do so by using a longitudinal approach taking advantage of the four-year rotational panel design of the European Union Statistics on Income and Living Conditions (EU-SILC) covering the years 2006–2020 for up to 25 countries. We integrate these data with country-level policy information gathered from the OECD Family Database (and other sources) and a measure of gender norms for up to 18 countries from European Social Survey (ESS years 2004, 2008, 2010 and 2016). Where possible we will include measures on the sub-national level (NUTS-1). Our outcome of interest is childbearing, measured via changes in the household composition during the four-year observation window, and distinguishing first births from parity progression. As main explanatory factors, we consider specific types of family policies – i.e., services (spending per child in early-childhood childcare) [3], parental leaves (months and uptake), and transfers (total family benefits as a percentage of full-time earnings); classifications of their dimensions – i.e., familizing, defamilizing and liberalizing [1]; and we build a continuous latent measure of the underlying dimensions of family policies using Factor Analysis. Our measure of traditional gender norms is derived from a statement in ESS that captures male-breadwinning attitudes. Furthermore, we include a set of controls on demographic and socio-economic characteristics at the household and individual level. To account for the hierarchical structure of our data we develop our analysis using multilevel (random effects) regression models with individuals nested into NUTS-1 regions. Preliminary results show that the effects of specific family policies are generally small, vary across social groups and depend on the specific national context. Compared to female employment fertility decisions are sensitive to policies to a lesser extent.

References:

- [1] Van Winkle, Z. (2020). Family policies and family life course complexity across 20th-century Europe. *Journal of European Social Policy*, 30(3), 320–338.
- [2] Baizan, P., Arpino, B. & Delclòs, C.E. (2016). The Effect of Gender Policies on Fertility: The Moderating Role of Education and Normative Context. *European Journal of Population*, 32, 1–30.
- [3] Hook, J. L., & Paek, E. (2020). National Family Policies and Mothers' Employment: How Earnings Inequality Shapes Policy Effects across and within Countries. *American Sociological Review*, 85(3), 381–416

A Question of Security? Educational Expansion, Labour Market, Uncertainty, and Family Formation

Authors: Christian Brzinsky-Fay & Ana Karalashvili

Abstract: The postponement of family formation is a major concern in the low fertility regimes that have emerged in advanced European societies. Recent evidence reveals both delayed and reduced childbearing, which presents significant challenges to maintaining fertility levels above or at replacement levels. From an institutional perspective, demographic developments are viewed in conjunction with two central social transformations: prolonged educational participation and increased instability in labor market attachment. Both of these factors create delays in the attainment of economic security during young adulthood, which itself is a precondition for family formation.

This paper explores the roles of educational expansion and increased labor market flexibility in the transition to parenthood within the low fertility regime of Germany. We make a threefold contribution to the existing literature. Firstly, we disentangle the effects of labor market flexibilization and educational expansion by comparing cohorts that experienced uniform educational opportunities and labor market conditions. Secondly, we employ a longitudinal approach to uncertainty by focusing on school-to-work transitions and the development of employment trajectories until the first childbirth, which allows us to examine the transition to parenthood as a process outcome. Lastly, while the majority of previous studies explicitly focus on the transition to parenthood among women, we examine both genders.

We employ demographic and economic perspectives on the transition to adulthood and attempt to disentangle income and substitution effects by gender, educational attainment, and parental background across cohorts. The analysis is based on retrospective life course data from the National Educational Panel Study (NEPS) (N=9699). Limiting the sample selection to West Germany guarantees continuity across time and holds institutional factors constant. In the context of family formation postponement, we are interested in the aspect of educational expansion that results from increased enrollment rates in higher education and vocational training. Therefore, our observational window starts from the month individuals leave school. To adequately document the transition to the first birth, we follow individuals for a period of twenty years from their departure from school.

The study employs a previously underused measurement of sequence turbulence, which assesses the individual-specific levels of (in)stability of labor market participation in a time-varying manner on a monthly basis throughout 20 years. We combine the exploratory power of sequence analysis (in terms of measuring turbulence) with the explanatory power of event history modeling (time-variance) by analyzing the time durations until the event of the first childbirth.

Preliminary analysis suggests that employment turbulence accelerates the speed of transitioning to parenthood across all cohorts among women. The effect is particularly notable among those with lower and intermediate levels of education, rather than those with higher education. However, we do not find such an effect among men. Finally, we find that the timing of entering into parenthood varies across cohorts as a function of prolonged schooling. The findings persist even after accounting for conventional measures of precarity, such as the number and duration of unemployment spells – indicating the need for going beyond static measures of employment instability.

The transition to adulthood in Europe revisited: The importance of gender and parental socio-economic status

Authors: Valeria Ferraretto & Agnese Vitali

Abstract: In Europe, the age at which young people experience the events that mark the transition to adulthood (i.e., end of studies, labour market entry, leaving the parental home, entering a partnership, and becoming parent) varies greatly according to the country context, but a general trend towards postponement has been observed. Despite the abundance of comparative studies on the transition to adulthood, the role of social stratification has gained prominence only recently in the European demographic literature; additionally, notwithstanding women's increasing educational attainment and labour market participation, and consequently changing gender roles and mating patterns, we do not know how this affects demographic events during the "early" adulthood. While the association

between educational attainment and childbearing, or, at the macro level, between gender equality and fertility, is at the core of an established line of comparative research, the role played by parental socio-economic status on women's and men's choices during the transition to adulthood has been investigated by few studies.

This paper aims to fill this gap using retrospective data from two rounds (2006, 2018) of the European Social Survey for 31 European countries and for a sample of respondents born in the 1950s-1990s. Non-parametric analyses and discrete-time event history models with individuals nested in country-cohort groups allow to reconstruct the age at experiencing various transitions towards the adult status (i.e., age at first job, at first home leaving event, at first coresidential union, and at first child), by parental socio-economic status (SES) and gender. Events are analysed separately, constructing one sample for each of the events under scrutiny and restructuring the data into person-years.

Results indicate that, on average in Europe, having high SES parents is positively associated with a probability of postponing labour market entry, union formation, and childbearing, and of anticipating home leaving. Gender differences are noticeable for all events, with women being more likely to experience family-related events before men but starting to work afterwards. Gender gaps in the timing of events reduce only among individuals with high SES parents, pointing to a persistence of gender-specific pathways in the transition to adulthood, especially in the lower strata of society. While the sons and daughters of highly educated, well-off parents postpone family-related events, presumably until they reach a stable position in the labour market, young adults born in lower SES families are, out of necessity or out of choice, experiencing transitions earlier, especially to the first child. Women from lower socio-economic backgrounds experience all events of the transition to adulthood relatively early in life compared to their male counterparts as well as to women with higher parental SES.

Notably, ESS data lack information about the age at the completion of education, as well as additional information on the family of origin such as the disposable income, the characteristics of the dwelling, or indicators of wealth. Further analyses will be performed by country groups, so to identify how these trends evolved in specific contexts, and to suggest where policy could intervene.

Instability of interethnic partnerships in early adulthood

Authors: Stefanie Heyne, Jana Kuhlemann & Grace Olzinski

Abstract: In the past few decades, the populations of many Western countries have become more diverse in terms of ethnicity (Coleman, 2009). In Germany, the share of immigrants and their descendants in the population has increased from around 20% to more than 35% during the last 20 years (Federal Office of Statistics, 2021). However, this diversity is not reflected in partnership formation, as previous studies have shown a high level of endogamous partnerships, especially among people with migration background. Different explanations for this phenomenon have been put forward in the literature, but most of these refer to the process of union formation and neglect the importance of union stability, although single studies have suggested that interethnic unions are more unstable than intraethnic unions (e.g., Kalmijn et al., 2005; Milewski & Kulu, 2013).

Against this background, the present paper analyses the stability of interethnic partnerships during adolescence and early adulthood. Finding a first partner is a crucial step in adolescents' development and romantic partnerships in general play an important role in this phase of life. Experiences with the first romantic partnerships are fundamental for future partnerships, as they can shape future preferences and determine the choice of opportunities (Furman & Simon, 2008; Heckhausen et al., 2010; Hutteman et al., 2014). The ethnic partner choice in adolescence therefore has implications for the future partner choice. Additionally, if interethnic partnerships in adolescence and young adulthood are more likely to dissolve, this might contribute to the explanation of why interethnic marriages in adulthood are also more likely to fail.

There are several theoretical explanations of why interethnic partnerships should face a higher risk of instability compared to ethnically homogamous partnerships. According to Becker's (1974) new home economics, partnerships are a strategy to produce commodities with maximized utility. Harmony within the partnership as a commodity is more difficult to achieve for interethnic partnerships where partners each bring different cultural resources and the accompanying values, attitudes, and behaviors (Kalmijn et al., 2005). Furthermore, individuals in interethnic

partnerships might receive less support and acceptance from third parties like parents and peers (Milewski & Kulu, 2013).

Using the 9th wave of the German CILS4EU data, which contain retrospective biographical data on partnership formation and dissolution among adolescents aged 16-22, we analyse whether interethnic partnerships are less stable than intraethnic partnerships and whether this differs by ethnic group and gender of the partner. Furthermore, using information about attitudes towards endogenous partnership formation by parents we focus on the role of third parties for union stability in early adulthood. First descriptive results suggest that respondents with migration background are more likely to have interethnic partnerships compared to native Germans without migration background, and the probability to break up is significantly higher for interethnic compared to ethnically homogamous partnerships. In a next step, we will employ event history analysis to test explanatory mechanisms for the differences in the duration of intra- and interethnic partnership among adolescents.

Session 7 – Gender inequalities in STEM education and labour market

Choosing STEM in Higher Education: Intersectional Patterns by Gender and Ethnic Origin in Germany

Authors: Tamara Gutfleisch & Irena Kogan

Abstract: Changing demographics in Western industrialized societies and the goal of remaining globally competitive are creating an increased demand for workers in the fields of science, technology, engineering, and mathematics (STEM). Women in particular, but also ethnic minorities, continue to be underrepresented in core STEM fields in many countries. Furthermore, research on gender and ethnic differences in STEM participation has mostly taken a one-dimensional perspective and failed to provide a comprehensive account of intersectional patterns in STEM participation. Moreover, the determinants of enrolment in STEM fields at higher education for underrepresented groups still remain uncovered. Against this background, our study seeks to contribute to the body of research on inequalities in STEM participation at the transition to higher education by, first, exploring and, second, explaining, the intersectional patterns by gender and ethnic origin.

Several individual and contextual level factors might explain gender and ethnic gaps in STEM participation. Whereas rational choice approaches emphasize the role of achievement (e.g., school grades in math), socialization theories emphasize the role of social norms and socio-cultural background (e.g., parental influences). Gender norms assign higher math ability to boys and consider STEM as a masculine domain. Accordingly, girls might be less likely to choose STEM fields. Such gender differences, however, might vary by ethnic origin due to cultural differences in gender norms and STEM affinity. For example, in ethnic groups from origin countries with more traditional gender norms, the gender gap in STEM participation in higher education might be larger. In this study, we explicitly focus on socialization and cultural explanations for gender-ethnic gaps in STEM participation.

For our analyses, we use data from the National Educational Panel Study (NEPS), starting cohort 5. The sample consists of students who started their studies in the winter semester 2010/11 (N ~ 11,000). Our dependent variable is students' subject choice (STEM field vs. non-STEM field). We categorize study fields in STEM and non-STEM fields based on the International Standard Classification of Education (ISCED), which is internationally comparable. We differentiate between several origin groups of immigrants in Germany such as Turkey, Poland, Former Soviet Union (FSU), Middle East and North Africa (MENA), and Asia. Control variables include information on several student and parental background characteristics (e.g., age and parental education).

Preliminary results of logistic regressions show that girls have a significantly lower chance of choosing STEM than boys. Turkish-origin and MENA students have a higher chance of choosing STEM than German-origin students, but the differences are not statistically significant. In contrast, we observe pronounced and statistically significant differences between German-origin and Asian-origin students. The latter are two times more likely to choose a STEM subject in higher education than native German students. Although some variation in gender gaps by ethnic origin can be observed, these differences are not statistically significant.

Next steps would include an exploration of the role of individual and contextual factors (e.g., the role of parental occupation) responsible for gender and ethnic differences in STEM participation.

The impact of guidance counselling on gender segregation: Major choice and persistence in higher education. An experimental study

Authors: Marita Jacob, Melinda Erdmann, Irena Pietrzyk, Juliana Schneider & Marcel Helbig

Abstract: Gender segregation in higher education is considered one of the main drivers of persistent economic gender inequalities. While much research has been done to describe and understand the underlying mechanisms causing gendered educational choices in higher education, little is known about how this gender segregation in higher education can be changed.

With our paper, we aim to shed light on the potential of educational interventions for high school students to foster desegregation in higher education. For this, we focus on two different processes that contribute to gender segregation in majors among higher education graduates: first, the selection into specific majors and, second, the selection out of specific majors. We investigate whether an intensive counseling program leads to more gender-atypical choices among high school graduates, and we examine whether intensive counseling supports several indicators of students' persistence in gender-atypical majors.

In our empirical analysis, we use data from an experimental study on a counseling program for German high school students (N = 625) and estimate the program effect with linear probability models and intention-to-treat analyses. Our results show that high school graduates are more likely to choose a gender-atypical major if they receive intensive counseling. This applies more to men than to women. In addition, the program improved some persistence indicators for students in gender-atypical majors. Even though we only find a significant program effect for perceived person-major fit and students' satisfaction, the coefficients of all aspects of students' persistence show a trend that the program was beneficial for students in gender-atypical majors. Since experimental studies can also be affected by different types of bias, we conduct several robustness checks. All analyses indicate stable results.

In conclusion, we suggest that intensive counseling programs have the potential to reduce gender segregation in higher education. On the one hand, more students were motivated to choose a gender-atypical major and, on the other hand, different aspects of student persistence were supported by the program for students in gender-atypical majors.

What role do parents and friends play for women's and men's persistence in STEM careers?

Author: Stefani Antje

Abstract: The underrepresentation of women in Science, Mathematics, Engineering and Technology (STEM) subjects and occupations can already be found in early adolescence and continues through the whole educational trajectory to the labor market. But research on persistence in STEM in higher education and afterwards does not focus social environment, like friends and parents. Evidence points to a variation of the major choice in higher education by sex and occupation of the parent and the sex of the child, but results are mixed. For friend's influence on persistence in higher education and afterwards none study is known. Also there is a lack on a longitudinal perspective on the topic.

Here I ask, how parents and friends might contribute to later gendered career decisions than school. I'll measure the persistence of young men and women at three decision points in the educational trajectory: Entry to higher education, graduation and job entry. Finding the gender specific reasons for persistence STEM fields of studies and at the transition to the labour market are important contributions for not only lowering horizontal occupational gender segregation and gender inequality on the labour market, but to also raise the amount of the STEM workforce overall.

Through the gendered stereotypes parents hold about their occupation and their children, they show behaviour that supports or sanctions career decisions of their children (Eccles and Hoffman, 1984). Mother-daughter and father-son dyads exist in the transmission of occupational preferences (Bussey and Bandura, 1999). Thus, a mother working in a STEM occupation should help her daughter for persisting in this field, while a STEM occupation of the father helps the son. According to the concept of emerging adulthood friends become increasingly important in higher education and afterwards (Arnett, 2015) and their support should help for persistence in STEM.

The hypotheses will be tested with the student cohort (SC5) of the German NEPS data. It follows first year students in higher education from the winter term of 2010/11 for eight years until their job entry. My balanced sample contains 2,542 individuals, who answered questions about mothers and fathers STEM occupation, if their friends supported their choice of field of study. I'll use a sequential logit model for analysis, which calculates the transition probability for each of the three decision points simultaneously.

The preliminary results are gender specific: I find a mothers STEM occupation to be important for their daughters persistence in a STEM track in higher education and fathers STEM occupation to be important for their sons. Support from friends just helps young men's persistence in STEM fields.

References:

Arnett, J. J. (2015) *Emerging adulthood. The winding road from the late teens through the twenties*, New York, New York, Oxford University Press.

Bussey, K. and Bandura, A. (1999) 'Social Cognitive Theory of Gender Development and Differentiation', *Psychological Review*, 106, 676–713.

Eccles, J.S. and Hoffman, L.W. (1984) 'Sex roles, socialisation, and occupational behavior'. In Stevenson, H. W. and Siegel, A. E. (eds) *Child Development Research and Social Policy. Vol 1*, Chicago, University of Chicago Press, pp. 367–420.

The role of high school curricular differentiation in the transition from adolescence to adulthood in Israel: Gender and socioeconomic gaps in higher education and earnings

Authors: Yariv Feniger & Eyal Bar-Haim

Abstract: This study contributes to a large body of research on the role of curricular differentiation in stratification processes in the transition to adulthood in general and in Israel in particular. A series of reforms initiated by the Ministry of Education from the early 1970s to the mid-1990s brought about far-reaching changes in the structure of secondary education in Israel. As a result of these reforms, secondary education in Israel shifted from a model of early and relatively inflexible tracking to a model with greater emphasis on diversity in school curricular offerings and student (and parents) curricular choice. We focus on the first cohorts that were fully exposed to the reforms and examined their educational and occupational achievements using a dataset based on a census carried out by the Central Bureau of Statistics in 1995 combined with data from the Ministry of Education, the institutions of higher education, and the Tax Authority. By following individuals who were high school students in the 1990s, we show that socioeconomic background is closely related to sorting into various high school specializations. These specializations are connected to the likelihood of acquiring an academic degree and wages in one's early 30s. Therefore, the data analyzed in this study show that despite decades of educational reforms that attempted to deal with educational inequality in Israel, socioeconomic disparities in educational opportunities are still very prominent.

This study is the first to examine the long-term implications of enrollment in the high school "basic academic track," which was introduced in the 1990s to provide for the educational needs of students from lower socioeconomic strata who were also low achievers. In previous decades, these students were commonly placed in vocational education with meager chances of attaining a matriculation certificate and an academic degree. We show that the success of this track was minimal from a life-course perspective. Previous research showed that this track raised the

percentage of students eligible for a matriculation certificate. Still, the present study indicated that the chances of its graduates acquiring an academic education remained particularly low, and their average earnings are also low as a result. These findings suggest that the academization of vocational education per se is not enough to counterbalance the stratifying power of curricular differentiation. Based on the research literature, we argue that the school sends students placed in low-status tracks a discouraging message concerning their abilities and learning potential, usually amplified by their teachers' low expectations.

While curricular specialization has a strong explanatory power regarding the association between socioeconomic background and future educational and occupational achievements, it can only partially account for gender earning gaps in adulthood. Variance decomposition shows gender is the most critical component contributing to the explained earnings variance in maturity, accounting for about 40%. The next step in our research will focus on horizontal stratification in higher education as an additional mechanism for gender earning gaps.

Session 8 – School-to-work transition

What determines the willingness of establishments to hire young people with a secondary school-leaving certificate as trainee? Results from a factorial survey

Authors: Ute Leber, Sophie Hensgen & Alexander Patzina

Abstract: The German market for apprenticeship training has been facing severe matching problems for several years now. On the one hand, many establishments have rising difficulties in filling the training places they offer while, on the other, there are many young people who remain unsuccessful in their search for a training place. This is particularly true for adolescents with a lower secondary school leaving certificate and, even more so, for young people with special educational needs. Against this background, our paper aims at examining the factors which affect the willingness of establishments to hire young people with a lower secondary school leaving certificate as trainee. Based on the signalling theory, the job competition model and the theory of statistical discrimination, we try to find answers to the following questions:

- What is the role of the type of school that was attended by the applicants (special needs school vs. regular school)?
- What role do cognitive skills (school grades) and non-cognitive skills (reliability, motivation) of training place applicants play?
- Which characteristics of training establishments are relevant for the hiring of trainees with a lower secondary school leaving certificate (e.g., firm size, industry, qualification structure, difficulties in filling training places in the past)?

Our analysis is based on a vignette study that was part of BeCovid, a high frequency panel of establishments during the Covid-19-crisis conducted by the Institute for Employment Research (IAB). In May 2022, we asked more than 1,000 establishments which are authorized to train apprentices to assess the likelihood of success of fictitious training place applications. Each establishment was assigned four random vignettes that differed in the following six dimensions: type of school attended, school grades, internship, social background, motivation, reliability.

Our results show, among other things, that establishments consider the chances of success of a training place application to be better if the applicants have a high level of motivation and reliability. Even though school grades of applicants also play a role in the decision-making process of establishments, we find that a high motivation can compensate the negative effect of poor grades. In addition, our analysis shows that the chances of success of an application are considered to be worse if the young people have graduated from a special needs school in contrast to a regular school. Finally, characteristics of the establishment such as recurring difficulties in filling training place vacancies in the past as well as experiences with employees with lower secondary school leaving certificates also prove to be relevant when it comes to explaining the hiring process of trainees.

Ethnic Differences in School to Work Transition

Author: Gurleen Popli

Abstract: In this paper, we look at the differences in the educational choices made by young people belonging to different ethnicities in the UK at the end of their compulsory education at age 16, and relate these to the early labour market outcomes observed at age 25. We consider three outcomes: (i) decision to continue into education post-16; (ii) decision to continue into education post-18; and (iii) differences in the labour market outcomes at age 25. We look at both the unconditional and conditional gaps, which take into account the family background of the young people, their educational aspirations, and their attainment. We also look at counterfactual outcomes where we consider the differences in behaviour of minorities and whites with seemingly similar characteristics. To understand the differences, we look separately at different ethnic groups and compare them to their white peers; this allows us to consider the heterogeneity of experience across different ethnic minorities.

The paper uses data from Next Steps, a cohort study following YP born in England between September 1989 and August 1990. There are eight sweeps of the data available. The first sweep was done in 2004 when the YP were on an average 14 years old. The survey was conducted annually till 2010 when the participants were on average 20 years old. The last, eighth, sweep of the survey was conducted in 2015 when the YP were 25 years old. We consider the following ethnic minorities: Indian, Pakistani, Bangladeshi, Caribbean, and African. These minorities are chosen to represent the largest minorities in the UK.

The paper's main findings suggest that ethnic minorities in the UK are more likely to continue in education, despite coming from disadvantaged families and having lower attainment. The higher educational aspirations of minorities explain a large proportion of the participation gap between whites and minorities. However, for ethnic minority young people, these additional educational qualifications do not translate into success at the point of entry into the labour market. We also find evidence of heterogeneity in the outcomes of young people from different ethnic minority backgrounds.

The effects of fixed-term employment on occupational status and wage trajectories in Germany, Poland, and the UK: what is the role of parental status?

Authors: Katarzyna Kopycka, Anna Kiersztyn & Remigiusz Żulicki

Abstract: We assess the scarring effects of fixed-term employment experienced in the first years of young peoples' careers on subsequent wage and occupational status trajectories in three countries representing differing institutional contexts: Germany, Poland, and the UK.

Past studies suggest that fixed-term contracts in the first job after leaving education do not have lasting negative effects on wages and occupational status attainment, as many of those who start out as temporary workers are able to compensate for the initial disadvantage in the following years (Scherer 2004; Gebel 2010; de Lange et al. 2014). However, these results may mask important effects due to the heterogeneity within temporary employment, which can either act as stepping stones to permanent positions or trap workers in sequences of fixed-term jobs.

Our analyses add to existing studies in two ways. First, by focusing on the type of employment not only at labor market entry, but also in the following years. Specifically, we distinguish careers characterized by direct entry into permanent employment, mobility from initial fixed-term to permanent employment (stepping-stone), and lack of mobility to permanent employment (either staying in fixed-term arrangements or moving into unemployment), in order to directly capture the effects of the most unfavorable career entry patterns. Using growth curve modelling strategy, we assess these effects with regard to occupational status and hourly wage in different institutional contexts and across educational groups. Second, our study is one of the few to investigate whether the penalties for fixed-term employment are moderated by the social background of individuals. Theoretically, two mechanisms can apply: compensatory advantage, which lowers the penalties for disadvantaged labor market entry among individuals with higher parental status (Bernardi, Cebolla-Boado 2014), or boosting advantage (Bernardi, Gil-Hernandez 2020), which increases the rewards associated with entry through permanent positions.

We estimate growth curve models of occupational attainment and wage mobility during the first ten years of work activity after leaving education. Furthermore, we apply a regression analysis on random slope estimates in order to investigate the effects of family background. We use data from national panel surveys: G-SOEP, Understanding Society and Polish Panel Survey POLPAN for the years 2003-2017, 2009-2018 and 2008-2018, respectively.

Our preliminary results show that in Germany the negative effect of fixed-term contract on subsequent hourly wages is visible in the group with non-tertiary education, reflecting the specificity of the German dual education model. A similar observation applies to the UK context: career growth among individuals with A-levels or higher qualification is not affected by initial temporary employment. In Poland positive average career growth in terms of occupational status can be observed only for higher education graduates. Within this group, individuals who enter with fixed term employment enter into lower status positions, which can partly be compensated by steeper career growth. On average, it is not enough, though, to compensate for the initial disadvantage. Importantly, among individuals who experience fixed-term employment at the start the rate of career progression is steeper for those of advantaged social origin. The same effect can be found for Germany.

Book presentation: Post-school pathways of migrant origin youth in Europe

Author: Emer Smyth (Economic and Social Research Institute, ESRI)

Abstract: The period of transition from initial education to further/higher education and training or employment is especially important for migrant-origin young people, as many migrants have moved to a destination country to improve their lives and those of their children. However, there is a paucity of recent research on how the structural and individual factors in different country contexts interact in shaping the post-school pathways taken by migrant youth. This presentation provides an overview of a new edited book which seeks to fill this gap by documenting the outcomes for migrant young people in six countries across Europe with different migration histories and different transition systems (Ireland, Germany, the Netherlands, Italy, France, and Spain). It is argued that existing typologies of transition systems have neglected potential variations in the experiences and outcomes of migrant youth and attempts to identify potential dimensions that might usefully help us understand cross-national variation in migrant transitions.

Session 9 – Gender and digital inequalities

One Size Does Not Fit All: A Field Experiment on Countering Gendered Occupational Choices of Young Women and Men

Authors: Patricia Palffy, Patrick Lehnert & Uschi Backes-Gellner

Abstract: Gender differences in occupational choices constitute a persistent feature of workplaces worldwide (Cortes & Pan, 2018). Such gender-stereotypical occupational choices can limit the optimal matching of workers' talents to occupations, contribute to the gender pay gap, and reinforce gender stereotypes (e.g., Alonso-Villar et al., 2012; Blau & Kahn, 2017). Thus both firms and policymakers are seeking ways of encouraging young women and men to consider gender-atypical occupations—e.g., STEM occupations for women, and health and care occupations for men. However, little is known about whether brief interventions are effective in changing real-life occupational choices and, if so, whether the same types of interventions work equally well for women and men.

Theorizing that young women and men face different identity threat-related barriers to entering gender-atypical domains, we conduct a large-scale field experiment with young women and men choosing their occupations when applying for their first jobs. We build on social role and social identity theories (e.g., Eagly, 1987; Roberts, 2005) to explain which identity threat-related barriers to choosing a gender-atypical occupation exist and how these barriers may differ by gender. Specifically, we theorize (a) that devaluation threats (i.e., threats that arise when others devalue the characteristics of an individual's social identity group) pose a bigger barrier to choosing gender-atypical occupations for women than for men and (b) that legitimacy threats (i.e., threats that occur when others question an individual's membership in a positively regarded social identity group) pose a bigger barrier for men. Moreover, we

argue that two widely employed strategies for encouraging gender-atypical occupational choices (i.e., portraying counter-stereotypical role models and counter-stereotypical framing of gender-atypical occupations) mainly target devaluation threats. Thus we hypothesize that such strategies are more effective at encouraging women to apply for male-dominated occupations than at encouraging men to apply for female-dominated occupations.

We test our hypotheses in a large-scale field experiment in Switzerland's unique educational and labor market setting, in which two-thirds of adolescents choose a vocational educational pathway after completing their compulsory education. This pathway requires that the adolescents apply for apprenticeship positions in one or several occupations in the universe of over 200 occupations for which firms take apprentices. We randomly assign adolescent females and males engaged in the occupational choice process to brief information interventions containing counter-stereotypical role models and counter-stereotypical framing of STEM occupations (intervention 1) or health and care occupations (intervention 2).

We find that a brief intervention featuring female role models and counter-stereotypical framing of typically male jobs in STEM substantially increases young women's applications for STEM jobs. However, an equivalent intervention featuring male role models and counter-stereotypical framing of typically female jobs in health and care does not increase young men's applications for those jobs. Thus interventions that work for women do not necessarily work for men. To foster full gender equality in the workplace, firms and policymakers should not only continue investing in interventions aiming to attract young women to male-dominated occupations but also develop interventions particularly focused at men to encourage young men to consider female-dominated occupations.

Gender inequality in job match and work authority An exploration of early and middle labour market trajectory of Catalanian university graduates

Author: Luis Ortiz-Gervasi

Abstract: Gender inequality in job match and work authority among college graduates have rarely been explored together. Yet, the non-existence of a gender difference in overeducation may conceal female over-representation in the lower echelons of occupations for which they are well matched. Moreover, the joint study of overeducation and work authority may cast light upon the limitations in the female handling of time in order to avoid labour market penalties likely associated to couple formation or motherhood. Female graduates may be inclined to withhold couple formation, motherhood or having more children till a good job match is obtained. This use of timing may not be so feasible later in life. For a start, the postponement of marriage or motherhood before a good match is attained may reduce the margin for the same use of time to favour work authority attainment. And time may be generally less at hand for overcoming obstacles to female access to work authority because work authority usually comes later in the professional trajectory.

To preliminarily test the association between gender, on the one hand, and overeducation and work authority attainment, on the other hand, we resort to data from two Gender Surveys carried out by the Catalanian Agency of Higher Education among university graduates who got their bachelor degree ten and twenty years before the interview (in 2010 and 2020, respectively). These surveys share the same questionnaire and contain valuable information about work preferences that is not often found in similar sources.

Since different graduates were contacted for each one of those Gender Surveys, their data was merged and the result was treated as cross-sectional data. Logistic regression was used for the study of overeducation and multinomial logistic regression for the study of work authority (three levels). Besides gender, the key independent variables in our analyses were couple formation, parenthood and number of children. Interaction effects between these variables and gender were considered in our analysis, in order to assess the degree to which the corresponding life-cycle events moderate any eventual gender inequality in access to job match or work authority. To discard a possible effect of a heterogeneous distribution of work values among female and male graduates, an index of career preferences was added to the analysis.

Female graduates were not found at a higher risk of overeducation than male graduates. And couple formation, parenthood and number of children either did not have any significantly different effect on overeducation among

male and female graduates or were more negatively associated with overeducation among female graduates. Unlike overeducation, though, we found a clear female disadvantage in work authority attainment, which became aggravated when graduates lived in couple, became parents or had more children. Our results reveal that the non-existence of gender inequality in terms of job match may conceal inequality in work authority attainment, and reinforces the idea that timing and withholding of some life-cycle events, if useful for securing a good job match, may not be enough for guaranteeing gender equal access to positions of work authority.

Digital divides among secondary school students in a comparative perspective

Authors: Steffen Hillmert & Silvia Kopenky

Abstract: During the worldwide Covid-19 pandemic, differences in the access to information and communication technologies (ICT), the use of ICT, and in corresponding competencies have gained attention in the research community, the public, and among policy makers. In times of homeschooling, distance learning, and remote teaching, such 'digital divides' have become more important for social disparities in educational success (see, for example, for Germany Dietrich et al. 2021; Helm et al. 2021). However, this crisis might also accelerate processes of digitalisation in education. Already before, half of the OECD countries had either a general or an education-specific national digitalisation strategy (for an overview, see van der Vlies 2020). A major goal that most digital strategies share is closing existing digital divides among population groups such as students in both digital usage and competencies. However, little is known about the success of such strategies in the school system and, ultimately, its effects on individual students.

Research has already shown that socio-demographic characteristics such as gender or social background matter for differences in the forms and purposes of ICT use, but also that the relevance of the characteristics varies across countries (Lengsfeld 2011). At the country level, especially availability of digital infrastructure and costs of usage affect a population's digital usage behaviour (Mubarak 2020).

In this project, we want to have a closer look at the multi-level determinants of ICT competencies. In particular, we are interested in an international comparison of

- (1) how digital competencies are distributed among secondary school students with respect to socio-demographic characteristics,
- (2) how this is linked with institutional and organisational conditions in education, and
- (3) whether country-specific patterns in these distributions can be associated with different policies regarding both education and digitalisation.

We expect local (school) conditions to be decisive for individual students' competencies. This includes the availability of ICT infrastructure, particularly in the form of reliable Internet connectivity, and the sufficient provision of digital devices. In a national perspective, competencies tend to be more homogeneous among social groups if digital strategies are coordinated at the national rather than a lower administrative level and are followed by a comprehensive and homogeneous implementation in the education system.

To examine our research questions, we utilise data from the International Computer and Information Literacy Study (ICILS) 2013 and 2018, conducted by the International Association for the Evaluation of Educational Achievement (IEA). This project gathered information about young people's ability to use ICT in several areas of life from approximately 60,000 and 46,000 grade 8 (or equivalent) students in 21 and 12 countries respectively (Fraillon et al. 2014, 2020). We employ multi-level regression analyses with digital competence scales as the major dependent variables. Gender, social background and migration status are central independent variables at the individual level. We include indicators of school-level infrastructure, and information on the country-specific digitalisation strategy is considered at the highest level. Forms of individual ICT usage are expected to be central mediators. By connecting our results on digital competencies with research on general competencies, we can contribute to the broader question of whether digitalisation in education enables groups to accumulate further advantages or to compensate traditional disadvantages. Thereby, country-specific inequality patterns can be identified and strategies of digitalisation can be assessed with regard to their inclusive potential. Further policy conclusions can be drawn regarding the provision and administration of digital resources in education.

Poster Presentation during coffee break (7th Sep morning)

Training at school banks or the workplace? Early career outcomes of school-based versus work-based vocational training

Author: Laura Eberlein (Vrije Universiteit Amsterdam)

Abstract: This paper examines the differences in school-to-work transitions of graduates of two rather distinct forms of vocational education, full-time education with practice periods and no employment status versus dual training with an emphasis on continuous on the job training and an employee status for the apprentice. Although the two forms of vocational education are present in most European countries, the extent of workplace learning varies widely. The Netherlands presents an interesting case because, unlike most other countries, both systems coexist. This provides an opportunity to investigate the differences in early labour market outcomes between the two forms of vocational education.

Hypotheses about the school-to-work transitions of the two vocational systems can be derived from various labour market theories, concerning both the entry of new individuals into the labour market and career development. Job search theories (Viscusi, 1983; McKenna, 1985) indicate that labour market entry is a turbulent period: most job changes occur in the first years on the labour market, and it takes time to establish a good match. This is important as early career experiences are crucial for long-term wage and employment prospects (Mills and Blossfeld, 2003). Graduates from work-based training may have better employment prospects and earnings potential, due to the hands-on training and work experience gained through their apprenticeships. They are often able to secure full-time employment with their training company after graduation, providing them with greater job security. However, graduates from school-based training have a wider range of opportunities for further education, which can lead to better job prospects in the long run.

Against this background, we use a unique dataset in which we combine data from the 2016 School Leaver Survey, which contains information about the training and job match, with Dutch register data for 2014-2020, including monthly information on employment, wages and benefits. This allows us to follow school-leavers for a period of 5 years after the moment they left education, leaving us with a detailed longitudinal account of their school-to-work transitions. Employing a Mixture Hidden Markov Model, we examine differences in school-to-work transitions, such as job mobility and unemployment. By treating the labour market status as a latent variable, this model allows us to obtain trajectories based on several measures of labour market outcomes. A multi-stage modelling process is applied: First, we identify different labour market states based on the following observed variables: employment status, contract type, earnings, and self-assessed job match quality. Second, we derive employment trajectories for the previously defined states over the 5-year period, by identifying how individuals move between the different states over time. Individuals are grouped based on their similarity in transition probabilities, thereby identifying distinct career patterns. Third, we estimate whether the two forms of vocational training lead to differences in labour market outcomes and, ultimately, to different employment trajectories. As a result, we can examine disparities in crucial transitions between the two groups, including the transition from temporary to permanent employment, advancement towards higher remuneration, and likelihood of pursuing further education.

Poster Presentation during lunch break (7th Sep)

Employment instability and childbirth over the last 20 years in Italy

Author: Stefani Scherer (University of Trento) & Elisa Brini (University of Oslo)

Abstract: Family formation is fostered by circumstances of plannability and economic and social stability. Previous literature has documented how insecurities can hamper fertility decisions, but their impact depends on the institutional and economic context, on the detailed circumstances studied and differs for men and women. In the southern European context employment instability proved to be particularly relevant for the decision to have a(nother) child, which some tend to attribute to the less developed state-support to families. Further, this context

was particularly hit by the economic crisis with relevant variations of the general level of uncertainties. This makes Italy a good test-case for specific effects and their dynamics over time.

Most research acknowledges the importance of the presence and employment situation of a partner, but only few research tests partner effects directly. Usually the decision to have a child is taken within the couple which makes the couple's situation relevant, beyond the individuals' situation. Especially for women, the presence of a breadwinning male partner might still be more important than their own employment situation. Further, it is theoretically to be expected that important heterogeneities, beyond gender differences, exist in the relevance of employment situations for childbearing, yet previous research, often related to data limitations, reports only average results.

This paper makes its contributions studying the effects of employment related insecurities of both partners on the likelihood to have a child, over a larger historical time span for Italy, based on the longitudinal component of the Italian labour force survey from 2000 to 2020. In particular, the paper brings together systematically individual and couple level situations of insecurity by focussing on employment (contracts and unemployment) of both partners (if any) and details of the variation over historical time. We also disentangle the temporal dimension of insecurity from other aspects by accounting for income and occupation. Finally, analysis account for relevant heterogeneities of the employment insecurity effects not just across contextual factors and the presence of a partner, but also the characteristics of the individual herself, most importantly level of education.

First findings confirm employment insecurity to influence negatively fertility and for women these negative effects have increased over time (figure 1). Insecure employment situations appear also to be (slightly) more inhibitory for fertility among the more educated, which might be attributed to different expectations about standards for becoming parents.

Figure 1: Employment status and the presence of a child in the family. Average marginal effect (AME, ref. dependent employment)

The presence of a partner mediates the effects of employment situations. It appears that to a relevant share, fertility is reduced for those in insecure positions because instability comes with consequences for the marriage market. For men employment appears to be of little importance once the person lives with a partner. For women increasingly her own employment situation is crucial, rather the partner's one. This perspective provides interesting insight in the different channels of the employment effects for men and women.

College Majors and Skill Mismatch: A Dynamic Approach –

Authors: Lorenzo Navarini & Dieter Verhaest (KU Leuven)

Abstract: Among employers and policymakers, there is a belief of a shortage of graduates in fields such as Science, Technology, Engineering and Math (STEM) and a relative oversupply of graduates in Humanities and Social Sciences (Cappelli, 2015). The share of graduates choosing STEM majors is lower than Humanities in most countries (Oosterbeek & Webbink, 1997). Moreover, technological change and demographic evolutions may have intensified the demand for graduates in computer science and engineering as well as in health sciences (Acemoglu, 1998). Finally, this belief seems justified by the large earnings premiums that are observed for STEM graduates (Altonji et al., 2016).

At first sight, the literature on educational mismatches seems to justify these complaints. Many studies find college majors associated with mismatches: in particular, graduates from humanities face problems finding matching jobs (e.g. Dolton & Silles, 2003; Frenette, 2004; Ortiz & Kucel, 2008; Barone & Ortiz, 2011; Ghignoni & Verashchagina, 2014). However, the evidence of STEM reducing mismatches is more mixed, with some STEM fields being more successful than others. For instance, Verhaest et al. (2017) found graduates in Health Sciences to be successful in avoiding overeducation and field-of-study mismatch, while, graduates in Sciences, Mathematics and Computing performed average in both respects and those in Engineering, Manufacturing and Construction combining low incidences of full mismatches with high incidences of overeducation. Similar results were found by Chevalier (2017) when relying on data for the UK and in a review of Cappelli (2015).

Even if the evidence on reducing mismatches by increasing STEM participation is mixed, it is doubtful that this can be given a causal interpretation. Individuals are likely to select themselves into majors based on their abilities (Roy, 1951). In the US, Kinsler and Pavan (2015) addressed this issue with a dynamic model and found graduates in Business and Science to be more successful in avoiding field-of-study mismatches than graduates from other fields of study. Yet, it remains unclear whether this result can be generalized to other labour markets. Moreover, other issues remain unaddressed: the differential impact of major choice on alternative combinations of mismatches and the extent to which the results differ between Health and other Science majors. At last, the model of Kinsler and Pavan (2015) does not account for differences in dropout or retention rates. A STEM college major may increase the likelihood to drop out and it may be rational to prefer a non-STEM field despite having a higher mismatch likelihood.

In our project, we aim at addressing these gaps by modelling simultaneously field of study choice, grade failure, dropout, and the status of the first jobs in terms of horizontal and vertical mismatch. In addition, as Kinsler and Pavan (2015) and Chevalier (2017), we look at how these mismatches affect the wage returns to STEM participation.

To this end, we estimate a Dynamic Discrete Choice (DDC) model based on longitudinal data about Belgian young peoples' educational and labour market careers (Belgian SONAR dataset). In this approach, career decisions are modelled as a sequence of choices that each depend on past decisions as well as on observed and unobserved characteristics (Heckman et al., 2016, 2018a, 2018b).

How much do learning contexts matter? The influence of VET school and firm characteristics on young adults' training satisfaction and dropout risk

Authors: Nele Theuer, Katarina Wessling & Dominik Becker (Federal Institute for Vocational Education and Training (BIBB))

Abstract: With approximately 60% of a cohort obtaining their occupational qualification in the vocational education and training (VET) system, the path to a qualified occupational degree in Germany is dominated by VET; in particular by the apprenticeship system, where students are trained 'dually' in both firms and VET schools.

Previous research presents individual factors, personality, and prior education (Beicht et al., 2008; Nießen et al., 2020) as crucial influences of VET success (i.e., access to, satisfaction with, and completion of VET). Moreover, contextual characteristics of the training firm are known to influence individuals' VET success (e.g., Dietzen et al., 2014; Ebbinghaus & Krewerth, 2015). In contrast to firms, the effect of VET schools – the second important learning context – is so far understudied. However, to shape VET courses most effectively it is important to understand how both learning contexts – firms and VET schools – contribute to individuals' success in VET.

In this study, we analyse the joint influence of firms and VET school characteristics on young adults' training satisfaction and the risk of training noncompletion. To that end, we combine information from several sources to build an innovative dataset comprising survey, administrative, and firm data.

We employ a theoretical framework that is well-established in the school effectiveness literature and has been adapted for VET occasionally. Training quality is differentiated in input, process, and output quality. School characteristics are defined as input and process qualities that influence output quality. Measurable indicators are teaching quality and style, school equipment, and learning climate (Beicht et al., 2009; Krewerth et al., 2008; Nickolaus, 2008). Wenner (2018, 2022) modifies the original framework by adding the relation between VET schools and training firms. Yet, empirical research on VET school effects is limited to selective regions or occupations (Rosendahl & Straka, 2011; Schafer & Baeriswyl, 2015). We are not aware of a systematic national study including a wide range of occupations.

We concentrate on two outcome variables; (1) the risk to drop out of VET and (2) the satisfaction with the attended VET programme. We use data from the Starting Cohorts 3 and 4 of the National Educational Panel Study (NEPS) and the BIBB survey 'VET from the perspective of trainees' (Blossfeld & Roßbach, 2019; Ebbinghaus et al., 2007). Both datasets provide information on individuals' training satisfaction and dropout risks as well as self-reported VET school and firm characteristics (e.g., state of classroom, school programme/mission, quality of teaching, performance standards, firm size, work processes). We aim at additionally linking both datasets with administrative

data on VET schools provided by school authorities that contain structural information on VET schools (e.g., type and number of training courses, student composition) and firm-level data provided by BIBB.

We use regression analyses to identify the extent to which VET school and firm characteristics affect young adults' training satisfaction and dropout risk. We assess in particular the moderating and mediating relationship between different school and firm characteristics. Our study makes central contributions to research and policy by compiling a highly innovative dataset on the contexts of VET. Moreover, our findings will inform practitioners about the importance of indicators and mechanisms through which VET learning contexts affect young adults' success in VET.

Poster Presentation during coffee break (7th Sep afternoon)

Does timing matter? Social inequalities in early and middle childhood and (non)cognitive outcomes in early adolescence (with Susan McVie and Babak Jahanshahi)

Authors: Adriana Duta, Susan McVie (University of Edinburgh) & Babak Jahanshahi (Queen's University Belfast)

Abstract:

Theoretical background:

It is well established that family and neighbourhood disadvantage affect children's cognitive and non-cognitive outcomes (e.g. Bourne, Bukodi, Betthäuser & Goldthorpe, 2018; Connelly & Gayle, 2019; Liu, 2020; Nieuwenhuis & Hooimeijer, 2016). However, with some notable exceptions (e.g. Cunha & Heckman, 2008; Guo, 1998), much less is known whether the timing when children experience disadvantage matters too. A growing body of literature has emphasised the importance of early years for later outcomes, demonstrating the long shadow of early-life disadvantage (Blossfeld et al., 2017; Heckman, Pinto & Savelyev, 2013). However, it is not always the case that early childhood intervention is the 'magic bullet' regardless of the type of disadvantage experienced and the type of outcome. Therefore, our study aims to contribute to the emerging literature which provides a more fine-grained understanding of how timing of disadvantage matters during early life course.

Research questions:

- 1) Does the timing of household, neighbourhood deprivation and family separation (i.e. whether experienced in early or mid-childhood) matter for children's outcomes in early adolescence?
- 2) If so, does the timing matter in the same way for the three measures of disadvantage and for both cognitive and non-cognitive outcomes?

Data and measures:

We use data from Growing Up in Scotland (GUS), a nationally representative longitudinal study which started in 2005/6, when the children were aged 10 months (N=5,217).

Dependent variables:

To measure the outcome variables, we use GUS sweep 9 when children were in early adolescence at age 12.

Cognitive score is measured via the 'listening comprehension' assessment from the Weschler Individual Achievement Test.

Difficulty score is based on the Strength and Difficulties Questionnaire (SDQ);

Pro-social score is a sub-component of the SDQ in which higher score indicates less evidence of difficulties.

Independent variables:

We measure explanatory variables in two different stage of child development: pre-schooling or early childhood (up to age 4) and schooling age or mid-childhood (up to age 10).

Household poverty: the number of sweeps that household was in the lowest equivalised income quintile in each stage of child development.

Neighbourhood deprivation: the number of sweeps child spent in deprived neighbourhood based on Scottish Index of Multiple Deprivation in each stage of childhood.

Family trauma: binary measure for each stage of childhood indicating disruption arising from loss and separation, namely the death and/or serious illness of a parent or sibling.

Single parenthood: binary measure indicating whether or not a child has experienced living with a single parent at each stage of childhood.

Control variables: child's gender, health and mothers' level of education.

Methods & Preliminary results:

We use Structural Equation Models (Bollen, 1989) to analyse the data. Our preliminary results suggest that household disadvantage in early childhood matters more for non-cognitive outcomes, while household disadvantage in middle childhood matters more for cognitive outcomes. Neighbourhood deprivation in mid-childhood also emerges as an independent detrimental factor for cognitive scores. Single parenthood appears to have a negative effect if experienced in mid-childhood and only for non-cognitive outcomes, stronger for difficulties score than for pro-social behaviour.

Poster Presentation during coffee break (8th Sep morning)

Should low-achieving male descendants choose vocational education? Using sequence analysis to explore employment returns to upper secondary education

Authors: Jannike Gottschalk Ballo (Nordic Institute for Studies in Innovation, Research and Education), Elisabeth Hovdhaugen, Asgeir Skålholt & Marianne Takvam Kindt

Abstract: A consistent finding about labour market returns to upper secondary education is that vocational education (VET) can offer an important pathway into the labour market particularly for those who are unlikely to graduate from higher education (Silliman and 2022, Blommaert et al 2020). In Norway, male students with low grades have higher labour market returns if they complete VET rather than general academic education (GEN) (Blommaert et. al 2020, Mongstad et al). While the literature focuses on institutional differences, gender and socioeconomic status, it rarely discusses labour market returns of immigrants or children of immigrants (Blommaert et. al 2020). The objective of this study is to draw on theories of educational tracking (Bol and van de Werfhorst 2013) to explore the role of the dual system in shaping labour market trajectories of descendants with low to medium grades, focusing on variations by gender.

We formulate the following research question: *What is the role of VET relative to GEN in shaping labour market trajectories for low achieving male immigrant descendants?*

Our study employs detailed longitudinal data with total coverage of the Norwegian population – we rely on 7 birth cohorts (1985-1991) of immigrant descendants and a majority control group. We follow their school-to-work-transitions and employment trajectories between the ages 16 and 30. To describe employment trajectories and create a typology of longitudinal labour market attachments we employ sequence analysis and subsequently linear probability models to analyse the association between explanatory variables and types of employment trajectories. Regressions include a range of interactions between variables to assess whether education and grades are associated with different longitudinal outcomes for men and women with and without immigrant background. Preliminary analyses identify four main types of sequences:

1. Quick transition from education to work with subsequent stable labour market attachment.
2. Quick transition from education to work with subsequent unstable labour market attachment.
3. Slow transition from education to work with subsequent stable labour market attachment.
4. Slow or no transition from education to work and subsequent labour market exclusion (or NEET).

Findings from regression analyses predicting sequence cluster memberships indicate that vocational education and training (VET) predicts quick school-to-work transitions with subsequent stable labour attachment (type 1) differently for male and female as well as for the majority and descendants. For majority male students with lower to medium grades from previous education, VET predicts type 1 trajectories. However, for low-achieving male descendants, this association is weaker. For female students (both descendants and majority) with low to medium grades we find no difference with regards track for the probability of type 1 trajectories. Thus, current findings suggest that the assumption about VET promoting quick school to work transitions for students with low to medium grades may not be true. This may have policy implications for career guidance.

Poster Presentation during lunch break (8th Sep)

Social background, mental health and the labor market integration of young Syrian refugees in Germany

Author: Hans Dietrich (IAB)

Abstract: From a longitudinal perspective, this paper sheds light on the effects of SES and mental health, and their interactions, on the integration of young Syrian civil war refugees into the German labor-market. The paper addresses both the effects of social origin (SES) and of mental wellbeing (here PTSD) of young Syrians' regarding their labor-market integration in Germany from 2016 to 2021 (Kosyakova & Kogan 2022). Doing so, this paper integrates status attainment theory and mental wellbeing research. With respect to SES, the paper incorporates both direct and indirect SES effects when analyzing young Syrian refugees' status attainment in Germany (Boudon 1974, Breen & Goldthorpe 1997). In the case of refugees, the direct effects of social origin might be mitigated, as social, cultural and economic resources are not easily transferable, especially in case of forced migration. In line with the literature, we expect however, severe indirect effects of social origin.

There is on the one side, the indirect SES effect of education. As Syria had developed a modern educational system, educational degrees delivered reliable signals for human capital. Besides the indirect SES effect of educational attainment (Jackson et al., 2006), we take into account ongoing educational aspirations. As refugees might have not finished their educational development and left the country before the final graduation due to forced migration, we expect an own-standing effect of ongoing study intention (that is in contrast to Morgan et al. (2012) and Fishman's (2019) assumptions which are drawn mainly from results for native populations). Here, we employ study intention as a kind of idealistic aspiration, and we take into account adaption processes over time spent in Germany. Additionally, from literature we know, that, for various reasons, migrant-groups systematically report higher levels of educational aspirations and expectations, compared to the native population (e.g.: Kristen et al., 2008; Dollmann & Weißmann 2020; Dollmann 2021).

As the majority of these individuals have experienced violence in various ways, PTSD is addressed as possible moderator with respect to the SES affected labor-market integration of the respondents (Dietrich et al 2023). We employ unique survey data, including 2.732 young Syrian refugees, who were interviewed for a first time in 2016, immediately after they received clearance to enter the German labor-market. The survey data are perfectly matched with register data (Berge et al 2021), which document the labor market status of the respondents from 2016 to 2021. Linear regression models are applied and predictive marginals calculated to present results for the effect of PTSD and SES on refugees' labor-market integration.

In line with the literature and the limited opportunities for direct SES transfers to the offspring in case of forced migration, we found only weak direct SES effect on occupational outcomes. However, respondents educational background and educational aspirations work as significant indirect SES effects, which shape respondents labor-market integration. The analyses identify mental health (PTSD) at arrival time as a second mechanism. Symptoms of posttraumatic stress disorder (PTSD) seems to have a systematic and even growing effect on individuals labor-market integration over time. With respect to the interplay of SES and PTSD, significant interaction-effects between SES and PTSD, suggest PTSD as moderator for the origin-destination association.

Gender-atypical school-to-work transitions among migrant and native youth in Finland

Author: Irene Prix (University of Turku)

Abstract: This paper examines whether and how migration-based inequality may moderate the way in which gender segregation plays out among young people entering the labour market in Finland.

In explaining the persisting gender segregation in work and education, prior research has emphasised socialization as the driver of young people's gendered interests and self-concepts. However, the way in which gender segregation processes interact with structural constraints and pragmatic pressures, related to both socioeconomic context and migration status, are still under-examined. Moreover, cultural notions of gender-specific competencies and behaviour not only affect young people's field of study choices (the supply side), but also employers' gender stereotypes and therefore hiring decisions (the demand side). Status belief theory expects employers to favour majority gender applicants for gender-typical jobs, whereas the glass escalator thesis would expect men to benefit from their social status in both male- and female-typical contexts. Despite mixed experimental findings, previous studies have highlighted important interactions between gender- and that ethnicity-based hiring discrimination, which may affect demand side processes of gender segregation in contradictory ways.

Against this background, I propose the following research questions (RQ):

- RQ 1. To what extent do young people with educational qualifications in a gender-atypical field face a longer labour market transition compared to the gender majority in the field?
- RQ 2. How does migration status matter for moderating these transition patterns?
- RQ 3. In what way do native and migrant youths' first jobs differ from each other, in terms of skill match and occupational gender profiles?

Data and methods:

I use register-based, longitudinal and full population data from Finland (n=710,663), which includes 1.25 and 1.5 generation migrants born between 1979 and 1989 (n=10,707). The main analyses focus on the first significant job (held for more than 6 months) that young people entered within three years of obtaining their highest qualification in the Finnish educational system.

Methodologically, I use event history analysis to examine the time to a first significant job (RQ 1 and 2) and examine job characteristics using (multinomial) logit models (RQ 3).

Expected Results:

RQ 1: Based on the status belief hypothesis, I expect similar delays in the school-to-work transition for both men and women with gender-atypical qualifications. By contrast, the glass escalator account would expect an advantage for men with female-typed qualifications, but a disadvantage for women with male-typed qualifications.

RQ 2: If ethnic stereotypes further reinforce employers' female-typical competency expectations, but penalize migrant men on the labour market, gender-atypical qualifications may be a stronger disadvantage for migrant men than women (status beliefs account). By contrast, a glass escalator perspective would expect overall lower migrant men's advantage, leading to overall lower penalties for gender-atypical qualifications among both men and women with migrant background.

RQ 3: Overall, skill-mismatches on their first job should be greater for migrant compared to native youth. Migrant youth with lower-skilled qualifications may encounter greater pragmatic pressures to adopt flexibility with regard to occupations' gender profiles. Hence, we expect higher shares of migrant youth in gender-atypical occupations compared to native youth.

Higher education retention in Ireland and Scotland: does school subject choice matter?

Authors: Cristina Iannelli (University of Edinburgh (Scotland)), Patricia McMullin (University of Turku (Finland)) & Emer Smyth (Economic and Social Research Institute (Dublin, Ireland))

Abstract: This article provides new insights into the potential role played by higher education (HE) selection mechanisms in influencing student retention by exploring drop-out patterns in Ireland and Scotland. The phenomenon of dropping-out from HE is a cause of concern in many countries and has attracted a good deal of research and policy interest internationally (European Commission, 2015). This is because high drop-out rates are often considered a sign of institutional inefficiency and a factor contributing to inequality. Despite large variations across countries in the level and patterning of HE drop-out, most research has been conducted at the national or institutional level. This research has shown that students' family background is significantly associated with the chances of university drop-out, with higher rates found among those from working-class, less educated and poorer families (Aina, 2013; Hovdhaugen, 2009; Johnes and McNabb, 2004; Powdthavee and Vignoles, 2009; Bozick, 2007). It has also pointed out the importance of students' prior academic achievement at upper secondary level in predicting the likelihood of college retention (Cabrera et al., 2013; Liston et al., 2018; Powdthavee and Vignoles, 2009). However, much less attention has been paid to national variation in admission policies and in particular to the role of the curriculum studied in secondary school in shaping students' HE adjustment. In our paper, we adopt a comparative perspective, contrasting the Irish and Scottish HE systems which place differential emphasis on grades and subjects as a basis for admission: subjects studied at school is a more influential selection criterion (in particular, in the most prestigious institutions) in Scotland than in Ireland. We expect this feature to improve retention because of greater preparedness of students for course material and also to reduce social inequalities in the chances of dropping-out in Scotland.

We ask the following research questions:

- Does having studied school subjects related to the field of study taken in HE (i.e. subject matching) enhance retention in HE courses in the two countries? If so, is this relationship stronger in Ireland than in Scotland?
- Are social inequalities in the chances of dropping-out higher in Ireland than in Scotland? Can these inequalities be explained by subject matching to a larger extent in Ireland than in Scotland?

We use administrative data from the Higher Education Authority (HEA) in Ireland and Higher Education Statistics Agency (HESA) in Scotland. The sample is composed of all full-time first year students aged 21 or under on entry who are new entrants to HE-level courses, and includes 26,816 students in Ireland and 15,427 students in Scotland. The data contain information on students' school grades, school subjects taken for their final examinations (prior to enter HE), type of HE institution attended and individual characteristics, such as parental social class of origin, gender, age on entry and student nationality. We run a series of binary logistic regression models to model the chances of 'non-continuation' one year after HE entry. Our preliminary results show that rates of non-continuation are higher in Ireland than Scotland but general patterns by subject matching and grades are similar between the two countries: drop-out rates are greater among those with no matched subjects and lowest among those with two or more matched subjects and greater among the lower-achieving than higher achieving entrants. However, in Ireland there are strong social inequalities in the chances of dropping out while this is not the case in Scotland. Moreover, in Ireland subject matching explains between 13% and 26% of the social class gap and subjects and grades together explain almost all gap. We discuss the policy implications of these findings in the conclusions.