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Life Course Transitions and Patterns: Stronger Evidence for Better Policies

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ABSTRACT BOOK

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**ABSTRACT BOOK
IN ORDER OF PROGRAMME**

Monday 8th September 2025

KEYNOTE 1

Following a Cohort of Undocumented Workers Gaining a Legal Status: The Parchemins Study in Geneva, Switzerland

Claudine Burton-Jeangros, University of Geneva

In 2017, the canton of Geneva in Switzerland implemented a pilot regularization programme for undocumented workers who could prove a long-standing integration in the local labor market, a population composed in majority by women active in the domestic economy. While limited research had previously documented the harsh working conditions and deteriorated health status of these workers, the Parchemins study was then initiated to assess the consequences of gaining a legal status on their socioeconomic and health circumstances. A mixed quantitative and qualitative longitudinal design was developed to follow their trajectories over a 5-year period, with an initial sample of 468 participants combining workers who obtained a residence permit over the course of the study and others who remained undocumented. The presentation will discuss the methodological challenges of the study and then present some main results. Overall, becoming a legal worker was experienced as a major relief, alleviating stress and providing more control over one's future. However, findings show that gaining legal status did not erase the consequences of years lived in clandestinity. In conclusion, the Parchemins study illustrates the contribution of longitudinal designs to understand the unfolding of trajectories shaped simultaneously by strong individual agency and by constraints and opportunities associated with global inequalities.

1A STREAM: HEALTH & WELLBEING 1

SYMPOSIUM

Environment and Health Across the Life Course

Chairs: Gergő Baranyi, University College London; Jamie Pearce, University of Edinburgh

Environmental exposures shape health outcomes from birth to adulthood, yet their complex interactions and long-term effects remain comparably underexplored. This symposium brings together four studies that examine the relationship between environmental factors and health across the life course, using diverse methodological approaches and datasets.

The first presentation introduces the concept of the external exposome, exploring how multiple environmental exposures from birth to adolescence influence mental health outcomes in young adulthood. Using the Millennium Cohort Study, it identifies key environmental determinants shaping youth well-being.

The second study expands on this by investigating lifecourse environmental and behavioural pathways leading to inflammatory and autoimmune diseases. Drawing on the Northern Finland Birth Cohort, it highlights the interplay between urbanicity, land cover diversity, and behavioural factors in disease risk.

The third study shifts focus to mental health disparities among youth in deprived coastal communities in England. By examining economic, social, and built environmental factors, it identifies crime and educational opportunities as key pathways influencing long-term mental health outcomes. Finally, the fourth study examines the health co-benefits of air pollution reduction in Spain, demonstrating how stricter air quality regulations could reduce low birth weight prevalence, particularly among socioeconomically disadvantaged groups.

TALK 1: External Exposome During Early Life-Course and Adolescent Mental Health

Presenter: Gergő Baranyi, University College London

Co-authors: Katie Harron, Emla Fitzsimons, University College London; Cathryn Tonne, Barcelona Institute for Global Health

Multiple physical and social area-level features have been associated with child mental health. However, most studies focus on single exposures without considering the complex ways in which different environmental exposures are intertwined—either due to common sources (e.g., road traffic) or structural disadvantage. This often results in high correlations between exposures, making it challenging to disentangle their effects in observational data. Examining the totality of environmental exposures (i.e., the external exposome) offers an alternative approach to addressing complex exposures. However, this has rarely been explored in life-course studies due to the lack of repeatedly measured environmental data. This project aims to fill this gap by characterizing the external exposome for a nationally representative birth cohort, identifying domains of exposure across the life course, and assessing the relationship between these domains and mental health.

Data was drawn from the Millennium Cohort Study, a nationally representative cohort of individuals born in 2000/2002 in the United Kingdom. Home addresses from birth to age 17 were geocoded at the property level and linked to a wide range of physico-chemical (NO₂, PM_{2.5} PM₁₀, O₃ pollution concentrations, road noise), built (green space coverage, access to

blue space, light pollution, % of built-in areas, walkability) and social (Townsend Index, crime, population density) environmental features (n~10000). Mental health was assessed at age 17 using the Kessler 6 scale. Principal component analysis will identify exposure domains at birth and at ages 3, 5, 7, 11, 14, and 17 years, while quantile-based g-computation with survey weights will assess associations between exposure domains and youth mental health.

TALK 2: Life Course Environmental and Behavioral Pathways of Inflammatory Disorders and Autoimmune Diseases

Presenter: Mikko Kärmeniemi, University of Oulu

Co-authors: Melody Ding, Philip Clare, University of Sydney; Juha Karvanen, Santtu Tikka, University of Jyväskylä; Ville Karhunen, University of Cambridge; Vahid Farrahi, TU Dortmund University; Raija Korpelainen, University of Oulu

The immune system and inflammatory processes are significant determinants of chronic diseases. This study investigated the contribution of environmental, behavioral, and biological factors to the development of inflammatory disorders and autoimmune disease across the life course, utilizing data from the Northern Finland Birth Cohort 1986 (N = 9,432) up to age 33. Lifetime environmental exposures were assessed according to residential relocation history. Data on health behaviors, biological, and socioeconomic factors were collected through clinical measurements and questionnaires. Diagnosed disease outcomes were obtained from national registers. We used directed acyclic graphs to assess causal assumptions and identify covariate adjustment sets to minimize bias. Survival analysis with the Cox proportional hazards models and time-varying covariates examined the impact of lifetime environmental exposures, health behaviors, and biological determinants to disease outcomes.

A total of 1,458 cases across all outcomes were identified. We found several significant determinants that contributed to disease incidence. However, there were no consistent factors across all outcomes. Urbanicity and natural land cover diversity were associated with a lower incidence of type 2 diabetes and rheumatoid arthritis, respectively, while higher BMI increased diabetes risk. Among behavioral factors, higher alcohol intake increased the risk of multiple sclerosis, and smoking was associated with a higher incidence of ulcerative colitis. The strongest associations were observed for stress and celiac disease.

In conclusion, the present study highlights the complex interplay of environmental, behavioral, and biological determinants in the development of inflammatory disorders and autoimmune diseases and emphasizes comprehensive approaches to disease prevention.

TALK 3: Which Environmental Characteristics Explain the Worse Mental Health of Young People Who Lived in Deprived Coastal Communities in Adolescence?

Presenter: Emily Murray, University of Essex

Previous research has shown that English adolescents who lived in the most deprived coastal neighbourhoods had worse mental health outcomes up to 11 years later than if they had lived in equivalent inland neighbourhoods. We used the same twelve waves (2009-2022) of the UK Household Longitudinal to examine whether economic, social, educational or built environmental characteristics during adolescence (15 years, or closest available 10-14yrs) explained this association. Initially, cross-sectional regression models were fitted between 26 environmental variables and coastal classification, with adjustments made for clustering of individuals within LSOAs. Second, longitudinal associations were fitted between environmental variables and SF-12 mental functioning scores (MCS) during adulthood (age 16+) over 11 years follow-up. Longitudinal models were fitted at the individual and study wave, with additional adjustments for longitudinal study weighting. If an environmental variable was associated with both coastal classification and MCS score, they were included in the full model. Youth who lived in coastal (n=764), compared to inland (n=4,157) LSOAs in adolescence, experienced worse average levels for sixteen environmental variables (e.g., Level 3 qualifications 33.5% vs. 38.0%) and better average levels for five environmental variables (% overcrowded, crime deprivation, distance to food stores/hospitals and air pollution). After adjustment for individual socio-demographics, only crime and progress to higher education were independently associated with MCS scores [Crime deprivation, Top 20% vs Bottom 20%: -1.20 (-2.38, -0.03) and Progress higher education, Middle 20% vs Worse 20%: 1.07 (0.09, 2.05) respectively]. When these variables were fitted to models with coastal classification, area deprivation, coastal*deprivation and socio-demographics, mean differences in MCS scores (95% CI) between respondents who lived the top 20% most deprived coastal, compared to equally deprived inland, LSOAs in adolescence decreasing from -4.3 (-7.0, -1.6) to -3.9 (-6.7, -1.1). Crime and education should be investigated as pathways to improve mental health of coastal youth.

TALK 4: Health Co-Benefits of Climate Change Mitigation Action in Spain: Insights from NO2 and Low Birth Weight

Presenter: Stefan Sieber, Barcelona Institute for Global Health

Co-authors: Joan Ballester, Cathryn Tonne, Barcelona Institute for Global Health

Objective: We aimed to quantify reductions in low birth weight (LBW) cases associated with decreased air pollution exposure during pregnancy, while assessing disparities in these benefits across maternal education groups.

Methods: We included 1,411,192 at-term births in 2010- 2018 from the Spanish birth registry. We performed distributed lag non-linear models to extract associations between NO2 and LBW in the total sample and stratified by maternal education (primary, secondary, tertiary). The model outcomes were then used to predict the number of LBW cases between 2010 and 2018 under the observed exposure pattern and three retrospective counterfactual scenarios: 1) in-utero air pollution exposure limited to EU Ambient Air Quality Directive (AAQD, 20 µg/m3), 2) limited to WHO Air Quality Guidelines (10 µg/m3), 3) social intervention where all mothers attain highest level of education (tertiary).

Results: Stricter air quality interventions for NO2 between 2010 and 2018 could have reduced the share of LBW cases in the total sample from 4.62% (95% CI: 4.24% - 5.02%) under observed exposure to 4.55% (95% CI: 4.18% - 4.95%) under AAQD scenario and 4.47% (95% CI: 4.10% - 4.87%) under WHO scenario. The largest reductions were observed among infants born to mothers with primary education, from 5.25% (95% CI: 4.46% - 6.23%) to 5.07% (95% CI: 4.25% - 6.02%) under observed exposure and WHO scenario, respectively. In the scenario where all mothers attained tertiary education, the share of LBW cases would have been 3.96% (95% CI: 3.63% - 4.30%).

Conclusion: Climate change mitigation policy that reduces air pollution may have substantial health co-benefits, particularly for children and contribute to reducing health inequalities in LBW.

1B STREAM: LONGITUDINAL STUDY 1

SYMPOSIUM

Recent Developments and Innovations in Child Cohort Studies in the UK

Chair: Lisa Calderwood, University College London

Longitudinal cohort studies of children and youth are a core part of the survey infrastructure in many countries, and in the light of the rapid social change such as from technological advances, the rising cost of living and the Covid-19 pandemic, there has been a renewed focus on such studies as vital evidence bases for child and adolescent research including on well-being, education and labour market. This session will cover recent developments in child and youth cohort studies in the UK. The presentations will cover the scientific content and design of these studies, as well as findings and progress so far.

TALK 1: Early Life Cohort: Learnings from Feasibility Study and Plans for the Main Cohort

Presenter: Alyce Raybould, University College London

Co-authors: Lisa Calderwood, Alissa Goodman, Pasco Fearon, Erica Wong, Karen Dennison, University College London

Longitudinal birth cohort studies are vital for understanding the development and outcomes of successive generations of children, though there is increasing recognition that often those families who are of most interest from a research and policy perspective are less likely to be recruited and retained in national studies.

The Early Life Cohort Feasibility Study (ELC-FS), funded by the Economic and Social Research Council, successfully tested the feasibility of a new UK-wide birth cohort study of several thousand babies with a target age of 9 months. It is led by the Centre for Longitudinal Studies at University College London. The fieldwork, carried out by Ipsos, ended in summer 2024. The study has strong focus on inclusivity and is designed to maximise representation of 'less often heard' groups. The use of birth registrations as a sampling frame enabled sample boosts of babies born into disadvantaged and ethnic minority families, as well as Scotland, Wales and Northern Ireland, and direct recruitment of fathers including those living in their own households.

The study interviewed mothers and fathers about children's social and economic environments, their health, well-being and development. We also collected saliva and oral swabs for DNA extraction with a randomised subgroup, and record linkage consents where we experimentally tested different consent wording. Interviews were carried out primarily face-to-face, with web, phone and video interviewing also used. We also included experiments to test the effectiveness of targeted differential incentives and conditional incentives.

This paper will present key findings from the Feasibility Study, as well as giving an overview of how those learnings fed into the proposed design and features of the Early Life Cohort. The Early Life Cohort is expected to begin data collection in November 2026; it will be the first major UK birth cohort study in 20 years.

TALK 2: Children of the 2020s: An Ongoing Birth Cohort Study of Early Environmental Influences on Educational Outcomes to Inform Early Years Policy

Presenter: Laurel Fish, University College London

Co-authors: Pasco Fearon, Lisa Calderwood, Alissa Goodman, Marialivia Bernardi, University College London; Sandra Mathers, University of Oxford; Sarah Knibbs, Ipsos MORI

Evidence indicates substantial and growing disparities in educational attainment, and that these inequalities are established very early in children's development. In scientific and policy terms, it is critical to identify malleable risk factors linked to these early inequalities to inform policy and intervention. Children of the 2020s (COT20s) is an ongoing, nationally representative birth cohort study of families in England that will provide evidence on policy-relevant factors affecting child development and later educational outcomes. COT20s is a five-wave longitudinal survey of children from nine months to five years, with annual data collection including face-to-face interviews at nine months and three years. The achieved sample size was 8,518 families at wave 1, with a target of 4,142 interviews at wave 5.

The study includes primary caregiver surveys, an innovative app, BabySteps, enabling the collection of developmental and home environment measures in the inter-wave periods, linkage to health and education administrative records, an online survey for a second co-residential parent and/or any own-household parents. Fieldwork for the age 3 in-home interview takes place between November 2024 and June 2025. Alongside the main survey, data collection features a host of innovative elements, including a five-minute video recording of the parent and child playing taken on the BabySteps app, a set of digitalised cognitive assessments administered via a tablet, and a battery of interviewer-administered direct assessments with the child. Early analysis of wave 3 fieldwork progress indicates strong respondent engagement, high completion rates and high-quality data collection across all components of the age 3 interview. This presentation will provide an update on this landmark ongoing study and spotlight key early findings relevant to informing early years policy.

TALK 3: Five to Twelve: A Cohort Study of Emerging Educational Inequalities Among Children at Primary school in England

Presenters: Jules Allen, Martin Wood, National Centre for Social Research (UK)

Co-authors: Svetlana Speight, Joshua Hodgkin, Rebecca Light, Honor Mitcheson, National Centre for Social Research (UK)

The inaugural wave of the Five to Twelve cohort study, which investigates educational and wellbeing outcomes during children's primary years in England, achieved over 8,600 in-home interviews in the 2023/2024 academic year. In this presentation, we will discuss the initial findings of this innovative study, which involved data collection from parents and teachers of cohort members, who were aged 5 and 6 at the time, alongside cognitive assessments of the children themselves.

This comprehensive study encompasses a wide array of topics, including pupil behaviours and character, parental background, home environment, mental health and wellbeing, and the dynamics of parent-child relationships. With a particular emphasis on educational inequalities, the sample was boosted to include children from disadvantaged households. It will continue to track these children throughout their primary school years.

The study transitioned from in-home interviews at ages 5 and 6 to an online/CATI approach in its second year; we will discuss the implications of this methodological shift on response rates and overall study outcomes.

The study is a collaboration in England between the National Centre for Social Research, National Children's Bureau (NCB) and National Foundation for Educational Research (NFER).

TALK 4: A New Longitudinal Study of Adolescence in England: Growing up in the 2020s

Presenter: Jess Stepanous, University College London

Co-authors: Larissa Pople, Emla Fitzsimons, University College London; Jess Deighton, Tanya Lereya, Anna Freud; Nicholas Gilby, Christy Lai, Julia Pye, Ipsos MORI

Growing up in the 2020s is a new five-year longitudinal study of secondary-school children in England commissioned by the Department for Education and run in consortium by the UCL Centre for Longitudinal Studies, the organisation Anna Freud and Ipsos. It is part of a series of national longitudinal studies that includes the Five to Twelve study of primary-school children and Children of the 2020s, focused on the first five years.

Growing Up in the 2020s will be a national barometer for the wellbeing and educational progress of young people in England throughout secondary school and beyond. Today's adolescents face unique challenges compared to previous generations, growing up amid rapid technological advancements, shifting social norms, and global crises like climate change and rising mental health issues. Data from the study has the potential to inform prevention strategies to help identify those at risk of poorer outcomes early and ensure they are supported accordingly.

A sample of c20,000 children aged 12/13 years in England have been selected from the National Pupil Database, with a higher selection probability for pupils eligible for free school meals. The aim is to achieve approximately 7,750 paired child-parent interviews at wave 1, with approximately 4,000 paired child-parent interviews anticipated at wave 4. Wave 1, which

is currently underway and in the field until July 2025, is being conducted face-to-face. Waves 2 to 4 will use a sequential mixed mode approach (online>telephone at waves 2-3 and online>face-to-face at wave 4). An innovative element is the Iris sub-study, which aims to track the internet usage of a sub-sample of c400 young people on their personal mobile phone for 4 weeks.

This presentation will provide an opportunity to learn more about this study, including its scientific objectives, the study design, questionnaire content, response rates and characteristics of respondents.

1C STREAM: DISADVANTAGE / INEQUALITY 1

SYMPOSIUM

Pathways to Integration: Wellbeing, Support, and Labour Market Transitions in Refugees from Ukraine and Syria in Germany

Chair: Ben Edwards, Australian National University

In this symposium the Refugees across the life course group provides a series of longitudinal studies on the integration experiences of refugee adolescents and families in Germany, drawing on recent data from Ukrainian and Syrian refugees. The first study by Ludovica Gamaro tracks wellbeing outcomes among Ukrainian adolescents over their initial years in Germany, identifying school belonging, friendships, and extracurricular engagement as key protective factors. Hans Dietrich examines the mental health trajectories of young Syrian refugees, revealing complex associations between emotional, practical, and institutional support systems over time. Ette, Milewski, Décieux and Bujard investigate family reunification among Ukrainian refugees, demonstrating that initial intentions to reunite were shaped by contextual factors such as children's presence in Germany and region of origin, with only a minority of couples reuniting within two years. Finally, Ette and Witte analysis of labour market transitions shows that early language course participation among Ukrainian refugees can both facilitate and delay employment integration, depending on timing, completion, and individual circumstances. Together, these papers highlight the importance of timely social, educational, and institutional supports in shaping refugee wellbeing and long-term inclusion. The findings underscore the need for integration policies that are attuned to the evolving needs of young refugees and families across multiple life domains.

TALK 1: Predictors of Wellbeing Among Displaced Adolescents: Results from the "Refugees from Ukraine in Germany" Study

Presenter: Ludovica Gamaro, Federal Institute for Population Research (BiB)

Background: The Ukrainian refugee population includes a large share of adolescents. Although existing evidence indicates that war trauma has detrimentally affected them, there is still little systematic evidence on adolescents' wellbeing and on how it is related their experience over time in resettlement countries.

Methods: The study assesses the longitudinal predictors of wellbeing among a representative sample of Ukrainian adolescents over their first three years in Germany. The analysis focuses specifically adolescents aged between 11 and 17 years, who were interviewed in spring 2024 and one year later. Wellbeing is measured by school belonging, broad life satisfaction, internalizing symptoms and externalizing behaviour. Relevant predictors span both the school-domain and leisure time, with particular attention paid to German language proficiency, type of school, presence of friends and participation in sport and extra-curricular activities. Adolescents' information is also linked to their parents, who have been interviewed six times, between summer 2022 and spring 2025, eliciting rich information on their pre-migration characteristics, experience of reception and settlement.

Implications: The establishment of a longitudinal survey collecting information directly from refugee adolescents provides the novel opportunity to analyse whether, and under which circumstances, school and social participation is a protective factor for their wellbeing. More generally, results will allow gaining a deeper understanding of the challenges that refugee adolescents from Ukraine face and to identify ways to enhance their current and future wellbeing.

TALK 2: Associations Between Mental Health and Social/Institutional Support

Presenter: Hans Dietrich, Institut für Arbeitsmarkt- und Berufsforschung (IAB)

Employing data from the IAB -Wellcome study this paper addresses the associations of mental health and support uptake. The IAB-Wellcome study interviewed 2700 young Syrian refugees, arriving in Germany between 2015 and 2016. High level mental health measures (PTSD ETI trauma inventory and HSCL-10) were repeatedly employed to identify individuals' health progression from 2016 to 2020. Here we are interested in the quality of individuals mental health and individuals' uptake of social and institutional support. The results demonstrate the ambivalent effects of family and friends support effect. We distinguish practical -economic and job-related support on the one hand and emotional support on the other. Which are associated with individuals' mental health situation. Further on we identify groups-specific pattern in uptake of institutional support, where we identify secular, religious and mixed strategies.

TALK 3: Family Reunification of Refugees from Ukraine in Germany: Intentions and Realisation

Presenter: Andreas Ette, Federal Institute for Population Research (BiB)

Co-authors: Nadja Milewski, Martin Bujard, Federal Institute for Population Research; Jean Décieux, University of Bonn

Since the outbreak of the Russian full-scale invasion of Ukraine in February 2022, gender-specific policies for leaving Ukraine have contributed to gendered flight constellations, with women and children constituting the majority of refugees. Around three quarters of adult refugees arriving in Germany were women, 23 percent arrived with a partner, 42 percent were single women and 35 percent arrived without a partner. Data from the first months after their flight in 2022 show that among spatially separated women, intentions to reunite with family in Germany were particularly high if the partner lived in more war-affected regions, if at least one minor child was already in Germany, and if the respondents expressed their intention to stay in Germany. We examine how these intentions for family reunification were realised in the first two years after flight. The analyses are based on representative data from four waves of the “Ukrainian Refugees in Germany Study” (conducted by IAB-BiB/FReDA-BAMF-SOEP survey, waves 1 and 2; BiB/FReDA, waves 3 and 4). Given that 27 percent of couples reunite during the first two years of their stay in Germany, we analyse the determinants of the realisation of original intentions. During the panel, overall 322 women reunited with their partners in Germany who were separated across the border at wave 1. As a contribution to the literature comparing intentions and behaviour, we highlight the importance of different stages of family formation opposite to economic constellations for understanding migration decisions in the context of armed conflict and forced migration.

TALK 4: Language Courses as Springboards or Traps? The Labour Market Transition of Ukrainian Refugees in Germany

Presenters: Andreas Ette, Nils Witte, Federal Institute for Population Research (BiB)

More than 1.2 million Ukrainians are currently seeking protection in Germany due to Russia’s war of aggression. Compared with refugees from other countries, they benefit from a more liberal protection regime. In Germany, they have been granted immediate labour market access alongside early investments in their human capital through integration and language courses. To assess the effectiveness of this “language-first” approach, this paper examines the labour market integration of Ukrainian refugees, emphasizing the impact of early-stage human capital investments following their arrival. Previous research on refugees from other countries suggests mixed outcomes. On the one hand, early participation in language and integration courses may delay refugees’ entry into the labour market by locking them into prolonged training programmes and raising their reservation wages. On the other hand, timely participation in such courses significantly improves refugees’ subsequent employment opportunities, particularly by better using their existing skills and enhancing employment quality, thereby strengthening their long-term integration prospects. Through fixed-effects panel regression models, this paper analyses both short- and medium-term effects of language course participation using variation in attendance and duration of language courses. It distinguishes between various indicators of labour market integration: initial access to employment and subsequent employment quality, focusing specifically on employment type and mismatch. Furthermore, the analysis considers the timing and intensity of language training, differentiating between completed and incomplete language courses. The analysis uses data from the BiB/FReDA survey on Ukrainian refugees, which constitute a comprehensive six-wave panel dataset documenting early integration trajectories in Germany until 3 years after arrival. The dataset allows examining whether initial human capital investments act as a springboard for successful integration or as a trap, inadvertently delaying refugees’ entry into the labour market. The study also highlights heterogeneous effects based on gender, presence of children in the household and refugees’ pre-existing skills.

1D STREAM: EDUCATION / EMPLOYMENT 1

INDIVIDUAL EDUCATION TO EMPLOYMENT PAPERS

TALK 1: The Costs of University Non-Completion for Early Labour Market Outcomes: Evidence from Linked Administrative Data

Presenter: Matthew Curry, The University of Queensland

Returns to university, including patterns of heterogeneous effects across students, form a key link between socioeconomic origins and destinations. Previous literature on scarring effects suggests that initial labour market penalties due to university noncompletion may have persist over the life course. To investigate these initial effects of university noncompletion, we utilize a longitudinal linked administrative dataset which follows a cohort of Australian university entrants from ages 17–25. The data contain pre-university background characteristics, standardised measures of secondary school performance used for university entrance, and initial enrolment and institutional characteristics, all of which are used to control for the propensity to complete university. We estimate non-completion penalties on unemployment-related welfare receipt and logged earnings for 25-year-olds. When constrained to homogeneity, regression models controlling for the propensity to complete college suggest significant noncompletion penalties for earnings for both men and women. When returns are allowed to vary over the distribution of propensity scores, patterns of positive selection emerge, where those most likely to complete university are rewarded with the highest earnings premiums. On the other hand, the non-completion penalty in unemployment-related welfare receipt becomes largely insignificant once regressed over the propensity score distribution; rather, it is pre-university characteristics that strongly influence welfare receipt for both university completers and non-completers. Analysis of occupational SEI scores further

suggests that the larger university non-completion penalties for advantaged students are a function of differences in occupation rather than labour supply. While longer-term comparisons over the entire career are not yet possible, the heterogeneous accrual of dropout penalties for employment and earnings during the crucial school-to-work transition period is important for understanding how exiting university students can best navigate their early careers and has implications for higher education policy and practice and labour market policies for young workers.

TALK 2: Unexpected Educational Advancement and Subsequent Employment Among People from Educationally Disadvantaged Families

Presenter: Madeleine Floiger, University of Potsdam

This study examines unexpected educational trajectories and subsequent employment outcomes of individuals from educationally disadvantaged families. Unexpected educational advancement refers to intergenerational mobility exceeding one educational level. The unexpected utilization in the labor market describes the translation of higher educational attainment into adequate, long-term employment. The study explores under which conditions educational advancement results in sustainable labor market integration.

Based on resource theory, the analysis examines factors that enable individuals with significantly higher educational qualifications than their parents to overcome a disadvantaged background into middle adulthood. Key resources include a supportive learning environment and peer influences. Additionally, self-responsibility and self-efficacy may facilitate this process. The central research question is: Which influencing factors, in what form and combination, significantly impact unexpected employment outcomes in schooling, post-school education, and personal development?

The study utilizes data from the LiFE study (Lebensverläufe von der späten Kindheit ins frühe Erwachsenenalter, authors: Wolfgang Lauterbach, Helmut Fend, Werner Georg, Fred Berger & Urs Grob). It tracks approximately 2,000 children aged 12 to 16 from 1979 onward, with follow-ups at ages 35 and 45. The study captures educational and professional biographies, social trajectories, cultural-political orientations, and personality development. Classical mobility analyses first describe upward mobility trends. Regression analyses then identify causes of unexpected labor market outcomes, focusing on stepwise logistic regressions. Preliminary results show that 13% of individuals from educationally disadvantaged families attain a university degree, exceeding their parents' education by more than two levels. A combination of strong academic performance, high aspirations, and verbal intelligence proves beneficial, particularly for males. However, these unexpected upward trajectories occur only when multiple factors interact at different life stages.

TALK 3: Patterns of Timing of Leaving Education and the Parental Home and Starting Employment, Cohabitation, and Parenthood During UK Contemporary Young Adulthood

Presenter: Annie Herbert, University of Bristol

Co-authors: Anne McMunn, Ingrid Schoon, University College London; Michael Green, Duke University; Laura Howe, Jon Heron, University of Bristol

Background: The age of transitioning to adult social roles (e.g. leaving full-time education, entering parenthood), have been shown to relate to health, but there is a lack of contemporary data. Using data from the Next Steps UK cohort born in 1989-90, we identified distinct groups of young adults according to timing of transitions.

Methods: For Next Steps participants who were still actively participating at the latest sweep at age 32 (n=7279), we used information from 333 variables from age 16 to 32 to identify whether an individual had been or was currently in the following roles, and the age at which this first happened: leaving full-time education; employment ≥ 30 hours a week ($>$ age 18; including equivalent vocational training); living with parents; cohabiting with a partner/spouse; parenthood. We used latent class methods to identify distinct groups according to these ages, stratified by sex.

Findings: We established four groups common to men and women: 'Increasing independence', (36% of women and 31% of men most likely to belong to this class); 'Extended education' (19% women, 23% men); 'Early Adult Parents' (14% women, 29% men); 'Still-at-home' (14% women, 16% men). A final fifth group 'Early Adult Non-parents' was only apparent in women (17%). In this talk we will present these different groups in more detail and compare these findings with those in previous 70's-born cohorts (Green et al 2017).

Conclusions: Compared with earlier cohorts, while the average ages of transitioning to different social roles have been increasing, the groupings in relative timing remain fairly similar. It appears that the gender gap in prevalence of these groups for 90's-born UK young adults has decreased compared to their 70's-born counterparts. There is now a need to better understand the drivers of this change, and whether it has translated into changes in health outcomes.

TALK 4: Intragenerational Educational Mobility and Income Trajectories

Presenter: Jessica Ordemann, German Centre for Higher Education Research and Science Studies

Co-author: Kaspar Burger, University of Potsdam

There are two types of educational pathways via which individuals can attain a school leaving degree that qualifies for entrance to post-secondary education. Either students follow the standard educational pathway that directly leads them to a secondary education degree or they follow indirect pathways by sequentially upgrading their educational credentials—and, in so doing, exhibiting intragenerational educational mobility. The question arises, however, whether both groups will go on to earn similar incomes. If attaining the same credential through different pathways were to lead to different incomes, it would suggest that factors beyond the credential itself play a role in shaping these incomes.

Our study addresses the economic consequences of intragenerational educational mobility by analyzing the income trajectories of individuals who had attained their final educational degree either by following a standard (direct) educational pathway or by obtaining a first degree and subsequently upgrading their credential, that is, by displaying intragenerational educational mobility. Based on linked data from the adult cohort of the National Education Panel Study (NEPS) and statistical data of the Integrated Employment Biographies (NEPS-ADIAB-SC6), we estimate linear random effects models to account for both within- and between-variation of adjusted graduates' (log) income trajectories using a group indicator and age fixed-effects (25-55 years). We control for labor market and socioeconomic context variables. Our analytic sample comprises 9,311 school graduates; 19.3 % of whom upgraded their first school degree and hence exhibited intragenerational upward mobility.

Our findings show that graduates who upgrade their secondary school degree earn lower incomes in the first phase of their professional careers but overtake their peers with standard educational biographies around the age of 40. We conclude that intragenerational educational mobility pays off financially in the long term, entailing both individual and societal benefits.

1E STREAM: LATER LIFE

INDIVIDUAL LATER LIFE 1 (Socio-Economic Factors) PAPERS

TALK 1: Shaping Socioeconomic Position Across the Life Course: Older Adults' Perspectives and Policy Implications in an Unstable Low- and Middle-Income Country: The Case of Lebanon

Presenter: Zahraa Beydoun, Qatar University

Co-authors: Hans Bosma, Nicolle Boumans, Maastricht University; Sawsan Abdulrahim, American University of Beirut

Background: Addressing social and economic disparities in low- and middle-income countries (LMICs) requires understanding socioeconomic position (SEP) through a life course approach. Economic and political instability in LMICs increases the risk of sudden declines in SEP throughout individuals' lives. The aim of the study is to gain a better understanding of older adult's perceptions of what indicates their SEP during the different phases of their life-course with particular attention to the role of social, economic and political factors in shaping their experiences. We will use the case of Lebanon that provides an ideal example of an LMIC with high youth migration, driven by economic and political instability, coupled with weak governmental protections.

Methods: This qualitative study involved 19 in-depth, open-ended interviews conducted between December 2021 and June 2022 with older adults aged 60 and above. Thematic analysis was performed to identify core themes.

Findings: Findings highlighted the complex and interconnected nature of SEP, shaped by individual, familial, community, political, and societal dynamics across the lifespan. Policy-related factors—such as inadequate social protections, weak governmental support, and economic and political instability—emerged as critical determinants of SEP. During childhood, education access, housing conditions, and societal stability influenced SEP perceptions. In adulthood, employment opportunities, asset ownership, economic stability, and social policies played significant roles. In old age, income security, health insurance, and family support (often impacted by weak governmental policies) were central to SEP perceptions. Moreover, social cohesion, resilience, and faith were major protective factors that buffered the effects of financial hardship among older adults.

Conclusions: Findings highlight the impact of societal factors—including war, economic instability, and weak social policies—on SEP trajectories. The study emphasizes the need for robust governmental support systems, such as pension programs, accessible healthcare, and social services, to promote sustained SEP well-being across the lifespan.

TALK 2: A Systematic Review of Life Course Socioeconomic Position and Falls Among Adults of Middle and Older Age

Presenter: Frerik Smit, University of Sydney

Co-authors: Marcia R. Franco, Catherine Sherrington, Fiona Blyth, Anita van Zwielen, Saman Khalatbari-Soltani, University of Sydney; Stéphane Cullati, University of Fribourg

Background: Fall risk in middle and older age may be determined by socioeconomic position (SEP) across the life course. However, a comprehensive review of the existing body of evidence on this topic is needed. This study aims to systematically review existing knowledge on the association between SEP across the life course and falls in middle and older age.

Methods: We systematically searched MEDLINE, Embase, and PsycINFO from inception to March 15th, 2024 for observational studies (longitudinal cohort, cross-sectional, and case-control), analysing the association between a minimum of one SEP indicator (e.g. education, income, occupation) and a falls-related outcome (e.g., fall occurrences, injurious falls). We undertook a narrative synthesis of results given significant heterogeneity across included studies.

Results: A total of 125 studies were included (5,880 deduplicated search results screened). Fourteen included studies explicitly aimed to study SEP and falls, an additional nine contained relevant adjusted models, and the remaining 102 studies only contained unadjusted results of relevance. Results indicate that higher SEP is generally associated with a lower fall risk/rate, and that the risk/rate of falls tends to be disproportionately high among individuals/groups of lower SEP. Notably, only four included studies contained any results of a SEP exposure from a life course stage prior to the study period, all of which were occupation measures with mixed results. Only one study explicitly assessed a life course model (accumulation model), finding that higher cumulative SEP was associated with a lower fall risk/rate.

Conclusion: This review indicates that the distribution of falls is disproportionately high among lower SEP groups, and that higher SEP generally has a protective association with falls. However, the overall body of evidence is limited, with a prominent knowledge gap regarding how SEP at different periods of the life course impacts falls in later stages of life.

TALK 3: Socioeconomic Status Across the Life-Course and Frailty in Older Age: Evidence from Switzerland

Presenter: Yves Henchoz, University of Lausanne

Background: Lower socioeconomic status (SES) in adulthood is associated with worse frailty trajectories and outcomes, but the impact of SES across different life stages on frailty in older age remains unclear. This study examines how different measures of SES throughout childhood and adulthood relate to frailty in older age. We hypothesize that childhood SES is as strong a predictor of frailty trajectories as adult SES, given that SES at different life stages may shape frailty risk through distinct mechanisms.

Methods: Data came from the Lausanne cohort 65+ (Lc65+), a population-based study of approximately 4500 older people followed over about 20 years. We examined how socioeconomic measures spanning young adulthood (education), adulthood (occupational class), and early old age (perceived income and wealth, financial strain, financial subsidies) relate to frailty levels and trajectories over a 10-year period. Trajectories of Fried's frailty phenotype were identified using group-based trajectory modelling. Logistic regression models were adjusted for sex, age, cohort, living alone, marital status, and number of children.

Results: Lower educational attainment, occupational class, financial strain and receiving financial subsidies in older age were all independently associated with higher risk of frailty at ages 65-70. In terms of frailty trajectories, financial strain in older age was associated with higher odds of medium-frailty (adjusted odds ratio (aOR), 1.48; 95% CI, 1.07–2.05) and high-frailty trajectories (aOR, 2.28; 95% CI, 1.32–3.94). Likewise, receiving financial subsidies in older age was associated with higher odds of medium-frailty (aOR, 1.69; 95% CI, 1.25–2.28) and high-frailty trajectories (aOR, 2.07; 95% CI, 1.22–3.51).

Conclusion: This study underscores the consistent association between SES measures across the lifecourse and frailty in early old age. Interventions throughout childhood and adulthood may help prevent frailty risk, while financial protection policies should address inequalities in frailty trajectories in older age.

TALK 4: The Effects of Delaying State Pension Age on Subsequent Healthcare Usage: A Cohort Analysis Using Linked Hospital Episode Data

Presenter: Laurence Rowley-Abel, University of Edinburgh

In response to population ageing, many countries have implemented policies to delay the age at which individuals are entitled to a state pension. Governments have argued that current entitlement ages are not financially sustainable in the context of longer life expectancies. However there has been limited assessment of how the extension of work further into later life might be impacting health and whether this puts further strain on healthcare systems. In the United Kingdom, the 1995 Pensions Act delayed women's age of entitlement from 60 to 65. The cohort of women first affected by this reform have now aged through their 60s, presenting a unique opportunity to analyse the impacts of delayed pension entitlement on their health and healthcare usage. We make use of largescale, linked hospital episode data in the UK Biobank to compare two cohorts of women – those born in 1949 who were unaffected by the reform, and those born in 1954 whose

entitlement age was delayed. Poisson regression models were used to model differences in the number of hospital episodes between the two cohorts. We also examined whether the reform had different effects depending on individuals' economic situation, given that reliance on a public pension will differ by socioeconomic status. Results show that while overall differences between the cohorts were minimal, low-income groups in the 1954 cohort had a significantly higher number of hospital episodes than low-income groups in the 1949 cohort. This suggests that policies delaying entitlement to pensions may have adverse consequences on the health of low-income individuals, which in turn puts additional strain on healthcare systems.

1F **STREAM: HEALTH / WELLBEING 2**

INDIVIDUAL SOCIAL CONNECTION

PAPERS

TALK 1: In-Person Social Isolation in the Age of Smartphones: Examining Age, Period, Cohort Trends

Presenter: Shawn Bauldry, Purdue University

Co-author: Siyun Peng, Indiana University

The rise of smartphones and social media is widely seen as a pivotal societal shift that has fueled what the U.S. Surgeon General in 2023 described as "our epidemic of loneliness and isolation." The evidence for an upward trend in social isolation, however, has not accounted for age and cohort effects – i.e., variation in time spent alone over the life course and across generations. Using 2003-2022 waves of the American Time Use Survey, we leverage the latest breakthrough in Age-Period-Cohort modeling to disentangle age specific trends, societal changes, and generational shifts that contribute to social isolation in the era of smartphones. We find a modest period trend of increasing social isolation, with an acceleration in the mid-2010s, suggesting that societal shifts during this time may have intensified social isolation for all Americans. Age or cohort effects, however, are much stronger and more important in explaining the social isolation crisis in the 21st century.

TALK 2: Evaluating the Public Participatory Local Program Cause Commune Using Longitudinal Data

Presenter: Dario Spini, University of Lausanne

Co-authors: Cecilia Delgado Villanueva, Nicolas Sommet, University of Lausanne

Cause Commune (Plattet & Spini, 2021) is a participatory local program conducted by a Swiss municipality from 2018 to 2024. This program conducted by the social cohesion service of the municipality has organized different types of activities in the public space (participatory forums, public events, opening of community spaces) with the larger objective of ameliorating the social quality (social inclusion, social cohesion, empowerment) of various neighborhoods and hopefully the mental and physical health of the population. The LIVES Center has collaborated in the design of this intervention and conducted a three-wave longitudinal study (with n=1411 at W1, n= 904 at wave2, and n= 956 at W3, about 700 individuals followed longitudinally) to analyse eventual individual and mean changes in the social quality in the neighborhoods. Measures of participation to the local events were also taken. They showed that about 25% of the population at wave 2, and 40% at wave 3, took part in at least one activity of the program. In order to show that participation impacted the local social quality, we will present results from multilevel analyses that mean and individual change occurred for those who participated in their level of empowerment compared to those who did not participate. Results were not significant for social inclusion and only on neighborhood identification scale for social cohesion.

TALK 3: From Social Ties to Social Trends: Unpacking the Dynamics of Personal Networks and Changing Demographic Behaviours

Presenter: Sofia Borgogni, Trinity College Dublin

Co-author: Richard Layte, Trinity College Dublin

This project investigates the role of social networks and ecological contexts in shaping demographic outcomes throughout the life course, focusing on transitions into first cohabitation.

Due to the ongoing de-standardization of life trajectories, scholars emphasized the need to examine the conditions that facilitate or hinder the adoption of life-changing practices underpinning current demographic trends in affluent societies. Substantial evidence shows that many demographic outcomes are strongly socially stratified. However, there remains a gap in understanding the pathways through which socio-economic forces, such as participating in higher education, influence individual agency.

Recent studies reveal that personal support networks are a crucial meso-level factor shaping individuals' demographic choices. Theoretically, they provide a measure of 'social embeddedness' that allows to link the normative environment at the societal level to individuals' decision-making.

Drawing from demographic research and social network theory, the study analyses first co-residential union formation, and shows how historical variations in network structures interact with spatial diffusion patterns. Based on the assumption that personal networks act as conduits for the reproduction of social norms, individuals defined by more

stable family and friendship networks are considered less likely to take up innovative behaviours compared to those characterized by a more diverse circle of friends and weaker kin ties. Discrete-time event history models are applied to data from the British Household Panel Study and Understanding Society to explore partnership formation of people born between 1975 and 1992 across the UK's constituent countries. Preliminary results indicate that having frequent interactions with childhood friends regarded as close slows down the transition into first cohabitation for highly educated people, whereas having frequent interactions with close, newly-acquired friends yields the opposite effect for the highly educated. This pattern partially mediates the variation in the prevalence of cohabitation across UK countries. Network influences are consistent across cohorts and countries.

TALK 4: The Dynamic Interplay Between Loneliness and Health Behaviors from Adolescence to Midlife: A Population-Based Prospective Cohort Study

Presenter: Libor Potočár, University of Oslo

Co-authors: Laura Cachón Alonso, University of Helsinki; Michal Kozák, Tilmann von Soest, Oslo Metropolitan University; Rubén Rodríguez-Cano, Norwegian University of Science and Technology; Tomáš Formánek, Aarhus University and Aarhus University Hospital

There is growing evidence of premature deaths among lonely individuals, with health behaviors representing one potential pathway linking loneliness with subsequent morbidity. However, existing research on the health outcomes of loneliness has predominantly focused on ageing individuals, overlooking the dynamic interplay of health behaviors and loneliness across the first decades of life. In this nationally representative prospective cohort study in Norway (n = 3,072) we investigated reciprocal linkages between loneliness and health behaviors, including alcohol use, body mass index (BMI), smoking and physical exercise from adolescence (Wave 0, mean age = 15y.) to midlife (Wave 4, 43y.). Using a structural nested mean modeling approach with G-estimation, we accounted for a comprehensive set of baseline and time-varying confounders and performed multiple sensitivity analyses. We demonstrated that increased loneliness in adolescence was prospectively linked with diminished physical exercise in emerging adulthood, albeit not with smoking, alcohol use, or physical exercise at later life stages. Moreover, elevated loneliness during young adulthood was linked to increasing BMI in midlife. In contrast, alcohol use, smoking, and physical activity during adolescence and/or emerging adulthood were prospectively linked to diminished loneliness. Combined, our results provide little evidence for causal linkages between loneliness and subsequent adverse health behaviors across the first life decades. The negative associations between adverse health behaviors in adolescence and subsequent loneliness suggest that compliance with harmful social norms may be socially adaptive.

2A STREAM: HEALTH / WELLBEING 1

SYMPOSIUM

Young Carers in the UK: Lifecourse Challenges and Policy Recommendations

Chair: Rebecca Lacey, City St George's - University of London

Young carers—individuals under 25 who provide unpaid care to family members with health conditions or disabilities—face profound and lasting challenges across their lifecourse. With an ageing population and rising care demands, understanding the lifecourse consequences of young caring has never been more critical.

Drawing on high-quality longitudinal data representative of the UK population, this symposium explores how early caring responsibilities shape young carers' long-term outcomes—including mental health, education, social relationships, and overall wellbeing—across the lifecourse. Presentations will consider whether these impacts differ by gender, ethnicity, socioeconomic status, and household composition, shedding light on which groups of young carers may be particularly disadvantaged.

This session will provide robust evidence that will inform a discussion on how targeted policy interventions can mitigate the potential adverse impacts of being a young carer, ultimately promoting healthier transitions into adulthood and more equitable long-term prospects.

TALK 1: Young Carers' Mental Health: Inequalities and The Role of Social, School and Peer Support

Presenter: Anne McMunn, University College London

Co-authors: Rebecca Lacey, Alejandra Letelier, City St George's - University of London

Background: Young carers experience significant mental health challenges, yet longitudinal research comparing their mental health to non-carers remains limited. Little is known about how social support and demographic factors influence these outcomes over time, or what might improve young carers' mental health.

Objective: This study examines whether young carers have poorer mental health than their peers, whether inequalities exist across key axes of inequality, and how different forms of support—social, school, and peer—may influence these outcomes.

Methods: Using data from the COVID Social Mobility and Opportunities (COSMO) study (2021–2023), a nationally representative cohort of 16-18-year-olds in England, we analyzed mental health outcomes for 11,207 young people across two waves. Measures included psychological distress, chronic mental illness, anxiety, and depression symptoms, alongside self-reported caregiving status, demographic characteristics, and social support. Regression models examined associations between caregiving, mental health, and support systems, adjusting for key covariates.

Results: Young carers (11.6% of participants) had significantly higher levels of psychological distress, depressive symptoms, anxiety, and chronic mental illness than non-carers. These disparities remained consistent across gender, ethnicity, household income, special educational needs status and parental composition.

Strong social support was linked to a lower likelihood of chronic mental illness. However, those with high peer support reported higher levels of depressive symptoms compared to young carers with lower peer support. No differences were observed by school support.

Conclusion & Policy Implications: Young carers face persistent mental health inequalities. Policies should focus on expanding access to tailored mental health resources, strengthening social support networks, and improving recognition of young carers' needs to prevent long-term negative outcomes.

TALK 2: Young Carers' Education: An Analysis of the Effect of Caring on Educational Attainment

Presenter: Rebecca Lacey, City St George's - University of London

Co-authors: Alejandra Letelier, City St George's - University of London; Anne McMunn, University College London

Background: Research on the impact of caring responsibilities on young carers' educational attainment is notably limited. Most existing studies rely on self-reported data, which may not fully capture the extent of challenges young carers face. Additionally, little is known about how educational inequalities vary by socioeconomic or demographic factors, leaving gaps in understanding their long-term effects.

Objective: This study examines the impact of caring on educational attainment at Key Stages 2 (KS2) and 4 (KS4) in England. It also explores inequalities based on gender, ethnicity, parental composition, special educational needs and disability (SEND), and socioeconomic background.

Methods: We used data from The UK Household Longitudinal Study linked to the National Pupil Database, covering information from 1996 to 2018. Educational attainment was assessed at KS2 in reading, mathematics, and writing, and at KS4 through GCSE results and key benchmarks, including achieving five or more GCSEs, the English Baccalaureate, and average point scores. Logistic and Poisson regression models estimated the likelihood of lower attainment, adjusting for key covariates.

Results: Young carers (12.8% at KS2, 10.6% at KS4) were more likely to come from lower-income households and deprived areas. Compared to non-carers, they had significantly lower academic performance across all measures. At KS2, they were more likely to fall below expected levels in core subjects. At KS4, young carers achieved fewer GCSEs, lower grades, and achieved fewer key educational benchmarks.

Conclusion & Policy Implications Young carers face significant educational challenges that manifest early and persist throughout their academic journey. Early identification, tailored educational support, and stronger policies recognizing young carers in schools are essential to ensuring they have equal opportunities to succeed.

TALK 3: Young Carers' Relationships: Friendship, Loneliness, and Bullying Across Genders

Presenter: Alejandra Letelier, City St George's, University of London

Co-authors: Rebecca Lacey, City St George's, University of London; Anne McMunn, University College London

Background: The social impacts of caring on children and adolescents remain underexplored. Research on young adult carers suggests they have fewer close friends and may experience social isolation. Qualitative studies highlight their increased risk of bullying and peer victimization. However, little is known about younger carers, particularly how these experiences vary by gender and change over time.

Objective: This study examined the association between young carer status and social relationships, including number of friends, loneliness, and bullying victimization. It explored short-term (onset of caring or one year after) and long-term (3-4 years later) outcomes, focusing on gender differences and socioeconomic inequalities.

Methods: Using data from The UK Household Longitudinal Study (UKHLS), this study followed individuals aged 10–18 across waves 9, 11, 12, and 13. Poisson regression models assessed differences in the number of friends, while logistic regression examined associations between caring, loneliness, and bullying. Analyses were stratified by gender.

Results: Individuals who became young carers reported having fewer friends than their non-carer peers, with this gap widening over time. Female carers consistently reported significantly fewer friends compared to males. However, no significant associations were found between care status and experiences of loneliness or bullying victimization.

Conclusion & Policy Implications: Young carers, particularly females, experienced reduced peer networks over time, which may limit their social development. Schools should implement peer support initiatives and train educators to recognize the social challenges young carers face. Gender-sensitive programs and community-based initiatives can help foster social inclusion and create safe spaces for young carers to maintain friendships.

TALK 4: Anatomy of the Gender Care Gap: Intersectional Life Course Dynamics and Geographic Variations

Presenter: Maria Petrillo, University of Sheffield

Co-authors: Matt Bennett, University of Birmingham; Ricardo Rodrigues, University of Lisbon; Gwilym Pryce, University of Sheffield

Background: Relatively little is known about young carers using large-scale nationally representative data, compared to adult populations. Understanding the intersectional social profiles of younger carers and how they have changed over time and place fills this evidence gap.

Objectives/questions:

- How has the gender gap among unpaid carers evolved across different cohorts in England?
- How does poverty status influence gendered caregiving disparities, and in what ways does financial strain affect caregiving roles and responsibilities?
- How does geographic deprivation impact the gender care gap, and how does location contribute to variations in caregiving experiences?

Methods: Using data from UK Household Longitudinal Study (UKHLS) and the Office for National Statistics Longitudinal Study (an individual-level microsample of the Census spanning 2001 and 2021), this study followed people for 30 years to understand how intersectional profiles and disparities in caregiving varied over time and place. Multiple quantitative methodologies were used, including Age-Period-Cohort and Multilevel Analyses for Individual Heterogeneity and Discriminatory Accuracy (MAIHDA).

Results: The results highlight the extraordinary heterogeneity of experiences in outcome and opportunity for caregivers in England. Depending on the data source, between 56 and 187 intersectional profiles were identified with unique caregiving experiences. Gender discrepancies remained constant over time but decreased for younger cohorts. Gender differences were compounded by other social characteristics such as poverty and geographical inequality.

Conclusion & Policy Implications: People do not experience their social characteristics in isolation - power structures ensure they collide and result in unique experiences of discrimination and privilege. Our findings highlight the settings in which gender inequalities are compounded or alleviated.

2B STREAM: LONGITUDINAL STUDY 1

SYMPOSIUM

Harnessing Longitudinal Studies to Produce Evidence for Action on Health Inequities Across the Life Span

Chair: Naomi Priest, Australian National University

Globally, social and health inequities are widening. In Australia, socioeconomic inequities are now at a 20 year high, exacerbating existing disparities in chronic disease and poor health. Inequities in health accrue from early life, making the identification of potentially modifiable intervention targets across childhood and adolescence a research and policy priority. By applying advanced causal modelling approaches to longitudinal studies we can estimate the extent to which hypothetical interventions on policy-relevant targets might reduce inequities. This provides an efficient opportunity for identifying the most promising short- to medium-term policy leverage points. These approaches are particularly useful and can provide rapid policy-ready evidence when it is not ethical, feasible, cost-effective or timely to conduct real world intervention trials. This symposium will bring together four studies analysing longitudinal data and applying advanced causal modelling approaches to identify promising intervention targets to reduce inequities in child health and development. Studies showcase how longitudinal studies enriched with administrative linked data can help to address inequities in health and development from early life. We will discuss our experiences of engaging with policy makers to maximise knowledge translation and explore enablers within and outside the research setting.

TALK 1: To What Extent Could Stacking Early Childhood Interventions Reduce Socioeconomic Inequities in Child Development?

Presenter: Sarah Gray, Murdoch Children's Research Institute

Co-authors: Sharon Goldfeld, Shuaijun Guo, Meredith O'Connor, Cindy Pham, Elodie O'Connor, Naomi Priest, Gerry Redmond, Marnie Downes, Margarita Moreno-Betancur, Alannah Rudkin, Katrina Williams, Murdoch Children's Research Institute; Fran Azpitarte, Loughborough University; Hannah Badland, RMIT University; Susan Woolfenden, Sydney Institute of Women Children and their Families

Background: Reducing socioeconomic inequities in child development requires multisectoral strategies, yet evidence is needed on which intervention combinations have the greatest impact. This study estimates how stacking five hypothetical early childhood interventions could reduce socioeconomic inequities in children's development outcomes at school entry.

Methods: We used longitudinal linked administrative data from 274,123 Australian children born between January 2012-July 2013 and who participated in the 2018 Australian Early Development Census (AEDC) at school entry. Socioeconomic disadvantage in infancy was defined as the lowest 25th percentile on a composite of household income, parent education, and occupation. Causal mediation analysis using an interventional effects approach estimated the impact of five hypothetical interventions that aimed to reduce socioeconomic inequities in household income (1-2 years), home reading (2-3 years), household crowding (3-4 years), child mental health (4-5 years), and preschool attendance (4-5 years). The outcome was teacher-reported developmental vulnerability on one or more domains of the AEDC.

Results: One-sixth of children exhibited developmental vulnerability at school entry. Socioeconomically disadvantaged children had a higher risk of poor developmental outcomes compared to peers: absolute risk difference=8.7% (95% CI, 8.2% to 9.1%). Intervening to reduce inequities in all five intervention targets simultaneously resulted in a 5.6% (95% CI, 5.2% to 5.9%) absolute reduction in the risk of poor developmental outcomes. Among separate interventions, the largest absolute reduction was for home reading (4.5%, 95% CI, 4.3% to 4.8%), followed by child mental health (0.6%, 95% CI, 0.5% to 0.8%) and preschool attendance (0.2%, 95% CI, 0.2% to 0.3%).

Conclusion: Combining interventions reduces socioeconomic inequities in child development more than individual approaches. Realising the potential of stacked interventions requires cross-sector collaboration and sustained investment in scalable, evidence-based solutions. We demonstrate how advanced causal methods with linked administrative data can address policy questions otherwise infeasible or impractical to test in trials.

TALK 2: Reducing Socioeconomic Inequities in Cardiovascular Health Through Positive Childhood Experiences

Presenter: Naomi Priest, Australian National University

Co-authors: Shuaijun Guo, Rushani Wijesuriya, David Burgner, Meredith O'Connor, Richard Liu, Sharon Goldfeld, Murdoch Children's Research Institute

Background: Children experiencing socioeconomic disadvantage are at higher risk of poor cardiovascular health than their non-disadvantaged peers. Positive childhood experiences may mediate the relationship between socioeconomic disadvantage and poor cardiovascular health. This study aimed to estimate the extent to which intervening on positive experiences could reduce socioeconomic inequities in children's cardiovascular health.

Methods: Data source: The Longitudinal Study of Australian Children Child Health CheckPoint (N=1874).

Exposure: maternal education (low/medium/high) as a key indicator of family socioeconomic position during pregnancy.

Outcome: Cardiovascular health (11-12 years) (poor/good) quantified by four health behaviours (diet, physical activity, cigarette smoking, and sleep) and four health factors (body mass index, non-highdensity lipoprotein, blood pressure, and blood glucose).

Mediator: Multiple positive experiences ($\geq 2 < 2$) (2-11 years) indicated by parenting, relationships, environments, and engagement. We conducted a causal mediation analysis using an interventional effects approach, adjusting for adverse experiences and other key potential confounders.

Results: Children with low (risk difference=4.9%, 95% CI=-3.2%, 13.0%) or medium (risk difference=5.6%, 95% CI=-1.2%, 12.5%) maternal education had a higher risk of poor cardiovascular health compared to their high maternal education peers. Causal mediation analysis estimated that increasing the levels of positive experiences in children with low or medium maternal education to be like their high maternal education peers could reduce cardiovascular health inequities by 20.4% and 8.9% respectively.

Conclusion: Our findings suggest that targeted policy interventions that promote positive experiences for children with low and medium maternal education are potential opportunities to reduce socioeconomic inequities in children's cardiovascular health. However, such interventions should be considered within a broader and multipronged approach that includes addressing socioeconomic disadvantage itself to achieve the maximum impact.

TALK 3: Incorporating Omics into Longitudinal Cohorts to Reduce Socioeconomic Inequities in Cardiometabolic Health: Identifying Mechanisms and Intervention Targets

Presenter: David Burgner, Kavindi Gamag, Murdoch Children's Research Institute

Co-authors: Toby Mansell, Danielle Longmore, Murdoch Children's Research Institute; Naomi Priest, Australian National University

Background: Cardiometabolic disease is a leading cause of morbidity and mortality globally with marked socioeconomic inequalities in risk, incidence and outcomes throughout life. By integrating rich epidemiological and clinical data with interrogation of biological samples, longitudinal cohort studies offer unique opportunities to identify mechanisms and intervention targets to address these inequalities. However, this promise has been only partly realised due to siloed approaches and slow uptake of recent developments in biosample collection and omics-based analysis platforms.

Methods: We have integrated over 17 international longitudinal cohorts across Australia, Denmark, Finland, Estonia, the Netherlands and the United Kingdom from early childhood to late adulthood with ~800,000 total participants that have collected rich multi-disciplinary data related to socioeconomic inequalities in cardiometabolic disease. Drawing on our work with these cohorts, we will outline the scope and promise of current and emerging omics platforms, simplified and cost-effective biosample collection and processing methods, and how these data can be integrated into existing epidemiological frameworks.

Results: We will use inflammation as a practical example, given inflammation is a key and shared mechanism contributing to cardiometabolic disease and a myriad of health outcomes across the life course, but it is often simplistically conceptualised and poorly measured. We will outline our holistic approach to assessing inflammation across a variety of omics platforms, and how its measurement can be readily incorporated into field-based sample collection. Presenting data from international cohorts, we will discuss findings on the extent to which intervening on inflammation could reduce socioeconomic inequities in cardiometabolic health in children and adults.

Conclusion: Cross-disciplinary approaches can better facilitate understanding of biological mechanisms and identification of targets for intervention, and can allow for more comprehensive assessment of intervention effects on prevention and reduction of socioeconomic inequalities in cardiometabolic disease.

TALK 4: A Life Course Approach to Reducing Preventable Mortality in Young People: The Australasian TIME Cohort Consortium

Presenter: Meredith O'Connor, Murdoch Children's Research Institute

Co-authors: Jessica Kerr, Stuart Kinner, Jess Heerde, Marnie Downes, Rohan Borschmann, Craig Olsson, Murdoch

Children's Research Institute; Nur Idrose, University of Melbourne; Rebecca Glauert, The University of Western Australia

Background: Preventable deaths (e.g., those resulting from self-harm, violence, injury) among 11-39-year-olds are increasing in high-income countries, and disproportionately affect those experiencing socioeconomic disadvantage. Yet the period of life from adolescence to middle adulthood has been largely overlooked in mortality research to date. The Australasian TIME Cohort Consortium aims to identify early drivers of preventable deaths among 11-39-year-olds at the individual (e.g., mental health), family (e.g., housing), and community (e.g., school engagement) levels to inform multisectoral prevention efforts. This presentation will particularly focus on TIME's theoretical positioning within a life course framework, and strategies for maximising policy influence.

Methods: Data has been a significant roadblock to building the evidence needed to inform preventive policy. Typically, administrative data lack comprehensive exposures, while Longitudinal Population Studies (LPS) lack the sample size needed for meaningful analysis of early deaths. TIME will harmonise data across 12 Australasian LPS involving >59,000 participants, leveraging the Melbourne Children's Life Course Initiative to facilitate data alignment and access. Linkage to national death records will capture an estimated 1,100 deaths classified using ICD-10-AM cause of death codes.

Results: This new integrated data resource will unlock innovations in mortality research at a time of significant policy interest. We will apply causal inference approaches to estimate the effects of hypothetical interventions earlier in life, health economic modelling to quantify their cost benefits, and knowledge cocreation models with policy and lived experience representatives to facilitate impact.

Conclusions: TIME's design brings focus to prevention opportunities earlier in the life span prior to the peak period of preventable deaths, contributing to shifting mortality research towards a life course approach that considers all periods of the life span. TIME's strategic positioning, policy partnerships, and causal approach optimises our potential for meaningful influence on early prevention within and beyond the health system.

2C STREAM: DISADVANTAGE / INEQUALITY 1

SYMPOSIUM

Exploring Prevention Among Ethnically Minoritised and Migrant Populations from a Life Course Perspective

Chair: Fabienne Buholzer-Mercier, University of Fribourg

This symposium presents cutting-edge research on prevention among migrants and ethnically minoritised populations, adopting a longitudinal and life course approach. By examining preventive health behaviours, uptake of health screenings, and engagement in primary care, the presentations will explore the multifaceted determinants of healthcare access and engagement in prevention.

The symposium critically analyses how social, familial, economic, and policy-related factors shape individual healthcare and health behaviours. Specific focus will be given to healthcare equity and policies outside the health sector that promote health. By integrating diverse methodological approaches such as qualitative in-depth interviews, longitudinal quantitative data linkage and cross-sectional survey studies, the symposium aims to refine theoretical frameworks for understanding migrant populations' preventive healthcare experiences. Taking a life course perspective allows us to capture the cumulative effects of structural barriers, discrimination, and unequal access to resources over time, highlighting how early-life conditions, migration trajectories, and duration of residence shape long-term health outcomes and opportunities for social mobility.

Presentations will highlight innovative studies and potential policy interventions to improve preventive practices and healthcare access for migrant communities.

TALK 1: Building Paths to Healthcare: Experiences of Maternal and Infant Healthcare Access Among Undocumented Migrants in Central and Western Switzerland

Presenter: Caterina Montagnoli, University of Basel

Co-authors: Elger Bernice Simone, Wangmo Tenzin, University of Basel; Jackson Yves, Geneva University Hospital

Introduction: Undocumented migrants face significant challenges accessing healthcare. In Switzerland, they are entitled to contract healthcare insurance but inequities in access remain. This multicentric qualitative study explores the experiences of undocumented mothers in accessing maternal and infant healthcare across Switzerland.

Methods: We conducted semi-structured interviews and analysed them using reflexive thematic analysis.

Results: Between February and August 2024, we conducted 29 interviews with pregnant women and mothers of children aged ≤2 years. Participants reported that social workers and midwives were instrumental in facilitating continuous access to healthcare services during pregnancy and postpartum. However, support declined after childbirth, exacerbating challenges in infant healthcare. Access to healthcare varied across cantons, prompting temporary migration for more affordable care even to give birth abroad. Mandatory health insurance posed a significant financial burden, with many participants reporting debt accumulation, adversely affecting care seeking and quality of healthcare received.

Conclusion: The findings underscore the critical influence of federal healthcare insurance policies, the provision of services at the cantonal level, and the roles of gatekeepers, such as social workers and midwives. Strengthening continuity of care in the first 1000 days of life and allocating increased resources to address the needs of pregnant and newly born undocumented migrants are vital steps toward achieving better health equity during the life course.

TALK 2: Use of Preventive Care and Migration in the UK: An Intersectional and Life Course Approach

Presenter: Vladimir Jolidon, University of Sheffield

Co-authors: Helena Mendes Constante, Natalie Bennett, University of Sheffield; Cornelia Wagner Bernadette van der Linden, Stéphane Cullati, University of Fribourg; Claudine Burton-Jeangros, University of Geneva

Prior research has shown that migrants participate less in preventive care than the native-born population. However, these studies often lack an intersectional and life course approach, which considers the overlap and interaction of social conditions in shaping inequalities in preventive care. We use Multilevel Analysis of Individual Heterogeneity and Discriminatory Accuracy (MAIHDA), an innovative intersectional approach, with data from 31,323 respondents aged 16 and above in the UK Household Longitudinal Study (UKHLS, waves 2020 and 2022). The outcome is a preventive checkup score, including dental, eyesight, blood pressure, cholesterol and blood tests. We examine inequalities in preventive care use across dimensions of sex, birthplace, ethnicity, area deprivation, parental socioeconomic position (SEP) and age. Our results reveal intersectional inequalities in preventive care, with interaction effects indicating multiplicative (dis)advantages of intersecting social conditions, i.e., patterns that additive approaches do not capture. Younger men from

deprived areas and lower parental SEP, both White UK-born and non-White foreign-born, had the lowest participation in preventive checkups – with a significant interaction effect for White UK-born men. Conversely, the highest preventive checkup participation was observed among older White UK-born men from non-deprived areas, regardless of parental SEP. An interaction effect was also found for this group. This study highlights preventive care disparities shaped by intersecting social conditions, revealing patterns that migration-only analyses may overlook. Identifying groups underusing preventive care can inform interventions to address preventive care and health inequalities.

TALK 3: Socioeconomic Determinants of Multimorbidity Among Migrants Undergoing Regularization in Geneva, Switzerland

Presenter: Janeth Tenorio-Mucha, University of Geneva

Co-authors: Claudine Burton-Jeangros, Jan-Erik Refle, University of Geneva; Yves Jackson, Geneva University Hospital

Aims: We aimed to assess the influence of pre-and postmigration socioeconomic determinants and the likelihood of developing multimorbidity among irregular migrants.

Methods: We used data from the “Parchemins study”, a cohort that followed irregular migrants in Geneva, Switzerland. We used data on 18 self-reported health disorders, grouped them by body system, and then created the variables of basic multimorbidity (cooccurrence of two or more health disorders) and complex multimorbidity (disorders affecting three or more body systems). We used longitudinal logistic regression to assess the association of the material, psycho-social, behavioural, and structural determinants distinguished by migration stage (pre-and-post) with the development of multimorbidity.

Results: The prevalence of basic multimorbidity is 50.1%, 55.6%, 54.2% and 54.2% in waves 1, 2, 3, and 4, respectively, while complex multimorbidity is 21.0%, 27.3%, 25.0%, and 26.9%, respectively. Higher education attainment is associated with less probability of developing complex multimorbidity. Participants who work in food preparation are less likely to develop complex multimorbidity, circulatory and musculoskeletal disorders compared with cleaners and helpers. Higher salary, emergency savings and good accommodation are protective factors for multimorbidity outcomes. Undergoing regularization showed a protective effect for developing multimorbidity outcomes, cardiovascular, musculoskeletal and mental disorders, but no for metabolic disorders.

Conclusions: Post-migration determinants are more influential for the development of multimorbidity than pre-migration determinants. To prevent multimorbidity among irregular migrants, we could improve work conditions for high-risk jobs, support regularization, and promote exercise.

TALK 4: Ethnic Disparities in Cervical Cancer Risk Among Women Living With HIV: Implications for Targeted Prevention Across the Life Course

Presenter: Tafadzwa Dhokotera, Swiss Tropical and Public Health Institute

Co-author: Julia Bohlius, Swiss Tropical and Public Health Institute

Introduction: Women living with HIV (WLWH) have a significantly higher risk of cervical cancer (CC) compared to HIV-negative women. Understanding the interplay between immunodeficiency, socio-economic status (SES), and ethnicity is important for designing effective prevention strategies. This study examines CC incidence and risk factors among WLWH in South Africa.

Methods: We used data from the South African cancer match study (2004-2014), an HIV cohort created through probabilistic record linkage of HIV-related laboratory records and National Cancer Registry data. We assessed patient-level (age, CD4 cell count) and municipal-level (SES, settlement type) risk factors using Cox proportional hazard models. Analyses were stratified by ethnicity categorised as Black and non- Black (Asian, Mixed-race, White).

Results: Among 3.4 million women contributing 10.5 million person-years of follow-up, 7,383 incident CC cases were identified, corresponding to an overall incidence rate of 70/100,000 person-years (95% CI [68.5-71.7]). The median CD4 cell count at baseline was 306 cells/ μ l while at cancer diagnosis it was 263 cells/ μ l. Older age was associated with a higher risk of CC across all ethnic groups. However, ethnic disparities were evident in the role of CD4 cell count and SES. Lower CD4 cell counts were protective in Black women (HR: 0.82; 95% CI [0.76-0.88]) but there was no evidence of a protective effect in non-Black women. Similarly, residing in high SES municipalities was associated with an increased CC risk in Black women only (HR: 1.34; 95% CI [1.20-1.50]).

Conclusion: Black women living in high SES municipalities likely have better cancer diagnostic access leading to higher case detection rates. In addition to improved and equitable cervical cancer screening services, sustained HIV treatment is critical for preventing CC risk in Black WLWH.

Discussant: Sarah Derveeuw, Ghent University

2D STREAM: EDUCATION / EMPLOYMENT 1

INDIVIDUAL EMPLOYMENT TRAJECTORIES PAPERS

TALK 1: The Intergenerational Transmission of Work Values in Changing Times

Presenter: Monica Kirkpatrick-Johnson, Washington State University

Co-author: Jeylan T. Mortimer, University of Minnesota

In rapidly changing societies, what relevance do parental work orientations have for children? Prior research from the Youth Development Study (YDS), indicated that G1 parents' work values, assessed in 1988/1991, influenced G2 offspring's work values, following a pattern of "delayed activation." Weak intergenerational associations, emergent in the adolescent children's last year of high school, increased as children aged, through their thirties. The current study examines intergenerational transmission of work values when the young adult "children" have children of their own. Specifically, we examine relationships between YDS G3's (N=238) work values in 2019-20 and their second-generation (G2) mothers' work values contemporaneously as well as earlier in the mothers' lives. Preliminary findings indicate a weak contemporaneous association ($b=.19$, $p<.10$) between G2 mothers' 2019 intrinsic values and G3's intrinsic values at age 17-30. Similar to that found earlier for G1 and G2, there was no intergenerational similarity among younger G3's and their mothers' intrinsic values. In contrast to the pattern for the earlier generations, no significant intergenerational association was found for G2-G3 extrinsic work values, both measured contemporaneously. However, both intrinsic and extrinsic work values of G3 in 2019-20 reflected their mothers' earlier work values, assessed in 2011. The intrinsic values association was especially strong, nearly double the contemporaneous intergenerational association. The strong findings with respect to intrinsic work values may reflect cultural change that places primacy on intrinsic means of satisfaction. It is notable that the observed "delayed activation" pattern may reflect a necessary time lag, not just a developmental process wherein young people need to mature and obtain work experience before their values align more closely with their parents' values. Future work will draw on additional waves of data to assess the "intergenerational development hypothesis," that children's work values reflect parents' values when the parents and children are the same age.

TALK 2: Toward a Better Understanding of Physician Career Transitions and Trajectories

Presenter: Erin Fraher, University of North Carolina at Chapel Hill

Countries around the world invest significant funds to train and support the physician workforce yet they face intractable concerns about whether there are enough physicians to meet population health needs. Researchers have advanced the data needed to help policy makers identify emerging physician shortages, however, we lack an understanding of how physician careers evolve and how, and when, to intervene to shape them. Most policy interventions focus on physicians' early career transitions, but mid- to later career physicians' career transitions are not well understood.

Drawing on annual physician licensure data from North Carolina in the United States, we analyze physicians' demographic and practice characteristics between 2005 and 2023 and assess the changing dynamics of trajectories ($n=588,752$ physician-years; $n=70,606$ unique physicians). Using multivariate logistic regression models, we investigate the effect of age, generational cohort and gender on two separate and mutually exclusive transitions: physician moves in and out of clinical practice ($n=8,816$ observations) and into retirement ($n=5,617$ observations) controlling for physician race/ethnicity, specialty and calendar year fixed effects. Gen X female physicians ages 46 to 55 (OR = 3.8, 95% CI 3.1-4.8) and primary care physicians (OR = 1.2, 95% CI 1.1-1.3) had higher odds of being temporarily out of the workforce compared to male physicians, as did female physicians in both the Trailing Edge Boomer (OR=1.7, 95% CI 1.3-2.2) and Leading Edge Boomer (OR=1.5, 95% CI 1.1-2.1) generations. Compared their male counterparts of the same age, female physicians ages 36 to 45 (OR=4.6, 95% CI 2.4-8.6) and ages 46 to 55 (OR=1.8, 95% CI 1.4-2.4) were more likely to retire.

This study illustrates how an increased understanding of the factors influencing physician transitions across their career has potential to inform health workforce policy and planning.

TALK 3: Missing the Opportunities to Overcome Disadvantage: How Socio-Economic Status Affects the Development and Achievement of Occupational Aspirations

Presenter: Jenny Chesters, University of Melbourne

Researchers examining the occupational aspirations of secondary school students typically find that aspirations for occupations requiring high levels of education are associated with family socioeconomic status (SES), regardless of students' academic ability and the type of education system. Cultural and Social Capital theories suggest that students from low SES families are disadvantaged by their parents having less experience in the education system, due to having shorter educational careers, and having less culturally rich social networks. The availability of panel data from the Longitudinal Surveys of Australian Youth (LSAY) allows for an examination of the development of occupational aspirations in a comprehensive school system and the likelihood that occupational aspirations will be achieved. Analysis of data from

the LSAY2015 cohort confirms that after controlling for academic ability at age 15, students from high SES families are more likely to hold aspirations for high status occupations than their peers from low SES families. Furthermore, at age 23, young people from high SES families are more likely than their peers from low SES families to be on track to enter high status occupations.

TALK 4: Trajectories of Employment and Welfare Benefits and Their Association with Job Exposure

Presenter: Cedrik Lyngroth, OsloMet

Co-authors: Åsmund Hermansen, Espen Dahl, OsloMet

Aim: This study aims to examine the associations between mechanical and psychosocial job exposures and employment and welfare benefits trajectories and whether these trajectories are gendered.

Data and methods: This study uses register data of the Norwegian population 2010–2019, consisting of one cohort of all men and women aged 45 in the workforce in 2010. We utilize two recently developed Job Exposure Matrices (JEM), to measure mechanical and psychosocial job exposures. The matrices are based on the Norwegian ISCO-88 occupational codes. Furthermore, we combine the JEMs to measure the degree of double exposure. We use sequence analysis (SA) to identify clusters of trajectories over a 10-year period, including employment, employment with low-income, Unemployment, Unemployment with benefits, Sickness Payment, Work Assessment Allowance, and Disability Pension. Subsequently, we analyze the probability of belonging to the clusters using multinomial logistic regression, examining the association between job exposures and the clustered trajectories.

Results: Our preliminary results identify five clusters of trajectories: *stable employment*, *low-income employment*, *income mobility*, *health-related benefits*, and *gradual transition from employment to health-related benefits*. The multinomial regressions indicate a negative association between higher levels of job exposure and stable employment across both genders. Additionally, a positive correlation between job exposure and the clusters of *low-income*, *health-related benefits*, and *gradual transition from employment to health-related benefits* was observed among women.

Conclusion: The preliminary results showed gendered effects. Higher levels of job exposure were associated with the trajectories of lower income and welfare benefits for women. Nonetheless, there is reason to believe that these associations are weakened by the healthy worker effect, considering that the sample comprises individuals aged 45 and older.

2E STREAM: LATER LIFE

INDIVIDUAL LATER LIFE 2 (Health & Wellbeing) PAPERS

TALK 1: The Impact of Village Development on Intergenerational Co-residence of Older Adults in Rural China

Presenter: Merrill Silverstein, Syracuse University

Co-authors: Xiaoyu Fu, Ying Xu, Tianqi Zhou, Syracuse University

In this paper we investigate the role of community development on patterns of co-residence between older adults and their adult children and grandchildren in rural China. Theory suggests that modernization of local communities may inhibit co-residence as a preferred living arrangement if values veer toward weaker norms of familism. On the other hand, modernization may inhibit outmigration of young adults for work related reasons, allowing them to live close to their parents and reducing their need for custodial childcare from grandparents. Data from the Longitudinal Study of Older Adults in Anhui Province China are used to test these competing hypotheses. The sample size numbers over 3,000 respondents aged 60+ across seven waves between 2001 and 2021. Mixture models are used to identify distinct trajectories of development in 36 villages as indicated by 24 service amenities and built infrastructure elements. Mixed models are then used to examine the relationship between trajectory category and the likelihood of co-residence with children and grandchildren. Cross-sectional evidence suggests that parents live closer to their adult children in the most developed villages. The trajectory analysis will shed light on whether the rate of village-level change is altering family forms of older adults during a period of rapid but uneven social and economic development in rural China.

TALK 2: Have We Neglected the Importance of Housing Conditions in Life Course Research on Health?

Presenter: Tarani Chandola, University of Hong Kong

Life course research on housing conditions and health has declined in recent years relative to neighbourhood effects. Improved housing is rarely prioritised in public health narratives on environmental health. However, as most of our day is spent at home, a lack of research on due to home hazards is puzzling. Moreover, a focus on traditional housing hazards, such as lead paint, water intrusion and poor ventilation may have diminished research on other housing conditions such as home modifications and utilities/services for improving health.

This talk highlights findings from three research studies on housing modifications and housing conditions in relation to disability and health among older adults living in the US, Europe, Hong Kong and mainland China. Using longitudinal data

from HRS, SHARE and ELSA, the research finds that housing modifications (such as installing ramps and rails) substantially reduced the number of Activities of Daily Living (ADL) problems over a period of 18 years, among over 90,000 older adults who were initially free from mobility impairments. Using cross-sectional data from Hong Kong, we show how housing modifications enabled caregivers of 2,960 older adults with physically disabling conditions to have better mental health than caregivers of older adults with similar conditions living in non-modified houses. Using longitudinal data from 8,423 older adults in CHARLS, we find that improvements in the physical housing environment and access to household utilities (i.e., gas, water, electricity, telephone and internet) was associated with lower ADL and higher lung function. Additionally, the protective effect of increased housing utilities was particularly marked among older adults living in homes with no or few utilities at baseline. Improvements in the quality of housing and reducing home hazards cannot be ignored in life course research on environmental and public health.

TALK 3: The Long-Run Impact of Primary Education on Women's Late-Life Cognitive Function in India

Presenter: Clémence Kieny, University of Lausanne

Co-authors: Nathalie Monnet, Mauricio Avendano, University of Lausanne

The global population is aging rapidly, leading to a sharp increase in older adults affected by cognitive impairment and dementia. As pharmacological interventions for dementia remain limited, preventive measures targeting social determinants of health, particularly education, have gained prominence.

Natural experiments, particularly those examining compulsory schooling reforms, provide robust evidence of the positive causal impact of education on cognitive health. Education may enhance cognitive reserve, delaying cognitive decline and functional impairment. Additionally, it may influence cognition indirectly by enabling access to better jobs, higher earnings, and healthier lifestyles. While most literature focuses on upper secondary education in high-income countries, the cognitive benefits of primary education remain underexplored, especially in low- and middle-income countries.

Moreover, in India, as in many developing countries, gender disparities in education remain pronounced. These disparities have far-reaching implications for cognitive health. Prior research in India has documented a considerable gender gap in cognitive function, driven largely by educational attainment, health status, and social participation. Understanding how gender inequality in education impacts cognitive health in old age is crucial, particularly for low-income women, who are disproportionately affected.

This study examines the causal impact of primary education on cognitive function in old age, focusing on women from poor socioeconomic backgrounds who were more likely to benefit from compulsory schooling laws than boys or wealthier girls. These laws expanded education access by mandating school attendance for all children. Using data from the Longitudinal Ageing Study in India (2017–2021) and an instrumental variable approach, we analyze the effects of historical schooling reforms. Our findings suggest that compulsory schooling laws increased education duration, significantly enhancing long-term cognitive function among disadvantaged women. These results highlight the importance of primary education in preventing cognitive decline and closing gender gaps in access.

TALK 4: Long Term Consequences of Accommodation Histories on Later Life Health

Presenter: Christian Deindl, TU Dortmund University

The impact of socio-economic conditions can be best understood by taking the life course into account. One interesting aspect of the social determinants of health across the life course are accommodation histories. Housing reflects the social position of an individual as well as his/her social origins. The relation between housing and health is more than simply an indication of material conditions. There is consistent evidence that home ownership correlates with better housing conditions, more investment in the neighbourhood and higher self-esteem of homeowners. All these are likely to have a positive impact on health. What makes housing even more interesting is that it is not only influenced by the family but also by the welfare state. Rent regulations, social housing or taxes for homeowners are state means to regulate housing. Because of these different policies, there are huge differences between countries in the prevalence and preferences of certain accommodation types and housing assets. Accommodation histories therefore enable us to include micro- and macro-level influences on health. We will use life history data from the Survey of Health, Ageing and Retirement in Europe (SHARE) to disentangle the impact of housing histories on later life health within different socio-economic contexts. Later life health will be considered as self-rated health and depression. Our results show that mental health is significantly correlated with early and medium home ownership. Additionally, we found that wealth mediated the association between home ownership and mental health.

2F STREAM: HEALTH / WELLBEING 2

INDIVIDUAL MENTAL HEALTH 1 PAPERS

TALK 1: Antidepressant Exposure, Response and Resistance in Severe Mental Illness: Longitudinal Patterns and Consequences

Presenter: Matthew Iveson, University of Edinburgh

Background: Individuals with Severe Mental Illness (SMI) – including schizophrenia, bipolar disorder, psychosis and severe depression – are often prescribed antidepressants as part of treatment. However, many people do not respond to antidepressants, and almost half of patients with depressive symptoms try several before finding one that works for them. At the same time, those living with SMI are at substantially increased risk of further morbidity and mortality. Little is known about the antidepressant treatment journeys of those living with SMI, and whether differences in these journeys (sequences, timing, etc.) may contribute to health outcomes.

Methods: This study used Scotland-wide hospitalisation, prescribing and death record data from almost 600k patients diagnosed with SMI during secondary care up to 2023. Longitudinal patterns in antidepressant treatment were identified and clustered using sequence analysis.

Results: Five clusters were identified, broadly distinguishing those on different classes of antidepressant and those with long- and short-term exposure. We examine the association between cluster membership and subsequent healthcare utilisation and mortality risk, adjusted for sex, age, deprivation and urbanicity. We also conduct follow-on analysis in the Generation Scotland cohort (N = 20k) to validate antidepressant clusters, and to examine the impact of psychosocial factors not captured by routinely-collected health data (e.g., education).

Conclusion: Patterns of antidepressant exposure among those with SMI may contribute to long-term health outcomes, and may have implications for treatment planning among these individuals.

TALK 2: Characteristics Associated with Co-Occurring Heavy Episodic Drinking and Psychological Symptoms Across Five Life Phases

Presenter: Noora Berg, Finnish Institute for Health and Welfare

Co-author: Olli Kiviruusu, Finnish Institute for Health and Welfare

Co-occurring mental health and substance use problems are associated with various life challenges. Understanding the age-specific characteristics of these co-occurring problems can help tailor age-sensitive prevention and treatment strategies. This study examined the association and co-occurrence of psychological symptoms (PS) and heavy episodic drinking (HED) from adolescence to midlife, and their associations with individual and contextual factors.

Participants from the Finnish TAM Cohort (N=2194) provided information on HED, PS, health (e.g. self-perceived health), psychosocial (e.g., self-esteem), social relations (e.g., contact with parents), and socioeconomic factors (e.g., education) at ages 16, 22, 32, 42, and 52. Co-occurrence was categorised into four classes: 1) neither, 2) symptoms only, 3) HED only, 4) symptoms + HED. Analyses were conducted using generalized mixed models.

Throughout the follow-up, the proportion of those with both HED and high symptoms ranged between 3.4% - 6.9% in women and between 4.5% - 8.7% in men. The overall association between high PS and HED was OR 1.89 (1.51-2.37) in women and OR 2.30 (1.78-2.95) in men. In women, age did not play a role in the association between symptoms and HED, while in men, the associations were stronger at ages 16, 22, 32, and 42 compared to age 52. In the multivariate model in both women and men, poor self-perceived health, smoking, self-esteem, and meaningfulness were associated with co-occurrence. In women, associations were also found regarding overweight, poor relationship with father, and lower education. In general, these associations did not vary by age, except for overweight and meaningfulness in women and smoking in men.

The strength of the association between psychological symptoms and HED is stable in women from adolescence to midlife but weakens in men. Individual and contextual risk factors for co-occurrence remain relevant across different age phases, suggesting that interventions remain pertinent throughout the life span.

TALK 3: The Impact of Digital Mental Health Technology on Mental Health, Education, and Economic Outlook of Young Adults

Presenter: Nathalie Monnet, Unisanté - University of Lausanne

Co-authors: Armando N. Meier, University of Basel; Clémence Kieny, Mauricio Avendano, University of Lausanne; Andrea Carolina Bello-Tocancipá, Laura Torres-Cuéllar, Juan Vargas-Nieto, Gustavo Perdomo-Patino, Martha Escobar Lux, Fundación Santa Fe de Bogotá; Naomi Koerner, Toronto Metropolitan University; Ricardo Araya, King's College London; Omar Yesid Vargas Rodriguez, Administrative Department of Social Prosperity, Colombia; Fabio Idrobo, University of Los Andes

Poor mental health undermines the ability of young people to succeed in education (Baranov et al. 2020; Haushofer and Fehr 2014; Ridley et al. 2020). A rapidly growing literature suggests that digital mental health interventions can improve mental health (Fu et al. 2021; Van Agteren et al. 2021), but their impacts on educational and economic outcomes remain largely unproven. We are conducting the first large-scale randomized controlled trial (RCT) to assess whether a digital mental health intervention can significantly improve mental health, educational attainment, and labor market outlook among low- university and vocational skills-based training students. We also study mechanisms related to decision-making, including self-control and patience.

The intervention consists of a co-designed transdiagnostic digital mental health platform lasting 10 weeks based on principles of cognitive behavioural therapy (CBT), combined with peer support. In collaboration with the Colombian government, we embed our study in a large-scale program that offers an educational subsidy for over 500,000 low-income youth aged 18 to 28 to attend college education. Participants will be first assessed for symptoms of depression, anxiety or post-traumatic stress disorder (PTSD), and if they have symptoms, they will be randomized into three arms: a) a first treatment group with access to the digital platform only; b) a second group with access to the digital platform as well as peer support; and c) a control group, which will receive information about standard care through local services. Outcomes will be assessed through four surveys over 9 months and linkage with high-quality administrative government data.

Our research will advance theoretical and empirical understanding of how mental health improvements impact economic outcomes. Findings will have substantial implications for policymakers considering the implementation of digital mental health platforms at scale, particularly in low- and middle-income countries.

TALK 4: Exploring the Reasons for Gender Differences in Mental Health Outcome Measures

Presenter: Aisling Murray, Department of Children, Disability and Equality (Ireland)

While a pattern for women and girls to have poorer scores on measures relating to mental health has been commented upon for some years, the dual cohort design of Growing Up in Ireland (GUI) offers a new opportunity to examine this issue both within and between groups.

Thirteen-year-olds in GUI's Cohort 98 and 08 (i.e. born ten years apart) completed the same measure of depressive symptoms (the Short Mood and Feelings Questionnaire, SMFQ) in their contemporary interviews. Using the same cut-off score to define 'at risk', the overall percentage of 13-year-olds in this 'risk' category rose from 16% among Cohort 98 (Nixon, 2021) to 31% among Cohort 08. Furthermore, the proportion of girls in the 'risk' category rose from 19% to 45% over time, whereas the increase among boys was much more modest: 14% to 18%. For Cohort 08 only, a second measure of mental well-being (the Mental Health Inventory 5) was also administered. While a smaller proportion of 13-year-olds (14%) were in the 'risk' category on the MHI-5, girls were again disproportionately represented (21% vs 8% boys).

Initial findings from Cohort 98 at age 25 (CSO, 2025) show that by adulthood, 32% of young women had received a diagnosis of depression or anxiety compared to 18% of young men. If the same trajectory were to continue for Cohort 08, who appear to have more adolescent depressive symptoms than Cohort 98 did, then a high level of mental ill health could be in store for these young people as they approach adulthood.

This paper will expand on the patterns observed in the descriptive statistics to explore potential explanations for the gender differences in mental health, and the apparent worsening of same over time.

3A STREAM: HEALTH / WELLBEING 1

SYMPOSIUM

Leveraging Nordic Register Data to Study Health Inequalities

Chairs: Olivia McEvoy, Lauren Bishop, Hanna Remes, University of Helsinki

This symposium will showcase the unique potential of register data for research on health inequalities. We will first present how these high-quality longitudinal data can be linked to biological relatives, household members, and neighbourhoods, enabling the study of health inequalities in different social and environmental contexts and at different life course stages. Drawing on a social determinants of health framework, we will then present five studies that consider the macro- or microlevel determinants of health and their interplay, while leveraging the advantage of total population data to include specific insights for population subgroups. The societal and policy implications for each life course stage are also considered. At the macro-level, the first study discusses the period effects of healthy life expectancy by gender and educational attainment between midlife and older adulthood. The second explores the social factors driving the migrant health paradox for chronic conditions and mortality during midlife. At the microlevel, the third study explores peer influence on substance misuse behaviour in adolescence and young adulthood, and the fourth estimates the effect of neighbourhood socioeconomic ascent during middle- late adulthood on cardiometabolic disease risk. The final study estimates contemporaneous parent-child mental health trajectories between childhood and emerging adulthood.

TALK 1: Decomposing the Change in Cardiovascular Disease-Free Life Expectancy in Finland by Gender and Education (2000-04 and 2016-20): A Multistate Decomposition Based on Total Population Register Data

Presenter: Shubhankar Sharma, University of Helsinki Co-authors: Timothy Riffe, University of the Basque Country; Mikko Myrskylä, Margherita Moretti, Pekka Martikainen, University of Helsinki

While extensive studies have documented declining cardiovascular disease (CVD) mortality in high-income countries, limited attention has been given to changes in the disease-free aspects. We analyze changes in CVD-free life expectancy (HLE♥) at age 40 between 2000-04 and 2016-20 by gender and educational attainment in Finland, where CVD remains a major public health concern. Using multistate models and high-quality register data (aged 40-100) linked to hospital discharge and death registers, we calculate HLE♥s at age 40 in both periods. We then decompose the changes in HLE♥ analytically into contributions from the changes in cardiovascular health prevalence at age 40 and age-structured CVD onset and CVD-free mortality. Furthermore, we apply Kitagawa decomposition to assess the contribution of improved educational profiles to the changes in HLE♥. Men experience a greater HLE♥ increase than women (2.3 vs 1.5 years), with the increase for both primarily driven by CVD risk and CVD-free mortality reductions, especially the former. At initial ages, both genders face an increased CVD risk, resulting into negative contributions; among women (especially the secondary and tertiary educated), this development suppressed their HLE♥ increase substantially. Negative contributions of age-40 cardiovascular health largely offset positive contributions of improved educational profile for both genders. Tertiary-educated adults benefit more from reduced CVD risk and CVD-free mortality than their basic educated counterparts, leading to the former's greater HLE♥ increase. We observe disparities in cardiovascular health progress within the Finnish population, with men benefiting more from reductions in CVD risk and mortality in CVD-free state. Adverse developments related to CVD risk at earlier ages among secondary and tertiary educated women highlight the need for targeted interventions. The use of total population registers and hospital diagnoses mitigates selection, attrition, and reporting biases. Furthermore, multistate decomposition addresses endogeneity biases present in Sullivan-based decompositions.

TALK 2: The Immigrant Health and Mortality Advantage and Health Selection of Secondary and Return Migrants: A Register-Based Study of Finland

Presenter: Eugenio Paglino, University of Helsinki

Co-authors: Mila Lyytinen, Lasse Tarkiainen, Pekka Martikainen, University of Helsinki

A health and mortality advantage of international migrants relative to native-born populations of destination countries has been documented across high-income countries. Beyond data artifacts, cultural or social buffering effects, and differential prevalence of health-related behaviors, health-related selection of immigrants and out-migrants has been proposed as an explanation for these advantages. In this study, we take advantage of Finnish register data to investigate 1) mortality and health differentials between foreign-born and native-born Finnish residents, 2) the association between health, occupational, and income trajectories of international immigrants and their decision to outmigrate, and 3) variation with respect to country of origin both in health inequalities and in the relationship between health, occupational, and income trajectories and out-migration. The health outcomes we plan to examine are diagnoses of the following chronic conditions: diabetes, hypertension, heart disease, asthma, and arthritis. We will use multi-state survival analysis tools to jointly model transitions between healthy status, unhealthy status, out-migration from Finland, and death. We will use similar tools to model the relationship between occupational and income trajectories and outmigration while accounting for differential mortality. This study has the potential to substantially improve our understandings of the health trajectories of international migrants during their permanence in destination countries as well as the determinants of out-migration of international migrants from their destination countries. Beyond contributing evidence to settle theoretical disputes about the importance of selective out-migration in explaining migrant health and mortality advantages, this study will inform policymakers and researchers on the health experiences of vulnerable immigrant populations.

TALK 3: Using Age Difference, Sex-Composition and Family Social and Economic Position (SEP) to Detect Evidence of Sibling Influence on Alcohol Misuse Behaviour as a Quasi-Peer Effect

Presenter: Olivia McEvoy, University of Helsinki

Co-authors: Joonas Pitkänen, Lauren Bishop, Pekka Martikainen, University of Helsinki

The deleterious health effects of heavy episodic alcohol consumption or 'alcohol misuse' are well documented. Finland follows the current European trends of steady decline in consumption among young people. However, Finnish youths are among the highest in Europe for alcohol intake on the "last drinking day," suggesting drunkenness-orientated drinking is unchanging. Alcohol misuse runs in families, but peer environment is also a consistent predictor of use. It's debated whether individuals select peers based on their mutual preestablished desire to engage in risk behaviours or individuals align their behaviours to conform to any peer network. The latter purports that peer influence could promote alcohol misuse over and above the influence of the family. Using Finnish social and health population registries, we examine sibling resemblance in alcohol misuse aged 10-20yrs, a 'critical' period, for full biological sibling pairs who lived together during childhood. We test if this relationship is moderated by sibship age-difference, and if this moderating effect varies by sibship sex-composition and family social and economic position (SEP), using logistic regression and interaction effects. We hypothesise that smaller age differences and same-sex sibling pairs makes peer-like processes of influence between siblings more plausible.

Our approach reduces confounding bias by the fact that siblings are matched "by nature" on covariates related genetics and early environment without requiring them to be measured or known. In contrast to previous studies on health behaviours and criminal offending, age does not appear to modify the degree of sibling resemblance in alcohol misuse. This is with the exception of sisters, particularly sisters with a disadvantaged family SEP, where a quasi-peer effect is demonstrated. We extend previous research by adopting this methodological approach on a new behavioural outcome and demonstrating the relevance of family SEP as another tool for using sibling data to identify potential socialisation processes.

TALK 4: The Effect of Small-Area-Level Socioeconomic Ascent on the Onset of Cardiometabolic Disease Among Urban Residents in Finland: A Target Cluster Trial Emulation Approach Using Linked Register-Based Data

Presenter: Moritz Oberndorfer, University of Helsinki

Co-authors: Lasse Tarkiainen, Luca Dei Bardi, Pekka Martikainen, University of Helsinki; Laurie Berrie, Jamie Pearce, University of Edinburgh

Estimating causal contextual (or "neighbourhood") effects on individual-level outcomes has long been of interest to social scientists due to its potential as powerful policy lever. Their estimation, however, is challenging because of residential selection, exposureconfounder feedback, and lacking clearly defined estimands. Here, we use Finnish register-based data and a new methodological approach to estimate the effect of small-area-level socioeconomic ascent experienced during adulthood and late adulthood on the risk of cardiometabolic disease onset. We emulate a cluster target trial with yearly follow-ups from 1996 to 2018 including 1,020,861 observations of 87,053 residents aged 40-60 living in 63 inner urban postcodes below their city-median household income at the end of 1995. We followed our study population until 2018, death, or the first onset of cardiometabolic disease observed through hospitalisation, prescription, and medication purchase registers. In our study, we define the within-context change estimand as the difference in the risk of cardiometabolic-disease onset, had people who continuously experienced socioeconomic ascent of their baseline residential area (20/63) from 1995 to 2018 instead lived in areas that experienced no socioeconomic ascent. Socioeconomic ascent was measured using median household income increase between 1995-2018. We find that being continuously exposed to socioeconomic ascent of the baseline residential area had a small protective effect on the risk of cardiometabolic disease; up to a one percentage point difference in the 22-year cumulative incidence compared with living in unexposed areas. Accounting for selective mobility of individuals during follow-up through inverse probability weighting, our estimated effects doubled. Effects were stronger for individuals with compulsory education and tertiary education. Socioeconomic ascent of inner urban areas had a small protective effect on cardiometabolic disease onset among initial adult residents. Finland's relatively generous welfare state, social mixing and housing policies may protect disadvantaged groups against displacement and enables them to benefit from neighbourhood-level improvements.

TALK 5: Joint Trajectories of Parental and Offspring Psychiatric Hospitalizations: A 30-year Follow-up of Finnish Birth Cohorts 1980–1989

Presenter: Lauren Bishop, University of Helsinki

Co-authors: Liina Junna, Joonas Pitkänen, Pekka Martikainen, University of Helsinki

Extensive research suggests a strong association between parental psychopathology and offspring's mental ill-health, with emerging research suggesting that these processes may be reciprocal. However, few studies have considered mental ill-health from a family life course perspective. The current study estimates contemporaneous mental health trajectories for parents and children during the child's first 30 years of life, using a total population sample of Finnish children born 1980–1989 (n=769,046). Mental ill-health is derived from administrative inpatient care records. We use group-based dual-trajectory modelling to estimate 1) univariate mental ill-health trajectories for parents and children, respectively, and 2) conditional and joint probabilities of the interrelationship between parents and children's mental ill-health to identify family mental health trajectories. We subsequently use multinomial logit models with a modified Bolck-Croon-Hagenaars

correction to estimate group membership as a function of childhood socioeconomic position. Finally, we consider effect heterogeneity by sex and type of disorder. Preliminary univariate trajectories suggest that children's mental ill-health follows four distinct trajectories: 1) low mental ill-health and onset during key developmental periods: 2) childhood, 3) adolescence, and 4) emerging adulthood. Parents were grouped into five initial trajectories, characterized by 1) low, 2) increasing, and 3) persistently high mental illhealth, as well as peaks during 4) offspring childhood and 5) offspring emerging adulthood. In estimating joint family trajectories, we expect to identify socially patterned groups characterized by low and persistently high mental ill-health, and groups with a discordant timing of onset between parents and children. Identifying family mental ill-health trajectories will help to further disentangle the reciprocal processes that contribute to the transmission or emergence of mental health problems within families and identifying during which developmental periods at-risk families could most benefit from support to inform policy and practice.

Discussant: Hanna Remes, University of Helsinki

3B STREAM: LONGITUDINAL STUDY 1

SYMPOSIUM

Across Lifetimes and Generations: How Longitudinal Research Advances Our Understanding of Development

Chair: Flavia Wehrle, University Children's Hospital Zurich

Understanding health and development across the lifespan and across generations requires an interdisciplinary approach integrating various fields such as psychology, medicine, and economics. This symposium brings together research from these fields to provide novel insights into how developmental processes unfold.

The first presentation examines the methodological and conceptual challenges of extending child development studies into adulthood and aging. The Zurich Longitudinal Studies (ZLS) – a multigenerational cohort study spanning over six decades – serve as a unique foundation for addressing these questions. The following three presentations apply ZLS data and data from “The LifeStories Project” to diverse research inquiries.

The second presentation analyzes secular trends in physical growth and intelligence, revealing distinct generational changes in height, weight, and cognition, driven by underlying biological and environmental mechanisms.

The third presentation investigates the long-term impact of parental socioeconomic status (SES) on cognitive development, demonstrating its enduring influence from early childhood to adolescence and across family generations.

Finally, the fourth presentation explores recruitment challenges of “the LifeStories Project”- a follow-up study of individuals who experienced early-life adversity due to institutionalization - highlighting how psychosocial deprivation shapes intergenerational outcomes and research feasibility.

Together, these presentations underscore the value of interdisciplinary, longitudinal research in unraveling the complex mechanisms shaping health and development across generations.

TALK 1: Zurich Longitudinal Studies: From a Cohort Study on Child Development to a Lifespan Perspective on Health and Development

Presenter: Flavia Wehrle, University Children's Hospital Zurich

Co-authors: Dominique Eichelberger, Tanja Kakebeeke, Jon A. Caflisch, Bea Latal, Céline Zeller, Nadine Jait,

Jessica Fervença Ramos, Oskar G. Jenni, University Children's Hospital Zurich

Growing evidence suggests that individual and environmental factors in childhood and adolescence play a crucial role in shaping adult health and development. Long-term longitudinal studies are essential for understanding these lifespan trajectories, yet they remain rare due to the inherent challenge of requiring decades to unfold. Expanding studies on child development into adulthood and aging offers a valuable solution.

The Zurich Longitudinal Studies (ZLS) comprise three comprehensive cohort studies on child growth, health, and development, now being extended into adulthood. The first cohort, established between 1954 and 1961, enrolled 409 healthy infants. In the 1970s, two additional cohorts were introduced: between 1974 and 1979, 258 infants (99 term-born, 159 preterm), and between 1973 and 2002, 295 offspring of the original participants. These cohorts were assessed using largely matching study protocols, capturing data on the physical, motor, cognitive, and social health and development and on the environment these individuals grew up in—amounting to over 20 million datapoints from birth into young adulthood.

Between 2019 and 2021, comprehensive follow-ups of the first and second cohorts (mean ages: 65 and 45 years, respectively) were conducted, to assess their life stories, current health, well-being and living situations. The assessments of the third cohort are currently ongoing.

This presentation highlights the wealth of lifespan developmental data accumulated through the ZLS and explores the opportunities, methodological challenges, and limitations arising from a long-term longitudinal cohort recruited from a study about development in early life. With its unique breadth, the ZLS now enables the investigation of childhood determinants of adult health outcomes. Ultimately, it supports the growing scientific call to shift the focus of aging research toward early life, fostering a lifespan perspective on health, development, and aging.

TALK 2: Secular Trends in Physical Growth and Intelligence in Children and Adolescents Born Between 1978 and 1993

Presenter: Oskar G. Jenni, University Children's Hospital Zurich

Co-authors: Dominique Eichelberger, Tanja Kakebeeke, Jon A. Caflisch, Flavia Wehrle, Oskar G. Jenni, University Children's Hospital Zurich; Aziz Chaouch, Valentin Rousson, University of Lausanne

Human physical growth and intelligence have been documented as increasing for the past few generations. Comparing the timing of secular trends in these characteristics could provide insight into what underlies them. However, they have not been examined in parallel in the same cohort during different developmental phases. Thus, the aim of this study was to examine secular trends in body height, weight, and head circumference, and intelligence by assessing these traits concurrently at four points during development: the ages of 4, 9, 14, and 18 years. Data derived from growth measures, and full-scale intelligence tests were drawn from 236 participants of the Zurich Longitudinal Studies born between 1978 and 1993.

Secular trends for height and weight at 4 years were positive (0.35 SD increase per decade for height and an insignificant 0.27 SD increase per decade for weight) and remained similar at 9 and 14 years (height: 0.46 SD and 0.38 SD increase per decade; weight: 0.51 SD and 0.51 SD increase per decade, respectively) as well as for weight at age 18 years (0.36 SD increase per decade). In contrast, the secular trend in height was no longer evident at age 18 years (0.09 SD increase per decade). For intelligence, a positive secular trend was found at 4 years (0.54 SD increase per decade). In contrast, negative secular trends were observed at 9 years (0.54 SD decrease per decade) and 14 years (0.60 SD decrease per decade). No secular trend was observed at any of the four ages for head circumference. The different patterns of changes in physical growth, biological maturation, and intelligence between 1978 and 1993 indicate that distinct mechanisms underlie these secular trends.

TALK 3: Mind The Gap: Multigenerational Family Effects on Cognitive Skill Formation

Presenter: Jonas Bühler, University of Lucerne

Co-authors: Oskar G. Jenni, Flavia Wehrle, University Children's Hospital Zurich; Christophe A. Schaltegger, University of Lucerne

This study investigates the impact of parental socioeconomic status (SES) on cognitive development throughout the lifespan, using comprehensive longitudinal data from the Zurich Longitudinal Studies (ZLS). The analysis includes data of participants from the first ZLS cohort (ZLS-1) and their offspring (ZLS-3), spanning six decades from 1954 to 2002. By integrating unique cognitive and demographic data with detailed measures of parental SES, we explore how family background influences cognitive abilities from birth to young adulthood, as well as across generations. Using age-specific regression models, we find that parental SES accounts for significant disparities in cognitive outcomes, with differences emerging in early childhood and persisting into young adulthood. In the ZLS-1 cohort (1954-1961), higher parental SES consistently predicts stronger cognitive outcomes at various developmental stages, with disparities becoming more pronounced from the age of three years onward. An analogous analysis of the ZLS-3 cohort (children of ZLS-1 participants) confirms intergenerational patterns, highlighting the enduring role of parental SES in shaping cognitive trajectories, despite changes in the educational system. Our analysis provides further insights into dynastic effects within a three generational framework. While parental SES continues to influence cognitive development throughout adolescence, the effect of grandparental SES diminishes by the age of fourteen. This underscores the central role of parental SES as an important determinant of cognitive skill development.

TALK 4: Intergenerational Recruitment Challenges in a Follow-Up Study on Formerly Institutionalized Infants and Their Offspring: A Direct Consequence of Early Life Adversity Rather Than a Methodological Issue?

Presenter: Nina Graf, Marie Meierhofer Children's Institute

Co-authors: Raquel Paz Castro, Patricia Lannen, Selin Kilic, Marie Meierhofer Children's Institute

This study is part of the LifeStories project, a 60-year follow-up of individuals placed in Swiss infant care institutions in the 1950s due to controversial compulsory social measures (N=431), compared with family-raised peers (N=399) from the Zurich Longitudinal Studies (ZLS). Institutionalized children were deprived of caregiver interactions and cognitive stimulation, leading to severe developmental delays, particularly in language and social skills (Sand et al., 2024). The long-term effects of early-life psychosocial deprivation revealed persistent cognitive and socioemotional consequences in late adulthood, and qualitative interviews suggest transgenerational effects within families (Lannen et al., 2021, 2024; Sand et al., 2024).

Building on these findings, we launched a follow-up study with the offspring of the formerly institutionalized individuals to examine potential intergenerational effects. Recruitment required permission from the formerly institutionalized individuals to contact their offspring, yet 63.4% denied access, despite applying a rigorous ethics protocol (Lannen et al., 2022). We hypothesize these challenges are not merely methodological but rather reflect direct consequences of early institutional placement. Specifically, taboos surrounding institutionalization, strained parent-child relationships, and difficulties forming close familial bonds – all well-documented outcomes of psychosocial deprivation – likely contributed to the low response rates (Lannen et al., 2020; Nelson et al., 2019). These challenges underscore the long-lasting impact of early psychosocial deprivation, affecting individual development and research feasibility in longitudinal and intergenerational studies.

This presentation analyzes barriers encountered in recruitment, situating them within the historical context of compulsory social measures before law reform in 1981, developmental psychology theories on attachment and deprivation, and methodological implications for longitudinal studies. Understanding these obstacles informs future research strategies while providing insight into the interpersonal and relational consequences of early institutionalization across generations.

3C STREAM: DISADVANTAGE / INEQUALITY 1 SYMPOSIUM

Longer Lives, Shifting Paths: Life Course Approaches to Ageing and Inequality

Chair: George B. Ploubidis, University College London

This symposium presents findings from four studies exploring the intersections of health, wealth, work, and wellbeing in later life, drawing on the latest data from the 1958 and 1970 British birth cohorts. The first study examines the impact of recent pension reforms and economic changes on financial preparedness for retirement among the 1958 cohort. Findings reveal considerable variation in pension knowledge, with many lacking adequate savings or awareness of their state pension entitlement. The second presentation investigates the relationship between chronic health conditions and midlife economic inactivity, showing that long-term health issues increasingly contribute to early workforce exit, a pattern evident across both cohorts. The third paper analyses how Target Replacement Rates are calculated and questions the current use of average career earnings, suggesting that this method may underestimate retirement income needs, particularly for those with non-linear working lives. The final study examines psychological distress trajectories following the COVID-19 lockdowns and into the ongoing cost-of-living crisis. While mental health indicators have improved post-lockdown, persistent inequalities by gender and socioeconomic background remain evident. Collectively, these studies highlight the need for integrated, life-course approaches to ageing policy - supporting not only financial security, but also equitable health and wellbeing outcomes across the lifespan.

TALK 1: Pensions and Economic Status Prior to Reaching Statutory Pension Age in the 1958 British Birth Cohort

Presenter: Vanessa Moulton, Sam Parsons, University College London

Co-authors: Bożena Wielgoszewska, George B. Ploubidis, University College London

Over the last 15 years extensive legislation has changed the landscape for retirement and pension provision in the UK, including abolition of the default retirement age (DRA), equalising and increasing the State Pension age (SPa) for men and women, changing the funding structure of the state pension, as well as changes to access to private pension wealth and the roll out of auto-enrolment of workplace pension schemes. The 1958 British birth cohort (n = 17,000) were in their mid-50's when these legislative changes were introduced and reached SPa (age 66) in 2024.

The Department for Work and Pensions (DWP) sponsored additional questions on pension provision in the latest sweep of data collection (age 62-65), making this cohort a key resource to investigate the influence of these policy changes on retirement decision making in the lead up to SPa. In a descriptive report produced for the DWP, we examined economic activity including early retirement, knowledge of the SPa and current value of the State Pension, accumulation and decumulation of financial resources, adequacy of personal pensions and other income sources in retirement, and how these varied across a range of demographic, economic and health characteristics captured across the lifecourse. Some important findings include:

- Most (8 in 10) cohort members had a private pension and 1 in 2 had either no or very low savings,
- 1 in 4 were fully retired and those retired were more likely to have a defined benefit (DB) pension,
- Overall the median average age to first access/intention to access any type of private pension was age 61,
- Of those who expect to receive a state pension, 1 in 2 (20%) didn't know when they would receive it and an even higher proportion, 1 in 3, did not know the value of the state pension they expected to get.

TALK 2: Long-Term Health Conditions and Health-Related Inactivity in Midlife: Insights from the British Birth Cohorts

Presenter: Laura Gimeno, University College London

Co-authors: Jennifer Dowd, Alice Goisis, George B. Ploubidis, University College London

Recent cross-sectional evidence suggests a rise in health-related economic inactivity in the United Kingdom. However, it remains unclear whether this trend reflects demographic shifts, worsening population health, or changes in the risk of becoming economically inactive for those with chronic long-term health conditions. Using nationally representative British birth cohort studies of people born in 1958 (NCDS, $n = 9761$) and 1970 (BCS70, $n = 7337$), we quantified the additional risk of being newly economically inactive due to health problems at age 50-54 years for those with a variety of chronic health conditions at age 42, using multinomial logistic regression models with previous economic activity as a lagged outcome.

The prevalence of poor health among economically active individuals was generally higher in the later-born cohort, while the additional risk of transitioning to health-related inactivity for those with chronic health conditions was often similar across cohorts, despite changes in diagnosis and economic/policy context. For instance, those with a longstanding illness at age 42 in either cohort were 5 percentage-points more likely to be newly inactive for health reasons in their early fifties compared to their peers. With a growing working-age population affected by chronic health conditions and multimorbidity, stronger preventive measures and workplace support are needed to help individuals remain and/or return to work.

TALK 3: On Target or Off Track? Target Replacement Rates in the 1958 British Cohort

Presenter: Bożena Wielgoszewska, University College London

Co-authors: Vanessa Moulton, Sam Parsons, Claire Crawford, George B. Ploubidis, University College London

Target Replacement Rates (TRRs) are defined as a percentage of pre-retirement earnings an individual would need to replace to meet an adequate income in retirement. In the UK, TRRs are used to ensure that a pensioner would be able to maintain the same standard of living in retirement that they had during their working life (i.e. consumption smoothing). While TRRs vary by earning bands, from 80 per cent of gross earnings for the lowest earners to 50 per cent for top earners, pre-retirement earnings are calculated as the average gross earnings from age 50 until State Pension age, currently age 66. In addition, only years with positive earnings are included in the calculation of preretirement earnings, which implies that someone who stops work at 55 will have the same average preretirement earnings as someone earning the same amount who continues to work up to State Pension age. The Resolution Foundation (2024) argue that the use of average career earnings, rather than end-of-career earnings only, would be more in line with the consumption smoothing theory of pension saving. This is because costs are typically higher in middle age and median earnings are typically higher in later life. In this [report] produced for the Department of Work and Pension, we utilise the data on earnings collected from participants of the 1958 British Cohort study when they were age 23, 33, 42, 50, 55 and 62, to compare various scenarios of how the pre-retirement earnings are calculated. The [report] also discusses a range of demographic, economic and health characteristics of those who would be affected in the various scenarios, concluding with the set of recommendations for adjustments in how TRRs are computed.

TALK 4: Have Long-Term Trajectories of Psychological Distress Changed After the COVID-19 Lockdowns and into a Cost-of-Living Crisis? Evidence from the 1958 and 1970 British Birth Cohorts on Inequalities at the Intersection of Generation, Gender, and Socioeconomic Position

Presenter: Darío Moreno-Agostino, University College London

Co-author: George B. Ploubidis, University College London; Jayati Das-Munshi, King's College London

Little is known about how long-term population trajectories of mental (ill-)health have evolved after the COVID-19 lockdown period which, in the UK, came with a large increase in the cost of living. We used data from two birth cohorts representing adults born in Britain in 1958 (1958 National Child Development Study, NCDS/1958, $n=6,140$, age 23-64.5) and 1970 (1970 British Cohort Study, BCS/1970, $n=7,856$, age 26-52.5). Measures of psychological distress, collected at multiple time-points between ages 23-64.5 (NCDS/58) and 26- 52.5 (BCS/70) using the nine-item version of the Malaise Inventory, were used after ensuring their measurement invariance/equivalence across timepoints, cohorts, genders, childhood socioeconomic positions (SEP), and their intersections. Using piecewise multilevel growth curve models, we studied how longterm trajectories of psychological distress had evolved within each cohort, and across genders, childhood SEPs, and their intersections. We found that, after an initial increase during the pandemic (Bspline2_linear_NCDS/58=0.30 [95% CI: 0.21, 0.40], $p<0.001$; Bspline2_linear_BCS/70=0.36 [0.25, 0.48], $p<0.001$), psychological distress levels decreased towards the post-lockdown period (Bspline2_quadratic_NCDS/58=-0.11 [-0.15, 0.08], $p<0.001$; Bspline2_quadratic_BCS/70=-0.16 [-0.20, -0.12], $p<0.001$). There were significant inequalities at the trajectories' starting points, with women (Bwomen_NCDS/58=0.72 [0.62, 0.81], $p<0.001$; Bwomen_BCS/70=0.73 [0.63, 0.84], $p<0.001$) and those with parents from a manual social class (Bmanual_NCDS/58=0.25 [0.15, 0.35], $p<0.001$; Bmanual_BCS/70=0.23 [0.12, 0.35], $p<0.001$) or living in a rented property during childhood (Brented7&11_NCDS/58=0.36

[0.25, 0.46], $p < 0.001$; $Brented5 \& 10_BCS/70 = 0.30$ [0.16, 0.45], $p < 0.001$) starting at higher levels of psychological distress than men, those with parents from a non-manual social class, or those living in an owned property during childhood. We also found evidence of inequalities at the intersection of gender and childhood SEP among 'Baby boomers' (NCDS/1958). We did not find evidence of any long-term reduction in any of these inequalities. Despite improvements in population mental health after the COVID-19 pandemic, unjust life-course inequalities by gender and socioeconomic inequalities persist.

3D STREAM: EDUCATION / EMPLOYMENT 1

INDIVIDUAL PAPERS EMPLOYMENT WELLBEING

TALK 1: Evolving Person/Job (Mis)Fit: Do Changes in Work-Place Captivity Influence Subjective Well-being?

Presenter: Wen Fan, Boston College

Co-author: Phyllis Moen, University of Minnesota

A central tenet in social psychology is the importance of perceived control in the stress process, while another focuses on the well-being implications of mismatches between preferred and actual arrangements. Integrating these perspectives and leveraging the COVID-19 pandemic, we examine "work-place captivity," defined as a misalignment between workers' actual and preferred work locations combined with a perceived lack of control. Applying mixed-effects models on U.S. nationally representative panel data (October 2020 to April 2022) of workers who worked from home at some point during the pandemic, we reveal disparities in work-place captivity, with women, Hispanic workers, and individuals without a college degree being more likely to experience captivity. Both sustained and transitions into captivity are associated with worse subjective well-being (job and life satisfaction, work-life conflict, and psychological distress). While resolving work-place captivity generally does not harm well-being, the common approach of adjusting preferences to resolve captivity—settling—lowers job satisfaction.

TALK 2: Does the "Right to Request" Flexible Work Policy Influence Men's and Women's Uptake of Flexible Working and Well-Being: Findings from the UK Household Longitudinal Study

Presenter: Baowen Xue, University College London

Co-authors: Anne McMunn, University College London; Heejung Chung, King's College London

Background: The expansion of flexible working arrangements (FWAs) in Europe, particularly under the UK's evolving "right to request" policy, has introduced varying levels of flexibility - from occasional schedule adjustments to full-time remote work. While existing research examines FWA availability, few studies differentiate how the intensity (partial vs. full flexibility) and type (reduced hours, flexitime, telework) jointly influence household dynamics. Gendered patterns in both FWA utilisation and outcomes suggest these arrangements may inadvertently reinforce traditional divisions of unpaid labour, with unclear health consequences for coupled partners.

Aim: This study aims to understand how different levels (intensity) and types of FWAs influence couples' health and well-being and how much of the health influence can be explained by couples' division of housework and childcare.

Method: This study will use wave 12 and wave 14 of the UK Household Longitudinal Study (UKHLS), which encompasses around 40,000 households. It will use the structural equation model to model how levels and types of flexible work influence couples' health and well-being and how much of the associations can be explained by the division of housework and childcare. The health outcomes will include physical health (SF-12 PCS), mental health (GHQ-12, SF-12 MCS), and multidimensional satisfaction (life/job/leisure).

Discussion: This study aims to advance the literature by employing a dyadic approach that examines how both partners' use of FWAs – considering type, intensity, and gendered patterns of adoption – collectively influence household labour divisions and subsequent wellbeing outcomes. Our analysis will identify: (1) which FWA configurations (e.g., telework intensity, schedule flexibility thresholds) optimise health benefits for both partners, and (2) under what conditions FWAs may inadvertently reinforce or mitigate gender inequalities in paid and unpaid work. The findings will provide evidence-based recommendations for implementing FWAs in ways that promote both worker wellbeing and gender equity in domestic responsibilities.

TALK 3: Work Characteristics and Life Satisfaction: A Longitudinal Comparative Analysis Between Switzerland and the UK

Presenter: Luna Dones, University of Applied Sciences and Arts Western Switzerland

Co-authors: Min Young Song, Cardiff University; Eric Crettaz, University of Applied Sciences and Arts Western Switzerland; Rod Hick, Cardiff University

Contemporary labor markets have witnessed substantial restructuring, with growing prevalence of non-standard employment arrangements and job precarity across advanced economies. While researchers have documented cross-sectional associations between employment quality and subjective well-being, a critical gap exists in understanding the dynamic, longitudinal effects of changing work characteristics on well-being, particularly across different institutional contexts.

This study employs fixed effects panel analysis to examine how changes in specific job aspects – including contract type, pay, and autonomy – shape fluctuations in life satisfaction in Switzerland and the United Kingdom. It draws from a wider Swiss National Science Foundation project investigating low-quality work, poverty, and subjective well-being trajectories using data from the Swiss Household Panel and Understanding Society survey. The Switzerland-UK comparison offers analytical benefits, as both countries feature flexible labor market regimes with significant presence of non-standard employment, yet Switzerland's more extensive social protection system potentially buffers the negative effects of adverse working conditions on well-being outcomes.

Our theoretical approach bridges individual-focused psychological theories with sociological perspectives that situate employment experiences within broader contexts of macroeconomic and social stratification systems. This integrated framework recognizes that work-well-being relationships are embedded within socioeconomic configurations that shape opportunity structures across the life course.

This presentation will outline theoretical approaches connecting job characteristics with subjective wellbeing, present preliminary empirical findings from fixed effects panel analyses examining how different patterns of change in work quality influence life satisfaction and discuss implications for developing social policies that support quality of working life. By identifying how changes in aspects of job quality impact well-being, our research contributes evidence-based insights for structuring employment policies that promote worker life satisfaction.

TALK 4: Working Conditions and Breast Cancer Risk: Insights from a Longitudinal Cohort Study

Presenter: Bernadette van der Linden, University of Fribourg

Co-authors: Joy Sudan, Arnaud Chiolerio, Stéphane Cullati, Cristian Carmeli, University of Fribourg; Salvatore Vaccarella, International Agency for Research on Cancer (France)

Background: Breast cancer is the most commonly diagnosed cancer among women worldwide. While the influence of lifestyle factors on breast cancer risk is well-established, less is known about the impact of working conditions. We aimed to examine how working-related physical activity and long working hours affect breast cancer risk using data from a large-scale longitudinal cohort.

Methods: We analyzed data from the UK Biobank, including 161,673 women aged 40-69 years who were free of breast cancer at baseline (2006) and followed until 2016. Key exposures included heavy physical/manual work (yes, sometimes, no), walking/standing work (yes, sometimes, no), and weekly working hours (<15, 16-30, 31-48, >49 hours), all self-reported at baseline. Incident breast cancer cases were identified through cancer registry linkages. We calculated cumulative risk differences and risk ratios (RR) for breast cancer, adjusted for age, education, medical history, and number of live births.

Results: Over 9 years, 5,092 women (3.1%) were diagnosed with breast cancer. Heavy physical/manual work was associated with 680 fewer cases per 100,000 women (RR: 0.79, 95% CI: 0.67–0.95), while walking or standing work was linked to 325 fewer cases per 100,000 women (RR: 0.90, 95% CI: 0.79–0.98). In contrast, the number of working hours showed negligible associations with breast cancer risk.

Conclusion: Our findings suggest that heavy physical/manual and walking or standing work may reduce breast cancer risk in women, contrary to the established link between high occupational physical activity and cardiovascular diseases. These results highlight the need for further research to explore the transportability of these findings across different populations and working environments.

3E STREAM: LATER LIFE

INDIVIDUAL LATER LIFE 3 (Health & Wellbeing) PAPERS

TALK 1: Cross-Country Differences in Sleep Quality in Later Life: Exploring the Link Between Lifestyle and Sleep

Presenter: Katharina Loter, Tilburg University

Co-author: Claudia Recksiedler, German Youth Institute

Numerous studies have shown a strong connection between sleep quality and mental health (e.g., Alcántara et al., 2016; Freeman et al., 2020). According to a cross-sectional study involving individuals aged 16–74 years from 20 European countries (Baranowski & Jabkowski, 2023), the primary determinants of sleep quality are health-related issues and depression, while the role of individual characteristics is more important than national ones. Adding to the longitudinal evidence on this matter, our study focuses on people aged 50+ and aims (1) to explore sleep patterns in a cross-country perspective and (2) to identify health behaviors—protective or harmful—linked to sleep quality over time.

We explore sleep dynamics using hybrid models for panel data (e.g., Bell et al., 2018; Schunck, 2013), utilizing nearly 500,000 observations across all SHARE waves. We apply hybrid models that encompass both random-effects and fixed-effects estimates, permitting the consideration of separate within-cluster and between-cluster effects (Bell et al., 2018). Separate hybrid models are fitted for each country to assess the similarity among individual country estimates (e.g., Uccheddu et al., 2019 for a similar analytical approach). Preliminary analyses revealed significant cross-country variations in sleep quality and (un)healthy lifestyles across Europe. While some older adults maintain a steady sleep routine over the years (highest percentage in Balkan countries and Ireland), others report sleep problems and changing sleep patterns (e.g., Estonia, Sweden, Denmark, Belgium, France, Italy, Poland), often triggered by illness, retirement, and/or bereavement. Regular physical activity serves as a critical protective factor for sleep, yet this association is not consistently observed in certain countries, for example, France, Sweden, Finland, Croatia, and the Netherlands. We are currently using machine learning to uncover longitudinal patterns in health behaviors. Our findings highlight the importance of supporting older adults in maintaining healthy routines to improve sleep and well-being in later life.

TALK 2: Longitudinal Pattern of Multimorbidity in Older Adult Population: Latent Transition Analysis in 34 Countries

Presenter: Ridho Al Izzati, Northumbria University

Co-author: Eduwin Pakpahan, Northumbria University

Multimorbidity has become a global public health concern, yet cross-national comparisons remain limited, especially in longitudinal settings. This study investigates the longitudinal patterns and transitions of multimorbidity status of people over age 50 in 34 countries (N=109,037). Using comparable health indicators across countries (HRS, ELSA, SHARE, MHAS, CRELES, CHALRS, IFLS), we examine the chronic health conditions (hypertension and diabetes), cognitive function, physical ability, and self-report of general health. Using the lifecourse framework, we investigate how early-life socioeconomic factors shape the multimorbidity status and its transition in old age. Using latent transition analysis, we identify three classes: mild, moderate, and severe multimorbidity. Our findings reveal substantial variation in these classes across countries, with diabetes and hypertension emerging as the predominant condition among older adults with severe and moderate multimorbidity, respectively. On average, across 6 years, both severe and moderate multimorbidity tend to increase, with a notably higher rise in severe multimorbidity observed in LMIC and UMICs. This study highlights the persistence of multimorbidity status among older adults across all countries, despite a general tendency for individuals to transition into a more severe category. Moreover, the probability of moving from mild to more severe multimorbidity appears to be consistent across countries. Using a structural equation model, this study finds that men, individuals with lower education levels, older adults, and those with lower childhood socioeconomic status are more likely to experience and transition into moderate or severe multimorbidity. This finding suggests that multimorbidity status and transitions are influenced by childhood socioeconomic factors. Mediation analysis reveals that adulthood socioeconomic status largely mediates this relationship, highlighting the pathway through which early-life disadvantages accumulate over time. These results emphasize the importance of understanding multimorbidity patterns and dynamics for effective public health intervention and healthcare services.

TALK 3: The Association Between Childhood Socio-Economic Status and Health with Age Trajectories of Walking Speed Amongst Mid-Older Population in Two Distinct Populations of England and China

Presenter: Mphatso Chisala, University College London

Co-authors: Leah Li, University College London; Rebecca Hardy, Loughborough University; Rachel Cooper, Newcastle University

Background: Slower walking speed in late adulthood is an important predictor of health outcomes including cognitive decline, disability, chronic illnesses, and mortality. However, how early life factors are associated with walking speed and its decline during ageing remains underexplored.

Methodology: We used data from the China Health and Retirement Study (CHARLS, Waves 1-3, n=9190, mean enrolment age 64.5y) and the English Longitudinal Study of Ageing (ELSA, Waves 1-10, n=13248, 64.5y). We applied random effects mixed models to the longitudinal measures of walking speed to examine how different indicators of childhood socioeconomic position (SEP) and poor health were associated with trajectory of walking speed from age 60y. We also explored how these are mediated by adult SEP.

Results: In both studies, females had a slower walking speed than males. Lower parental education was associated with an average slower walking speed at all ages (0.15m/s slower (0.11-0.17) in CHARLS (illiterate vs illiterate) and -0.07(-0.10,-0.04) in ELSA (no education vs high school)). In CHARLS, only in females but not males, having a parent who was in a farming occupation was associated with a 0.03 m/s slower walking (0.01,0.04 vs non-farming occupation). While in ELSA, participants with parents in unskilled labour/unemployed had a 0.15 m/s slower speed (0.11,0.17 vs professional/managerial occupation). Additionally, participants who reported poor health in childhood also had a slower walking speed in both settings. Only occupation in ELSA was associated with walking speed decline. The association between parental education and parental occupation with walking speed (at baseline) was partially mediated by adult SEP (12% in CHARLS and 49% in ELSA, respectively). While there was an association between parental occupation (CHARLS) and parental education (ELSA) with walking speed, these were mostly mediated through adult occupation and education.

Conclusion: Our study highlights the enduring direct and indirect impact of early life socioeconomic factors and childhood health on levels of walking speed in adulthood. These findings emphasize the importance of addressing both childhood and adult socioeconomic disparities and promoting childhood health to enhance physical capacity and wellbeing in later life. Understanding these relationships across diverse settings can inform targeted interventions to promote healthy aging and reduce the risk of age-related health problems.

TALK 4: Chronic Diseases and Multimorbidity Occurring During Childhood and New-Onset Parkinson's Disease Among Middle-Aged and Older Adults: A Prospective Cohort Study

Presenter: Jufen Liu, Peking University

Co-authors: Lirong Nie, Ziyang Ren, Jufen Liu, Peking University

Background: Adverse health experiences in early life can contribute to lifelong health impairments. However, the association of childhood chronic diseases and multimorbidity with the risk of incident Parkinson's disease (PD) in middle-to-old age remains underexplored.

Methods: This study used data from the Survey of Health, Ageing and Retirement in Europe (SHARE). 13 childhood-onset chronic diseases were selected, including chronic ear problems, vision impairment, speech impairment, asthma, other respiratory diseases, allergy, headaches, epilepsy, psychiatric disorders, diabetes, heart diseases, leukemia, and cancer, all of which were diagnosed by physicians and retrospectively reported by participants. Two or more childhood-onset chronic diseases were defined as childhood chronic multimorbidity. PD was defined using self- or proxy reported physician diagnoses. Cox proportional hazard regression was employed to investigate the association (hazard ratio [HR] and 95% confidence interval [CI]) between childhood-onset chronic conditions and incident PD.

Results: A total of 104,710 participants (44.7% men) aged 63.0 (56.0-71.0) were included, of whom 1,035 developed PD during a median follow-up duration of 6 years. Older adults with childhood-onset vision impairment, asthma, headaches, epilepsy, psychiatric disorders, diabetes, heart diseases, leukemia, and cancer were at 1.34-2.24 times higher risk of developing new-onset PD when compared to those without corresponding chronic conditions. Furthermore, childhood multimorbidity (vs. no) was significantly associated with new-onset PD, with HR (95% CI) of 1.44 (1.09-1.90), which remained significant even after adjusting for diseases in adulthood.

Conclusions: Early screening of PD among older adults with childhood chronic conditions and prevention of chronic diseases in children should be promoted to reduce the burden of PD, regardless of whether they have chronic conditions in adulthood.

3F STREAM: HEALTH / WELLBEING 2

INDIVIDUAL MENTAL HEALTH 2

PAPERS

TALK 1: Black Summer Bushfires and Psychological Distress of Young People: What Mental Health, Economic, Social, and Community Resources are Risk and Protective Factors?

Presenters: Ben Edwards, Matthew Gray, Australian National University

Objectives: To systematically assess whether economic, social and community resources can protect against the impact of the Australian “Black Summer” bushfires on adolescent psychological distress. Using 16 years of longitudinal data, we also test whether history of mental health problems, history of economic hardship puts youth at risk and whether a history of high parental warmth and low harsh parenting protects young people.

Study design: Prospective, population-based cohort study; analysis of Longitudinal Study of Australian Children (LSAC) survey data.

Setting, participants: Adolescents in the nationally representative cross-sequential sample of Australian children recruited in 2004 for the Birth and Kindergarten cohort (aged 0-1 and 4-5 years at enrolment). Survey data from waves 9 (16-17 and 18-19 years for B and K Cohort) and waves 1 to 8.

Main outcome measures: Psychological distress measured by the Kessler 10-item questionnaire, K10.

Results: There were 2,726 respondents from the B and K Cohorts who had psychological distress information and demographic characteristics in Wave 9. We did not find that a history of financial hardship, unemployment, being partnered, high social support, household harmony and additional stressful life events moderated the association between fires and psychological distress. Families’ financial hardship or capacity to raise \$2000 in an emergency in the previous wave, or over the prior 16 years did not increase or reduce the risk. Community collective efficacy, and history of positive parenting (high warmth, low harshness) was also not significant. History of high anxiety but not depressed mood was the only significant risk or protective factor. Those with a significant history of high anxiety had elevated distress levels when exposed to fire in the last 12 months compared to those with none or some history of high anxiety.

Conclusions: Findings underscore that leaving prior mental health history aside, how robust the impacts of bushfires were on youth mental health and that being exposed to the Black Summer bushfires affected all youth irrespective of privilege or social address.

TALK 2: Cumulative Risk for Comorbidity of Depression and Anxiety in Young People

Presenter: Francesca Pigatto, University of Auckland

Co-authors: Cameron C. Grant, Emma Marks, Caroline Walker, Karen E. Waldie, University of Auckland

Background: Depression and anxiety often co-occur, with their comorbidity resulting in a more severe prognosis than either condition alone. Identifying the impact of multiple risk factors on this comorbidity is essential for guiding early interventions.

Method: Data from 4563 young participants in the Growing Up in New Zealand (GUINZ) longitudinal study were analysed to identify the risk factors associated with comorbid depression and anxiety. Scores for depression and anxiety symptoms were converted into binary variables using the cut-off of 10 and 60, respectively, and then combined to create the comorbidity outcome. The Cumulative Risk (CR) score was used to measure the impact of multiple risk factors from prenatal to childhood on the likelihood of this comorbidity. CR scores were further grouped into three levels of risk and their association with comorbidity was examined using univariable and multivariable logistic regression analyses.

Results: The prevalence of comorbidity at age 12 years was 8.9% (406/4563). Among young people, 14.2% (647/ 4563) had no risk factor, 64.7% (2953/4563) had one to three (low CR score level), and 21.1% (963/4563) had four or more (high CR score level). In the adjusted analyses, young people in low and high CR levels had 2.6 times and 4.6 times higher odds, respectively, of experiencing comorbidity compared to those with no risk factors.

Discussion: The risk of comorbid depression and anxiety symptoms increases with the number of risk factors experienced from prenatal to childhood. Multi-faceted interventions targeting several risk factors are recommended to improve young mental health.

TALK 3: The Role of Parental Engagement in Student Learning in Decreasing Adolescent Anxiety and Depression

Presenter: Jenny Povey, The University of Queensland

Co-authors: Yanshu Huang, Sophie Austerberry, Macarena San Martin Porter, Janeen Baxter, Alexandra Gramotnev, The University of Queensland

Anxiety and depression rates are rising amongst adolescents—a time when developmental and contextual transitions converge—increasing the risk for adverse outcomes (e.g., lower levels of educational attainment, decreased employment opportunities, and increased risk of anti-social behaviour) across the life course. The prevalence of mental health problems in adolescence is a significant policy concern and will adversely affect—even in economically well-resourced countries like Australia—governments' ability to provide care for these young people over their lifetime. There are emerging studies over the past decade that suggest parent engagement in student learning—traditionally associated with improved academic outcomes—significantly decreases mental ill health. However, most studies use cross-sectional designs that do not account for the high variability in both the child's development and the parent-child relationship over time. In this study, we examine the association between parent engagement and two measures of mental health (depression and anxiety), drawing on national data from the Longitudinal Study of Australian Children and accounting for the school context—school belonging, peer connection problems, and bullying—and family context—parenting styles, family history of mental illness, family composition, and socioeconomic disadvantage—using panel fixed effects models. Findings show that parent engagement is significantly associated with lower levels of depression in adolescence, even when accounting for family and school context factors. Parent engagement is significantly associated with lower anxiety levels when accounting for family factors, but not after accounting for school factors. Responsive parenting style remains significantly associated with decreased anxiety levels. These findings highlight the important role of parent engagement in their child's learning and responsive parenting style to help mitigate the rising levels of anxiety and depression in adolescence and a call for educational policy to enhance the parental engagement school culture, particularly in secondary schools.

TALK 4: Experiencing Psychological Neglect in Adolescence and Mental Health Across the Life Course

Presenter: Sharon Christ, Purdue University

Co-authors: Elizabeth Coppola, Yale University; Olivya Reyes, Purdue University

Adolescence is a critical period for psychological development. Therefore, adolescents often require good psychological caregiving from parents and other adults. Lack of this care, or psychological neglect, may have lasting impacts on individuals as they continue their life course. Using the National Longitudinal Study of Adolescent to Adult Health (Add Health), a nationally representative cohort study in the U.S. that follows individuals from adolescence (grades 7-12) to middle adulthood (age 33-43), we estimated longitudinal trajectories of depression, self-esteem, and suicide proclivity. These trajectories were evaluated as outcomes of psychological caregiving levels, including neglect, experienced in adolescence.

Methods: A previously established measure of psychological caregiving/neglect was used. This was measured using a latent variable with six items and a good model fit. Depression, self-esteem, and suicide proclivity were also measured using latent variables with good model fit. The three mental health trajectories were estimated using age as the time metric. Relevant covariates included race and ethnicity, parents' education and income, support from peers, and other forms of maltreatment experienced in adolescence.

Preliminary Results: On average, mental health showed improvements from adolescence to middle adulthood, with depression and suicide proclivity decreasing and self-esteem increasing ($n=6,504$). Psychological neglect in adolescence impacted mental health, on average across the entire life course period evaluated, with standardized regression effects of 0.29, 0.26, and 0.50 for depression, suicide proclivity, and self-esteem, respectively. The effects were more pronounced in adolescence and diminished over time. It takes about 10-15 years for an individual with low levels of care (-1 std) to have comparable mental health levels to their peers who had average or above average (+1 std) psychological care. Models will be updated with increased sample and additional covariate controls. We will also attempt to evaluate survival as a function of psychological neglect with the mental health trajectories as mediators.

POSTER PRESENTATIONS

Relational Processes of Decision Making During the Transition to Adulthood for Young People with an Intellectual Disability

Presenter: Amélie Rossier, Haute école de travail social Fribourg HETS-FR - HES-SO

Co-authors: Dario Spini, University of Lausanne; Geneviève Piérart, Haute école de travail social Fribourg

Young people face many challenges during their transition to adulthood. During this period, young individuals will have to make major decisions which may impact them much later on in life course (Bourdon et al., 2021; Sapin et al., 2007). However, if decision making is led by individuals (Hitlin & Elder, 2007), this processes also depends on the interplay with social and structural factors (Bidart et al., 2011; Heckhausen & Buchmann, 2019; Landes & Settersten, 2019; Schoon & Heckhausen, 2019). In the context of disability, the transition to adulthood and decision-making remains complex (Bourdon et al., 2021; Jacobs et al., 2020) and may have consequences on their quality of life and their rights in the future (Hess-Klein & Scheibler, 2022). Thus, we will investigate the relational processes related decision-making for the young people with an intellectual disability throughout their transition to adulthood. Indeed, both the paradigm of life courses with the linked lives (Landes & Settersten, 2019) and in disabilities theories (Cudré-Mauroux et al., 2020) enable us to understand the decision-making through the relationships and interactions with the entourage as well as their support provided. A longitudinal qualitative study (Neale, 2020) will be conducted in order to explore the relational processes of decision-making. This will be based on an exploratory and inductive method. Collective interviews will be undertaken with young people with an intellectual disability, their carers and professionals who accompany them. This method will allow us to understand their experiences and situations of relational processes of decision-making during the transition to adulthood and will identify the resources, constraints and challenges within this process.

The Influence of Participation in Further Training on Occupational and General Well-Being: Adverse Effects or Positive Outcomes?

Presenter: Andrea Zangger, University of Bern

In a rapidly evolving labor market, participation in further training has become increasingly essential for employees. Technological and organizational changes contribute to the depreciation of existing human capital in OECD countries (Lentini & Gimenez, 2019). Simultaneously, demographic shifts slow the influx of young workers into the labor market (SKBF, 2023). As a result, highly developed countries like Switzerland face challenges in filling positions with adequately trained personnel (e.g., labor shortages). Given these dynamics, it is unsurprising that research has long focused on the impact of further training on occupational outcomes such as career mobility and income (for an overview, see Becker, 2017). From the employees' perspective, rising job requirements underscore the necessity of lifelong learning. In Germany, Burgard and Görlitz (2014) and Ruhose et al. (2020) examine the impact of further training participation on well-being, reporting mixed results. Their findings suggest that attending further training reduces occupational worries and increases job satisfaction—though the latter effect is observed only among men. Similar studies for Switzerland are lacking, and this paper aims to fill this research gap.

Using data from the Swiss panel study Determinants of Educational Choice ('DAB'), this study examines the impact of further training on (occupational) well-being. Tracking the educational pathways of young Swiss adults across eleven waves, along with well-being indicators, the dataset enables the application of longitudinal methods such as Fixed Effects or Difference-in-Differences estimators. Three research questions are addressed:

- 1: Does participation in further training enhance occupational and general well-being?
- 2: Do different types of further training (e.g., professional education and training [PET], informal training) have distinct effects?
- 3: Are there differences between short- and long-term effects on well-being?

Attitudes About Alternative Families in Europe: The Role of Life-Course Experiences

Presenter: Anne Solaz, Institut National d'études démographiques (INED)

Attitudes towards diverse families vary particularly because of beliefs on consequences for children's wellbeing. However, little is known about how these attitudes get shaped. This paper explores to what extent the individual life course may form attitudes about families. We analyse the role of personal experiences during childhood (measured by the family structure at age 15) and adulthood (proxied by the current marital status and the experience of previous separation) on the perceptions of child well-being in non-traditional families, i.e., single-parent, stepparent and same-sex families. Using the new module "Attitudes toward family diversity" from the European Social Survey Cronos-2 (2022) collected across eleven European countries, we analyse how people think that children fare in six alternative families as compared to the non-separated two-biological mother-father family. To what extent does an individual's life course shape these attitudes, or is it mainly linked to other individual characteristics (age, gender, socioeconomic status) or the societal context? Because of the comparative nature of the data, we can see whether the earlier diffusion of separation/divorce or support for same-sex parenthood within the country helps to be favourable to new family forms, irrespective of individual life-course experiences.

Preliminary results show that one-parent families receive less approval than step- or same-sex families. Supportive attitudes vary widely from 40% in central and eastern Europe to 85% in the Nordic countries. Young people, women and those who grew up in alternative families have more favourable attitudes toward child well-being in each non-traditional family. Step-by-step logistic regressions controlled for age, gender, education, income, professional situation, and country, show that the experience of parental separation during childhood and, to a less extent, as adult, makes people more confident about child wellbeing in non-traditional families such as one-parent (whether mother or father) and lesbian families, but not step-families. Future analysis will explore country specificities.

Sibling (Non-)Negotiations When Taking Over the Care of Parents: Potential for a Fairer Distribution

Presenters: Annika Hudelmayer, Johanna Schütz, Kempten University of Applied Sciences

Taking on the care of one's parents when they need support in old age often involves considerable effort and can lead to psychological, physical and financial burdens. While many empirical studies have examined the motivations and predictors for caregiving, little is known about how the caregiving process unfolds, what life events shape it, and how negotiations between family members in general and siblings in particular take place.

We examine the process of taking on care responsibilities, including the coordination and division of labour between siblings. Across Germany, 20 narrative-biographical interviews were conducted with people between the age of 36 and 74 who care for their parents and have siblings. The interviews were analysed using Bohnsack's documentary method.

The results reveal that the growing needs of ageing parents are rarely openly discussed within families and that there is little communication about the division of caring responsibilities. This shows that when support is needed, established gendered patterns of roles and support that have developed over the years within the family are transferred to the newly emerging care situation. The individual circumstances of each sibling, such as having a family of their own, can be interpreted as both, a reason for and against taking on care. It becomes clear that parents' wishes regarding their own care situation are given a high degree of importance. Daughters in particular have higher expectations of themselves, both in terms of support in everyday life and in terms of the care receivers' wellbeing. Their brothers are often delegated only individual caregiving tasks. Life course transitions and individuals' previous caring responsibilities are therefore crucial to the process of taking on caring responsibilities and need to be taken more into account if an equal distribution of caring responsibilities is to be achieved.

Informal Care: Does the Profile of Informal Caregivers Change Over the Life Course?

Presenter: Carine Rakofsky, Université Libre de Bruxelles

Co-authors: Céline Mahieu, Bram Vanhoutte, Université Libre de Bruxelles

Informal caregiving is a crucial, but often underrecognized part of healthcare systems. Studies show that 10 to 25 % of the population in Europe engages in informal caregiving in one way or another. While the 'average' caregiver has been extensively studied, relatively little attention has gone to a systematic analysis of the contrasting profiles of caregivers over the life course.

This study aims to identify diverging profiles of informal caregivers through a cross-sectional analysis of European population surveys such as : Survey of Health, Ageing and Retirement in Europe (SHARE), European Social Survey (ESS), Health Interview Survey (HIS), and Statistics on Income and Living Conditions (SILC). Sociodemographic predictors of being a caregiver will be studied in differing life phases using mixed-effects logistic regression models. Furthermore, the analysis will be stratified by life stages to investigate how the determinants of informal caregiving may vary across different stages of the life course, making use of multiple databases to test for robustness of results. We will define the life stages by taking into account life course transitions in the work and family domains. The mixed-effects logistic models will allow for the quantification of both fixed effects of explanatory variables and random intercept effects associated with geographic differences, while accounting for the nested structure of the data.

In summary, this study aims to provide a more nuanced understanding of the sociodemographic factors influencing individuals decision to take up the role of informal caregivers across different life stages. The expected results could help adapt support policies and targeted interventions for various categories of caregivers.

Maximising Participation Within a 13-Wave Cohort Study (CATS) Spanning Multiple Life Transitions from Childhood to Young Adulthood

Presenter: Carolina Murphy, Murdoch Children's Research Institute, University of Melbourne

Co-authors: Susan Sawyer, Lilli Nonneman, Murdoch Children's Research Institute

Longitudinal studies face numerous challenges retaining participation; study fatigue typically contributes to growing attrition, particularly amongst older adolescents and young adults. As studies progress the likelihood of losing contact with participants also rises, which can reduce sample diversity, bias results, and diminish statistical power. Targeted efforts to boost participant engagement are crucial to maintaining the robustness of longitudinal studies.

The Child to Adolescent Transition Study (CATS)¹ commenced in 2012 with 1,239 Australian children aged 8-9 years. Participants have been surveyed annually about their health, emotional wellbeing and education, with 13 waves of data collection between 2012 - 2024. Very high response rates were obtained for the first three waves (>90%) followed by three waves of moderate responses (>80%). Participation during latter secondary school declined further; 67% by wave 10. Given the gradual yet steady decline over 11 waves, a comprehensive review of protocols, sample characteristics, and study documentation was conducted in 2022 to inform wave 12. This coincided with participants themselves providing informed consent, rather than parents, with uncertain impact. A series of strategies to improve data collection and participant retention were implemented in the subsequent two waves (wave 12 in 2023, wave 13 in 2024), with the goal of improving participation. These processes resulted in the highest participation rates since 2017; participation rose from 67% in 2022 to 71% in 2023 and 73% in 2024. Some participants rejoined the study after nine years of absence and 67 participants who had been lost to the study were relocated and reengaged as a result of tracing efforts. Retention in longitudinal studies requires ongoing attention. Although strategies to reduce attrition can be resource-intensive, they represent a worthwhile investment, particularly in maintaining the engagement of individuals from marginalized groups, who are at greater risk of disengaging from longitudinal studies.

1 Subsequently renamed the Child to Adult Transition study, after funding was secured to continue annual surveys into adulthood.

Maternal Mental Health Trajectories and Childhood Overweight: Findings from the 2005 and 2016 National Birth Cohorts in Taiwan

Presenter: Chiung-Ying Kuan, National Taiwan University

Co-authors: Tung-liang Chiang, Ling-Yin Chang, National Taiwan University

Background: Recent findings show variability in the association between maternal depression and obesity in early childhood, which depends on the timing and duration of exposure. We investigated maternal mental health trajectories association with children's BMI across two generations in Taiwan.

Methods: Data were obtained from two nationally representative birth cohorts: the Taiwan Birth Cohort Study (TBCS) and the Kids in Taiwan: National Longitudinal Study of Child Development and Care (KIT). The TBCS includes a sample of 24,200 infants born in 2005, while the KIT comprises a sample of 13,692 infants born in 2016. Information regarding the mothers' mental health and the children's BMI was self-administered by the mother or primary caregiver in both cohorts. We collected data on the mother's mental health when the child was 6, 18, and 36 months old and used a group-based trajectory model to examine changes in mothers' mental health in these two birth cohorts. The child's BMI was calculated using their weight and height at 36 months. Child overweight status was assessed according to the WHO's definition. Logistic regression analysis was performed to explore the relationship between maternal mental health and the child's overweight status.

Results: The earlier cohort showed "persistent depression" at 4.2% and "never depression" at 95.8%. In contrast, the later-born cohort indicated "increasing depression" at 6.2% and "never depression" at 93.8%. We used logistic regression to explore the relationship between maternal mental health and child overweight status after adjusting for economic pressure. In TBCS, there is no relationship between the mother's mental health and the child's overweight (aOR: 1.00, 95% CI 0.79 to 1.27). In KIT, mothers in the increasing depression group are more likely to have overweight children (aOR: 1.48, 95% CI 1.05 to 2.10).

Neighborhood Residential Instability Sequences and Criminal Convictions in Adulthood: A 30-year Longitudinal Study

Presenter: Dale M. Stack, Concordia University

Co-authors: Marie-Pier Paré-Ruel, Lisa A. Serbin, Concordia University

Neighborhood residential instability (i.e., high turnover in residents) is linked to criminal behaviour across the lifespan (Gray & Parker, 2023). Most efforts to elucidate the aforementioned association overlooked the order in which changes in neighborhood circumstances occur across the lifespan (sequencing). In this study, we uncovered sequences of exposure to residential instability in 4110 participants (50.1% boys) from Montreal (Quebec) assessed at 5-year intervals between 1976 (childhood) and 2006 (middle adulthood). We estimated residential instability with census data and categorized neighborhoods into quintiles defined by population turnover rates. These quintiles were time-specific states entered into an optimal matching analysis to derive individual sequences of exposure to residential instability. These sequences were integrated into a cluster analysis that produced four subsets of participants with similar individual sequences. Cluster 1 (40.1%) and Cluster 2 (26.4%) covered individuals who remained in the most or second-most residentially unstable neighborhoods (>80th instability percentile or 60th–80th percentiles, respectively) throughout their lifespan. Cluster 3 (17.9%) and Cluster 4 (15.6%) included participants who spent their childhood and adolescence in unstable neighborhoods but moved into moderately or highly stable neighborhoods (20th–60th percentiles or <20th percentile, respectively) in their thirties and beyond. We conducted zero-inflated poisson regression analyses to determine if clusters differentially predicted the number of guilty charges compiled in the official criminal records of participants by age 50. A lack of social mobility predicted increased conviction rates. In contrast, moderate upward mobility was linked to decreased conviction rates, even more so than high upward mobility. Considering that moderate upward mobility occurred about 5 years sooner than high upward mobility, it appears that earlier positive changes in neighborhood circumstances reduce criminal outcomes better than exceptionally positive changes that happen further in life. These results emphasize the need for neighbourhood-directed policies intended for Canadian youth in precarious situations.

Racial Diversity and Depression in Early Childhood

Presenter: David Chae, Tulane University

There is growing evidence that exposure to racial diversity may be linked to better socio-emotional health among children; however, most of this research has been conducted on children of color and has focused on older children and adolescents. Studies on exposure to racial diversity in early childhood specifically among White children are limited. This study examined survey data from a U.S. national sample of 186 caregivers of White children between 4-8 years of age collected from March to November 2023. Multivariable linear regression models were specified examining caregiver reports of child depression in relation to school racial diversity (ranging from “almost all White” to “less than half White”). After adjusting for neighborhood racial diversity and sociodemographic covariates (child and caregiver age and gender, income, education, and social desirability response bias), school racial diversity was associated with lower reports of child depression ($b = -.14$, $SE = .07$, $p = .05$). Caregiver reports of positive interactions with non-White children (playing, getting along, and seeking interactions with peers who are not White) was added to the model, which was associated with lower child depression ($b = -.13$, $SE = .06$, $p = .03$). In this model, the association with school racial diversity was attenuated and no longer statistically significant ($b = -.11$, $SE = .07$, $p = .11$). Approximately 20% of the effect of school racial diversity was attributable to positive interactions with non-White peers, although it was not a statistically significant mediator ($Z = 1.37$, $p = .17$). Results from this study suggest that increasing exposure to racial diversity early in the lifecourse may be associated with lower depression among White children. These findings are consonant with other research suggesting that increasing racially diverse interactions from an early age may contribute positively to mental health and development, for example, by reducing isolation and promoting social skills and intergroup relations. Results also provide support for policies aimed at fostering racially diverse early school environments.

Education Disparities Within and Between England and Wales During a Key Transition: The Role of Socioeconomic Inequalities

Presenter: Dominic Kelly, University College London

Co-author: Emla Fitzsimons, University College London

Despite sharing a long history and many shared elements to their education structure, the education systems in England and Wales have substantially diverged since devolution in 1999. The two nations now operate separate education systems, each with unique priorities, frameworks and curricula. In recent years, there has been increasing empirical evidence (e.g., Jerrim et al., 2021) that Wales lags behind England in its performance on standardised testing. This is especially true at the key lifecourse transition at age 16 between the end of general education (GCSEs) and specialised education (A-Levels), which enables higher education. Educationalists and economists have suggested numerous explanations for the existence of these differences, especially regarding socioeconomic inequalities (Institute for Fiscal Studies, 2024), but there is a lack of suitable datasets to test these hypotheses as they either 1) include only survey data or administrative data or 2) include only English data or Welsh data. Using data from the Millennium Cohort Study – a UK wide cohort study of children born between 2000 and 2001 with rich data on child- and parent-level variables across the lifecourse – newly linked to the National Pupil Database containing English and Welsh students’ national assessment data, this paper examines inequalities across a range of dimensions (e.g. socioeconomic, gender) in attainment in GCSE exams (taken at age 16) between the two nations and the factors underlying them, drawing on rich lifecourse data including from

early in life. Analyses focus on cross-country comparisons of attainment gaps, showing the extent to which disparities within nations are mediated by family and contextual factors and draws out differences across nations. Preliminary analyses from self-reported data suggest that although socioeconomic disadvantage is related to lower academic achievement in both nations, the strength of this relationship differs between nations. Policy implications based on evidence relevant to each nation are discussed.

Socio-Legal Perspectives on Conflictual Parental Separation in Switzerland: How are the Child's Best Interests Defined by Judicial Authorities? Custody, Visitation Rights and Child Protection Measures

Presenter: Gentiane Schwarzer, University of Neuchâtel

Through a socio-legal approach, our study examines how judicial authorities determine the child's best interests in situations of conflictual parental separation in Switzerland. We characterize these situations by disagreements regarding the child's care that necessitate referring to judicial authorities and child protection measures because of parental conflict. Although all judicial decisions must fully consider the child's best interests as a primary consideration, which the child's well-being should guide, this notion is evolving, interdisciplinary, and relative. According to the Committee on the Rights of the Child, the assessment of this interest must, therefore, be based on recent scientific knowledge, adopting an evidence-based approach, and be specified in practice according to the fields of application to ensure consistent implementation and equal treatment among families. We are particularly interested in the criterion of communication and collaboration between parents, also called co-parenting, representing one of the eight criteria for custody determination in federal jurisprudence. Co-parenting is also crucial when evaluating a child's potential danger. We then question the expectations of legislators and practitioners and their evolution regarding their assessment of coparenting in light of the child's best interests and how these align with empirical research findings in social sciences on children's well-being after separation. A recent study reveals that the Federal Court's interpretation of the co-parenting criterion varies and tends not to align with empirical results regarding children's well-being in different custody arrangements. Furthermore, although the State has an obligation to clarify what constitutes a danger to the child or special protection, there is no universal definition or legal criteria to provide such clarifications. To address our questions, we are conducting an in-depth analysis of family law and 50 first-instance judicial cases. The results will be put into perspective with the sociopsychological and economic findings from a national longitudinal questionnaire.

The Distributional Effects of Lifelong Learning: Wage and Employment Returns for Disadvantaged Groups

Presenter: Giovanni Greco, University of Lausanne

Co-author: Giuliano Bonoli, University of Lausanne

The social investment turn is innovative in that it contextualizes social risks within a life-course framework (Hemerijck et al., 2023). Yet, it remains difficult to grasp the distributive effects of social investment on life-course chances.

In this paper, we address this gap by focusing on adult education and training (AET). We aim to study the impact on wage trajectories and on the risk of unemployment. While the positive effects of training are known (Blossfeld et al., 2014; Vanormelingen, 2025), the distribution of those effects remains seldomly explored. Our population of interest includes typically disadvantaged groups, such as the low skilled, precarious workers, migrants, and older workers. We overall expect lower returns for disadvantaged groups. But we also expect marginal returns to training be higher for groups that are more strongly disadvantaged and with the lowest human capital because the signalling effect of training is stronger for them. We also expect a ceiling effect for the highly skilled where the wage structure is more compressed.

This study covers three countries that offer the necessary degree of variation: the UK, a liberal welfare state and an education system promoting general skills; Switzerland, which displays a highly structured VET system containing an extensive AET system; and finally Germany, with a strong VET system but a less developed AET sector. Empirically, we use data from the UK Household Longitudinal Study, National Educational Panel Study and Swiss Household Panel respectively.

We implement fixed-effects regression models to estimate the effect of training on wages. This strategy limits biased estimates from selection into training by controlling for individual-level time-constant unobserved heterogeneity. We will also study the lagged effect of training to capture potential long-term impacts of training. Cox models will enable to assess the risk of job loss without assumptions on risk's time dependency.

From Intersectional Categories to Allostatic Load, via Career Paths: An application of the MAIHDA Approach to the French CONSTANCES Cohort

Presenter: Hélène Colineaux, Imperial College London

Co-authors: Constance Beaufils, Emmanuelle Cambois, French Institute for Demographic Studies, INED;

Cyrille Delpierre, Michelle Kelly-Irving, Toulouse III University-Paul Sabatier

Allostatic load (AL) is a composite measure of physiological wear and tear due to intense and/or repeated adaptation to stressful exposures. The intersectional framework aims to describe the combine effect of social marginalisations, such as gender, race, class. This study aimed to explore variations in AL across intersectional strata and to determine if these variations are explained by socio-behavioural mechanisms, specifically work trajectories.

We analysed data from the French CONSTANCES Cohort, including 66,228 subjects aged 55-69. The outcome was a continuous AL variable based on cardiovascular, metabolic and inflammatory biomarkers. Intersectional strata (n=48) were defined using binary sex categories, age class (-60, 60-65, 65+), ethnicity/race categories ("potentially racialised" if at least one parent born outside Europe), early-life social class ("advantaged" if at least one skilled or highly skilled parent, "disadvantaged" otherwise) and education level (high versus low/medium). An occupational trajectories variable, identified through sequence analysis, was the main candidate mediator. Statistical analyses were conducted using the MAIHDA approach.

We observed strong intersectional inequalities in occupational trajectories (Variance Partitioning Coefficient VPC from 5% to 42%), mostly driven by education level, but also sex category for some groups (being unemployed, self-employed, or a highly skilled worker), and to a lesser extent, ethnicity/ race and early-life social class. We observed moderate intersectional differences (VPC=8%) in AL, mainly driven by the sex category (so potentially sexual dimorphism), but also by education and age. We observed a moderate mediation by occupational trajectory (2% attenuation) of intersectional differences in AL, mostly through the contribution of education, and a larger impact of behaviours (24% attenuation). The intersectional framework allowed us to describe strong intersectional inequalities in work trajectories, and their association with later allostatic load.

Characterizing Multidimensional Social Exposure Through Unsupervised Machine Learning

Presenter: Ingrid Giesinger, University of Toronto

Co-authors: Emmalin Buajitti, Arjumand Siddiqi, Peter M. Smith, Rahul G. Krishnan, Laura C. Rosella, University of Toronto

Background: The social determinants of health are interconnected, however most research examines each determinant individually. Through unsupervised machine learning we aim to identify multidimensional social exposure profiles at the population level.

Methods: Ontario residents aged 25 to 64 who participated in the Canadian Community Health Survey (CCHS) between 2000 and 2012 (62,368 females, 53,523 males) were linked to the Canadian Census (2001, 2006, 2011) using postal code at CCHS interview. Individual-level social determinants were captured through the CCHS, while area-level indicators came from the census. Continuous measures were scaled prior to dimension reduction (Principal Component Analysis, 90% variance). Unsupervised machine learning clustering, through k-prototype, was applied to identify social exposure profiles. Descriptive analysis was used to assess differences in cluster-membership across social indicators. All analysis was sex stratified.

Results: ML methods identified four distinct clusters (A, B, C, D) with similar patterns across each. Cluster A had the highest proportion of visible minorities, immigrants, and residents of densely populated, racially diverse neighborhoods with high material deprivation. Cluster B had more non-partnered, social assistance-reliant, and food-insecure individuals, living in areas a high proportion of lone parents, and people living alone. Cluster C was characterized by social advantage across education, employment, and income, with area-level indicators of low unemployment and high material resources. Cluster D had a slightly older average age compared to the sex-specific sample average (respectively: females 47.0 vs 43.7; males 46.5 vs. 43.9) and resided in rural areas with high residential stability. While cluster descriptions were similar across sexes, females experienced higher economic disadvantage across several indicators compared to males.

Conclusions: Distinct profiles of multidimensional social exposure emerged following the application of unsupervised machine learning to a population-based cohort. Future work will examine whether these exposure profiles are associated with differential risk of health outcomes, potentially revealing opportunities for intervention.

Change of Preferences in Family Formation by Age, Cohort, and Period in South Korea

Presenter: Jeong-A Lee, Sciences Po, CRIS,

Previous literature indicates that South Korea is experiencing a significant ideational change, with a trend toward liberal views emerging in the younger generation compared to the more traditional views of older cohorts. However, few studies have examined the complex interactions between cross-cohort changes and within-cohort changes over extended periods. Moreover, within-cohort changes in preferences, which is understudied, remain inconsistent in the existing literature for the South Korean case. For instance, one study finds that women tend to become more conservative with age, while another study shows a decline in support for traditional gender norms over time, specifically regarding marriage. However, both studies have been limited in their ability to track long-term changes. Using data from the Korean Longitudinal Survey of Women and Families (2008-2022), a panel survey of 9,997 women aged 19 to 64, this study will reconcile these differing patterns of change by leverage nine waves of data to provide a better perspective on shifting attitudes towards family formation. Specifically, this study will examine multiple dimensions including attitudes towards childbearing, childrearing, marriage, gender norms and intergenerational support. To capture these changing patterns, a latent transition framework will track how attitudinal classes—identified through latent class analysis—shift over time. Additionally, multinomial logistic regressions, incorporating sociodemographic and contextual factors (e.g. parental leave and childcare availability), will identify the characteristics that predict an individual's likelihood of belonging to different attitudinal classes. Finally, Age- Period-Cohort (APC) models will disentangle the effects of aging, societal change and cohort-specific traits, offering insights into the mechanisms of value adaptation — where events changes value orientations — and selection, where pre-existing values predict later events.

Staying Positive: Psychosocial and Socioeconomic Determinants of Psychiatric Morbidity in Young Adults with HIV in the Netherlands

Presenter: Jonas Bergmann, University of Amsterdam

Co-author: Lonneke van Den Berg, University of Amsterdam

Advances in antiretroviral therapy (ART) and preventive measures like PrEP have reduced HIV transmission rates significantly. However, the mental health burden remains high, particularly among young adults (18-35). This study contributes to the literature by examining how Socio-Economic Status (SES) relates to mental health outcomes of young adults with HIV in the UK. It does so by zooming in on the moderating role of stigma and health literacy. Although previous studies suggest socioeconomic differences, to my knowledge no previous study has examined how stigmatization and health literacy accentuate these effects in this population. Young adults from lower SES backgrounds are expected to be more vulnerable to stigma and a lack of health literacy, which are both essential factors shaping the well-being of young people with HIV. To study this topic, new data is being collected among young adults 18-35 living with health. Validated measures of HIV stigma (PAN-Stigma), depressive symptoms (PHQ-9), SES indicators (education, income, employment), and health literacy (IMTA) will be used. These data will provide an unique insight in the wellbeing of young people with HIV today. Multiple regression models will analyze direct and moderating effects, while factor analysis will validate construct measures. Higher HIV stigma is expected to correlate with increased depressive symptoms, with health literacy moderating this relationship. Those with higher SES and stronger health literacy are anticipated to demonstrate greater resilience, while lower SES and limited health literacy may exacerbate psychological distress. Findings will inform interventions aimed at reducing stigma's mental health burden and addressing structural inequalities in HIV care.

Addressing Inequalities in Postnatal Mental Health and Parent-Infant Bonding: An Evaluation of the 'Baby Steps' Antenatal Parenting Programme

Presenter: Kate Mooney, University of York

Co-authors: Tracey Bywater, Sarah L. Blower, Dacheng Huo, University of York; Sara Ahern, Matthew Walker, Sebastian Hinde, Josie Dickerson, Bradford Institute for Health Research

Introduction: Difficulties with postnatal mental health may impact on a parent's capability to respond sensitively to their infant (ie. parental sensitivity), which can influence a child's early development. Providing intervention to parents early on in their child's life could prevent the development of inequalities in child outcomes. Our objectives were to assess whether Baby Steps is effective for improving (1) postnatal maternal sensitivity and (2) postnatal maternal mental health at 6-10 weeks post-birth.

Methods: Born in Bradford's Better Start (BiBBS) is the world's first interventional cohort study. 'Baby Steps' is a parenting programme that starts antenatally and aims to improve maternal sensitivity and mental health post birth. Multiple imputation (MI) by chained equations imputed missing data, and propensity scores were estimated to match each Baby Steps participant to demographically comparable control participants in terms of baseline sociodemographic variables, prenatal mental health, and attachment. Linear regression will test whether Baby Steps is associated with maternal sensitivity (measured using the Mothers Object Relations Scale Short Form) and mental health (using the PHQ8 and GAD7).

Results: Balanced propensity score matched groups have been created in each MI dataset, with 123 intervention participants matched to two control participants. The analysis to test whether Baby Steps improves maternal warmth, maternal invasion, depression, and anxiety is in progress. A health economic and process evaluation are in progress.

Conclusion: This research will reveal whether Baby Steps is effective for improving maternal outcomes in a socioeconomically disadvantaged and ethnically diverse setting, potentially providing a pathway for reducing inequalities in children's outcomes.

Validating a Measure of Intrinsic Capacity in the Dunedin Study: A Sample of Midlife Adults

Presenter: J. Kathy Xie, Duke University

Co-authors: Avshalom Caspi, Renate Houts, Terrie Moffitt, Duke University

Intrinsic capacity is a World Health Organization supported multidimensional indicator of healthy aging that focuses on functional capacity rather than morbidity and mortality. Intrinsic capacity captures the sum of all mental and physical capabilities of the individual and includes 5 domains: locomotor, cognitive, psychological, sensory, and vitality. Consistent with the geroscience view that we must target aging processes early to extend healthspan, there is a need to validate intrinsic capacity in younger adults. Currently, the youngest participants in validation studies are 45, and most are over 65. We modelled intrinsic capacity using data from the Dunedin Study, a population-representative longitudinal birth cohort (N=1037, Age=45). Measures comprising the 5 intrinsic capacity domains were attained using direct clinical testing and self- and other-report. Preliminary results from confirmatory factor analysis show that a bifactor model with 1 general factor (intrinsic capacity) and 5 specific subfactors (locomotor, cognitive, psychological, sensory, vitality) fit the data well, χ^2 value = 410.06 (df = 123); Comparative Fit Index = 0.93; Tucker-Lewis index=0.91; Root-Mean-Square Error of Approximation = 0.05. Future results will relate these factors to functional outcomes, such as biological aging, Alzheimer's disease risk, and life satisfaction.

Childcare Attendance and Childhood Obesity: A Comparative Study of Longitudinal Trajectories in France and the UK

Presenter: Laura Ciavarella, University of Lausanne

Co-authors: Mauricio Avendano, University of Lausanne; Lidia Panico, Sciences Po Paris (France),

Overweight and obesity in childhood are significant public health challenges, with 37 million children under the age of five, and 390 million children and young people between 5 and 19 years, classified as overweight or obese globally. In Europe, 1 in 4 children aged 6 to 9 are overweight. These conditions affect health outcomes and can result in type 2 diabetes, hypertension and increased risk for chronic diseases in adulthood. Evidence shows that a significant amount of obesity risk is initiated during early childhood. While individual, biological, and sociocultural determinants of childhood obesity are well documented, there is limited research on the role of public policies, particularly Early Childhood Education and Care (ECEC). This paper assesses whether attending preschool education is associated with trajectories of overweight and obesity among preschool-aged children in France and the UK. These countries have different policies: France provides substantial financial assistance promoting early and extensive childcare attendance, while the UK offers comparatively limited subsidized childcare provision

Using longitudinal data from the French National Cohort (Etude Longitudinale Française depuis l'Enfance - ELFE) and the Millennium Cohort Study (MCS) in the UK, this study investigates childhood weight trajectories from birth to five years for children who entered childcare and those who did not attend childcare. Growth curve models will be applied to capture longitudinal patterns of Body Mass Index (BMI) development, stratified by parental socioeconomic status. We will consider results from France and the UK in comparative perspective and discuss the influence of the policy context.

This research aims to enhance understanding of how policy environments are associated with childhood obesity risk, contributing to life course research and knowledge on social determinants of health. By comparing two distinct policy contexts, this study provides empirical evidence that may inform discussions on early childhood environments and health inequalities.

Changes in Residential Mobility and Living Arrangements in Later Life Among Older Canadians in Couple-Only Households

Presenter: Lisa Strohschein, University of Alberta

Older adults often express a desire to stay in their homes for as long as possible, preferring spaces and routines that are familiar. Nonetheless, declining health, economic pressures and spousal death can alter those preferences and precipitate change. This study seeks to understand factors that lead older couples to experience a first transition in residential mobility (where one lives) and/or living arrangements (with whom one lives). Data come from nine waves of the Canadian National Population Health Survey collected every other year between 1994/95 and 2010/11, with analysis restricted to respondents aged 65+ living in a couple-only household at initial interview (N=1267).

Three categories were constructed for the type of change respondents first experienced: (1) a change in residence only includes respondents who move to a different location, but do not add new residents, (2) a change in living arrangements

only reflects respondents who remain in the same residence, but have someone move in with them, and (3) a change in both location and living arrangements, such as might occur for respondents who move in with adult children or into a nursing home. Spousal bereavement was not treated as a change in living arrangements so as to determine whether it was a predictor of change.

Results indicate changing one's residence only (25.3%) was the most common change respondents first experienced (25.3%). Fewer respondents experienced a change in living arrangements only as their first transition (14.4%); fewer still change both as their first transition (9.5%). Competing risks analysis for time to first event, (where no change, death and attrition before first event were treated as censoring) revealed that homeownership was protective against change whereas poor self-rated health and spousal bereavement were associated with increased risks of change. A competing risks model that differentiated between each transition type provided a more nuanced perspective.

Gender as a Latent Variable in a Structural Equation Model: Sex and Gender as Predictors for Migraine and Stroke Diagnoses

Presenter: Mascha Kern, Charité – Universitätsmedizin, Berlin

Co-authors: Hans-Aloys Wischmann, Alex Müller, Tobias Kurth, Stefanie Theuring, Charité – Universitätsmedizin, Berlin
Sex and gender both shape health outcomes, often in complex ways that intertwine biological and social influences. Researchers have criticised analyses that conflate sex and gender in quantitative research, but recent studies have underlined the inherent difficulties of separating their effects and even questioned the feasibility of quantitatively disentangling them.

To address the challenge of studying sex and gender in a differentiated but integrated way, we will employ a directed acyclic graph (DAG) to conceptualize the influence of sex and gender on migraine and stroke diagnoses using data from the representative German Socio-Economic Panel (SOEP). As an independent predictor influenced also by sex assigned at birth, we operationalize gender as an unobserved latent variable with the use of multiple gender-related observables. We use the SOEP data to test the model assumptions made in the DAG model and to explore potential alternative models using causal discovery techniques. We codify the causal model as a structural equation model (SEM) to estimate gender and to study the effects of sex and gender on the outcomes within the same model. The estimated coefficients will be presented in both tabular and graphical (path diagram) formats. The results will be interpreted in the context of the a-priori assumptions underlying the causal model.

Our findings will contribute to the ongoing discourse on quantitative methodology in sex and gender health research. We aim to demonstrate that the contextual and social complexities of sex and gender can be systematically addressed in quantitative analyses by leveraging causal models that include gender as an unobserved latent variable, and by using a structural equation model to estimate both the latent gender and specific effects of gender and sex on the outcomes.

Cognition in Later Life and Life Course Socioeconomic Determinants: Longitudinal Evidence from The China Health and Retirement Longitudinal Study (2011-2020)

Presenter: Mengling Cheng, East China University of Science and Technology

Evidence showed that differences in later-life cognition were associated with variations in socioeconomic status (SES) in various life course periods. However, less is understood about the effects of SES over the life course and the underlying patterns. Guided by the life course perspective, this study examined the association between SES across childhood, adulthood, and older age and later-life cognition in China, testing four life course models: critical period, sensitive period, pathway, and accumulation. We used data from the China Health and Retirement Longitudinal Study (2011- 2020, 17,000 participants). We measured cognition globally and across domains. We measured SES in childhood, adulthood, and older age, alongside a cumulative SES index. We performed multilevel growth curve models to test the four life course models.

Results revealed that SES throughout the life course was associated with later-life cognition, with consistent evidence in global cognition and across cognitive domains. Findings supported the sensitive period, pathway, and accumulation models, but not the critical period model. In particular, older women and rural residents were more vulnerable to the adverse effects of socioeconomic disadvantages on cognition over time.

Our study highlights the importance of addressing SES disparities across the life course to mitigate its impact on cognitive aging.

Services Provided by Older Adults to Family Members: A Configurational Perspective

Presenter: Myriam Girardin, University of Geneva

According to active ageing theories, older adults who provide services within their families are in better health. It allows them to maintain an important role in the family, which boosts their self-efficacy. It also tends to strengthen the links between providers and recipients. Much of the literature has focused on the profiles of providers and recipients and the quality of their relationships. However, research has paid little attention to the family dynamics into which older adults are integrated. Yet we hypothesize that family dynamics and the propensity of older adults to provide services within their families are closely linked. This study, therefore, aims to go beyond dyadic 'provider recipient' relationships by considering all the relationships that makeup family networks. To do this, we adopt the configuration approach, which sees families as networks of significant family members who are related to each other through interdependent ties.

The data we used come from the VLV study, an interdisciplinary study carried out in 2011-2012 on the living and health conditions of people aged 65 and over living in Switzerland (n=3032). The results show that different types of services provided by older adults are significantly related to the density of practical help and conflict within their family network, as well as to the central role they play in it. Our findings underline the importance of considering the whole family network in which older adults are involved to understand their propensity to be service providers within their family.

Differential Effect of Parenting Style During Adolescence on Adult Cardiovascular Disease and Hypertension by Family Financial Situation: A Population-Based Study

Presenter: Nazihah Noor, University of Fribourg

Co-authors: Josephine Jackisch, Max Planck Institute for Demographic Research; Arnaud Chiolero, Stéphane Cullati, Cristian Carmeli, University of Fribourg; Kathleen Mullan Harris, University of North Carolina at Chapel Hill

Background: While much research has examined individual behavioral risk factors as determinants of cardiovascular health and of its socioeconomic gradient, less is known about the role of family environments, particularly parenting styles during adolescence. Individuals from poor families may experience stronger harmful effects due to heightened susceptibility. Adopting a life course perspective and a causal inference framework, we aim to quantify the effect of parenting style on offspring's adult cardiovascular health and whether it differs by family financial status.

Methods: We will conduct a population-based cohort study of adolescents from the National Longitudinal Study of Adolescent to Adult Health, recruited in 1994 – 1995 from the United States and followed into adulthood (n = 4452). Parenting styles will be operationalized as authoritative, authoritarian, permissive and indifferent, and measured via reports of parental responsiveness and demandingness by the adolescents (baseline, ages 12 – 19). Family financial status, measured by difficulty paying bills as reported by parents at baseline, will be examined as the effect modifier. The outcome will be cardiovascular disease and hypertension, as measured using biomarker and self-reported data in adulthood (ages 33 – 43). We will use doubly robust estimation methods with inverse probability weighting and logistic regression to quantify 20-year risk differences by family financial status.

Expected results and impact: We hypothesize that authoritative parenting will be associated with lower cardiovascular risk, particularly among adolescents from financially disadvantaged families, whereas neglectful parenting may exacerbate long term cardiovascular risk in these groups, potentially due to increased stress and maladaptive behaviors. Understanding how financial adversity modifies the effect of parenting styles on cardiovascular outcomes will elucidate whether specific parenting styles can mitigate or exacerbate socioeconomic disparities in adult cardiovascular health. Findings could inform family-based interventions and social policies aimed at reducing cardiovascular risk and promoting health equity.

ORIGINS: Nutrition Profile of Pregnant Women in a Longitudinal Birth Cohort

Presenter: Sarah Whalan, The Kids Research Institute Australia

Co-authors: Poonam Pannu, Alexander Scherini, Desiree Silva, The Kids Research Institute Australia

Dietary intake during pregnancy is an opportunistic time to influence future disease susceptibility in offspring later in life. The ORIGINS cohort was established to identify what factors contribute to 'a healthy start to life' through a focus supporting childhood health and preventing disease (including noncommunicable diseases).

We aim to describe the dietary intakes of pregnant women in this cohort and compare this to the Nutrient Reference Values (NRVs) and Australian Recommended Food Score (ARFS). The usual food and nutrient intakes of women were collected using the Australian Eating Survey (AES), a semi-quantitative Food Frequency Questionnaire (FFQ).

A total of 374 women completed the AES FFQ at both 20-weeks and 36-weeks' gestation between December 2016 and January 2023. Macronutrient, micronutrient and food group intake were explored using descriptive statistics. Overall, it was found that the energy contribution from carbohydrate was low, while fat and saturated fat was high, participants were not meeting recommendations for several key micronutrients (calcium, iron, iodine and folate) and they had low diet quality scores for all food groups. These findings suggest that despite ongoing promotion of healthy eating during pregnancy, further exploration of why dietary guidelines during pregnancy are not adhered to is warranted.

Family Dynamics Amid Economic Hardship: Financial Stress, Social Capital, and Children's Academic Achievement

Presenter: Yuka Temmyo, University of Zurich

Scholars have explored how unexpected economic hardships caused by unpredictable social events affect family environments, children's development, and academic outcomes. The family stress model (FSM) demonstrates how economic hardship can harm marriages, diminish parenting quality, and negatively impact children's academic performance. The model shows how hardships affecting one family member can impact others, creating a cycle of disadvantages that may persist across generations. However, the FSM takes a relatively narrow view of family relationships' connectedness and family dynamics. Family systems theory (FST) allows for looking at a broader range of family interactions than the FSM. The FST emphasizes family relationships' connectedness; it suggests that dyadic family relationships are reciprocally influenced. Despite this, few scholars have integrated the FSM with the FST to explore how grandparent–parent relationship quality can serve as a family social resource (i.e., social capital) to foster a better parent–child relationship in an economically strained family environment where parents' relationships may deteriorate. Using parents' unemployment history during the Great Recession (December 2007–June 2009) as an example of family economic hardship, this study extends the FSM by using the FST. It utilizes longitudinal, two-generation data from the Youth Development Study (N = 425 dyads).

The main analysis uses data from parents in their mid-thirties during the recession and their adolescent children and estimates a structural equation model. Presuming that greater social capital fosters higher academic achievement regardless of economic hardship, this study assesses whether high-quality grandparent–parent relationships buffer poor-quality parental relationships and help improve parent–child relationship quality and children's academic achievement. The results suggest that high-quality grandparent–parent relationships can be a key resource during economic hardship, enhance parent–child relationships, and promote academic achievements.

The findings offer valuable insights for policies that strengthen family dynamics in education, including children's education quality.

The Long-Term Health Consequence of the 1958-1961 Great Leap Forward and Famine in China: Evidence from a Quasi-Experiment

Presenter: Zongpu Yue, University College London

Co-authors: Stephen Jivraj, University College London; Emily Murray, University of Essex

The 1958–61 Great Leap Forward movement (GLF) and subsequent famine stands out as the worst in human history, with approximately 15–30 million excess deaths and about 30 million lost or postponed births. However, very few scholars have touched on the long-term health consequences. This study employs a difference-in-difference estimator to identify the effects of childhood exposure to the GLF on frailty index (FI) in middle- and later-life, taking into account temporal and geographic variations in the GLF severity under the consideration of regional fixed-effect and selection biases. Using data on 22,979 respondents from China Health and Retirement Longitudinal Study, five birth cohorts based on the life stages during the GLF are identified. The results show that each additional unit increase in the GLF severity results a higher FI by 0.017 ($p=0.071$, 95%CI: -0.001, 0.035) and 0.021 ($p=0.112$, 95%CI: -0.006, 0.048) among individuals experienced the GLF at ages 0–3 and 4–11, respectively. Conversely, almost no health effect (0.005, $p=0.780$, 95%CI: -0.032, 0.042) is observed in individuals who experienced the GLF at ages 12–17, and a “protective effect” (-0.027, $p=0.269$, 95%CI: -0.078, 0.023) of the GLF for individuals who experienced it in adulthood is found due to the mortality selection bias. Gender differences further reveal that the positive selection biases are greater among women aged 12 and older, obscuring the adverse impact of the GLF exposure on health, while the GLF negatively affect men's health across all life stages. The findings strongly suggest welfare policies should be formulated for people experienced this tragedy, and efforts to reduce childhood adverse experiences should be undertaken.

Results: The total BHS and sub-scores increased between two measurements in both men and women, except cardiovascular sub-score. Changes in the BHS, independently of age and its baseline value, were linked to prior behaviours, dietary patterns and socioeconomic factors. Univariate and adjusted for potential cofounders Cox models revealed that a 4-year increase in BHS was associated with higher rates of CVD and mortality, and tend to be associated with higher cancer incidence, independently of age and baseline value. We however do not observe any significant mediated effect of education nor income through delta BHS.

Discussion: We demonstrated that the change of a composite biological score over a few years, independent of age and its initial level, is socially pattern and can predict the incidence of mortality, cardiovascular diseases and, to a lesser extent, cancer.

TALK 3: Socioeconomic Position and Inflammation in Childhood and Adolescence: Analyses of Four Longitudinal Cohort Studies

Presenter: Kavindi Walpitagamag, Murdoch Children's Research Institute

Co-authors: Toby Mansell, Susanna Pättsi, Tong Chen, Barwon Infant Study Investigator Group;

Naomi Priest, David Burgner, Murdoch Children's Research Institute

Background: Early life is a critical period for the biological embedding of the social environment, with disease risk accumulating across the life course. Systemic inflammation is a key mechanism in social-to-biological transitions. We investigated the extent to which neighbourhood, household and individual-level socioeconomic exposures are associated with inflammation in childhood and adolescence and assessed the extent to which this relationship is mediated by BMI.

Methods: We conducted cohort-specific analysis in four longitudinal studies: the Barwon Infant Study (BIS, Australia, n=708, 4 years); Born in Bradford (BiB, UK, n=4576, 7–11 years); the Longitudinal Study of Australian Children's Child Health CheckPoint (LSAC-CP, n=1874, 12 years); and the Northern Finland Birth Cohort 1986 (NFBC 1986, n=9467, 15–16 years). Exposures, measured in pregnancy/infancy, were neighbourhood disadvantage, household income, and maternal education. Outcomes were log-transformed high-sensitivity C-reactive protein (hsCRP) and glycoprotein acetyls (GlycA). We conducted confounder-adjusted multiple linear regression and explored the role of BMI through causal mediation analysis based on interventional effects.

Results: Greater neighbourhood disadvantage and lower maternal education were consistently associated with higher inflammation in BiB, LSAC-CP and NFBC 1986 (e.g., difference in mean log GlycA between: i. most and least disadvantaged neighbourhoods in BiB: 0.14 standard deviations [95% CI 0.03–0.24]; ii. Most and least educated mothers in LSAC-CP: 0.23 [0.00–0.46]). Fewer effects were observed for household income and a minimal effect size between SEP and inflammation was found in BIS at 4 years. BMI was an important mediator in some models (e.g., intervening to reduce BMI in BiB children from disadvantaged neighbourhoods could reduce absolute GlycA differences by 45%).

Conclusion: Socioeconomic inequalities in systemic inflammation are evident in mid-childhood and adolescence across Australia, Finland and the UK, partly mediated by BMI. Interventions should address upstream socioeconomic conditions as well as downstream targets such as obesity.

TALK 4: The Role of Interpersonal Touch in Physiological Wellbeing: Cross-Sectional, Longitudinal, and Experimental Evidence

Presenter: Meena Kumari, University of Essex

Co-authors: Gabriele Navyte, Helge Gillmeister, University of Essex

The COVID-19 pandemic created an unprecedented period of touch deprivation. Interpersonal touch supports health, well-being, and stress-regulation, yet research has largely focused on younger adults and single health markers, overlooking its multi-systemic impact in older adults, who may be at risk of touch deprivation. This research examines four studies on touch and health in older adults. Cross-sectional analyses from the National Social Life, Health, and Aging Project (NSHAP) (n = 1,419) found frequent partner touch associated with better neuroendocrine health ($\beta = 0.13$, $p = .004$), while longitudinal analyses (n = 787) linked it to improved metabolic ($\beta = -0.08$, $p = .006$) and cardiovascular ($\beta = -0.14$, $p = .005$) health.

A four-month longitudinal survey (n = 57) revealed that partner hugs were the most frequent and pleasant form of touch, with older adults consistently reporting wanting more touch than they experienced. These findings highlight the importance of interpersonal touch in ageing populations, with implications for public health and the potential for vicarious touch as a low-cost intervention in social care and clinical settings.

5B STREAM: EDUCATION / EMPLOYMENT 2

SYMPOSIUM

A Dearth of Data: How Canadian Researchers Are Constructing Their Own Data Sets in the Absence of Government Data Collection Initiatives

Chair: Karen Robson, McMaster University

In this symposium, various education researchers from Ontario, Canada, discuss the data collection techniques they have used to develop longitudinal evidence on the educational and later-life outcomes of Ontarians. With a lack of current provincial and federal longitudinal data sets that collect information on demographic characteristics and educational attainment, achievement, and transitions into the work force, these presenters are part of three different data building exercises that help explain what is happening in Ontario now and also what has happened historically.

TALK 1: History, Agency, and the Class of '73

Presenter: Paul Axelrod, York University

"The Story of a Generation: Tracking the Pathway of the Class of '73," employs life course theory to examine the interplay between historical change, social structure, and personal agency. This paper focuses on how individuals from the Class of '73 navigated significant societal shifts and made decisions about their futures in response to broader social changes.

The presentation explores three major historical changes that impacted the cohort's life experiences between the 1980s and 2020. First, it examines how individuals managed economic uncertainty and volatility, including recessions and the 2008 financial crisis. Second, it investigates their adaptation to technological revolutions such as computerization, robotics, and digitization in the workplace. Finally, it analyzes their responses to cultural shifts, including increased workplace diversity and the implementation of human rights legislation. I conclude that the subjects of the study generally adapted successfully to these historical forces, demonstrating resilience and flexibility in the face of significant economic, technological, and cultural changes. This research provides valuable insights into how late baby boomers navigated the evolving landscape of post-World War II society, highlighting the complex interactions between individual agency and broader societal transformations.

TALK 2: The Study of a Generation: The Life Course Experiences of the Class of '73

Presenter: Paul Anisef, York University

This paper summarizes the main findings of a 47-year-old longitudinal study entitled "The Study of a Generation: The Life Course Experiences of the Class of '73". The project began as a short-term study of high school students and their attitudes and behaviors with respect to educational plans to provide projection data for post-secondary enrolments to the Ontario Ministry of Colleges and Universities (MCU). With the assistance of the Survey Research Centre at York University, a sample survey of Ontario grade 12 students was carried out in the spring of 1973. Over the next four decades, a total of six follow-ups were conducted with the same cohort. Surveys were employed across all seven phases of the study; in-depth interviews were employed in select phases. In this paper, we examine the life course experiences, trajectories and pathways of a baby boom cohort as it relates to their education, employment, retirement planning and experiences and life satisfaction. By way of illustration, the Class of '73 emerged from an extraordinarily expanded educational system that saw rising high school graduation rates and higher levels of postsecondary participation, particularly among women, than in the recent past. Young people had high educational and occupational aspirations, and with parental encouragement, students perceived extended schooling as a critical determinant of future occupational and material success. Notwithstanding public policies that expanded educational opportunities, social class distinctions persisted and, in some ways, were reinforced by the school system. Just as now, students from lower socioeconomic backgrounds were less likely to attend university than their more affluent peers and more likely to enter the workforce directly after high school or enrol in community college. Those with more highly educated parents who promoted university education, either directly or indirectly, were more likely to follow in their parents' academic footsteps.

TALK 3: Student Mobility in Hamilton, Ontario

Presenter: Karen Robson, McMaster University

In this research, I report on the findings of a community project in which data sharing between four institutions is undertaken in order to learn more about the post-high school trajectories of Hamilton youth. This project has been ongoing for several years, in an attempt to build a template for other data sharing exercises across the province and country, as the provincial government with Ontario has not fostered the development of longitudinal education data sources, despite collection much data on students in the course of daily business. Utilizing an ongoing data-sharing agreement and Hamilton Community Research Partnership between Hamilton post-secondary institutions and the public and Catholic school boards, I will explore student pathways to and transfer between two key Hamilton PSE institutions, McMaster University and Mohawk College. Using this data, I highlight which the characteristics of students who attend these post secondary institutions and the predictors of their transfer.

5C STREAM: METHODS

SYMPOSIUM

Findable, Accessible, Reusable and Interoperable (FAIR) Research Data: Efforts to Maximise the Potential of Longitudinal Data Through Discoverability Platforms

Chair: Louise Arseneault, King's College London

This symposium brings together four presentations on innovative tools showcasing longitudinal data resources. The aim is to provide a vision for making data more Findable, Accessible, Interoperable and Reusable (FAIR), and introduce attendees to two initiatives that facilitate the discoverability and use of longitudinal data from the UK and across the world.

The first presentation describes the development of the Atlas of Longitudinal Datasets, an online data discoverability platform sharing information about over 2,000 longitudinal datasets from across the globe. The second presentation describes the Catalogue of Mental Health Measures, which compiles, and disseminates information about mental health measures in over 60 UK longitudinal studies. The third presentation will showcase the contribution of advisors with lived experience of mental health conditions (LEEs) in the development and expansion of these platforms. The fourth presentation will draw on insight from the development of the Catalogue and the Atlas to share strategies that data custodians can use to make their data more discoverable.

Together, the presentations will address data richness, data access, the uneven distribution of longitudinal resources, LEE involvement, and exciting opportunities for research. This symposium will be relevant not only to data users but also to data custodians and funders.

TALK 1: The Atlas of Longitudinal Datasets: A Gateway to Thousands of Longitudinal Datasets from Across the Globe

Presenter: Bridget Bryan, King's College London

Longitudinal studies are a powerful research tool that have generated a wealth of opportunities to answer pressing questions about human health and society. However, data collected in longitudinal studies have often been underused despite the considerable investment that they represent and the research opportunities they offer, as they can be difficult to find and their data can be difficult to access. Improving the discoverability of longitudinal data is an essential step towards increasing the outreach and impact of these valuable data resources.

The Atlas of Longitudinal Datasets is an interactive online platform that aims to maximise the uptake of longitudinal data by improving the discoverability of thousands of longitudinal datasets from around the world. The Atlas shares metadata from over 2,000 longitudinal datasets from around the world, including information about their location, sample and unique features, as well as detailed information about data collection methods, mental health, neuroimaging, linkage and qualitative data, and data access policies. Users can explore and search thousands of longitudinal datasets on the Atlas, filter their searches to narrow down the number of relevant datasets, compare features of different datasets and save their favourite datasets and searches to return to. The Atlas aims to offer a resource for users of longitudinal data when planning new research projects, as well as data custodians in maximising the discoverability of their data. The Atlas can also facilitate the development of collaborations and consortia and be a resource for funders in identifying gaps and areas for enrichment across the global landscape. This presentation will introduce the Atlas, share insight into how it has been developed, and showcase its use as a free-to-access tool for data users, data custodians, funders and the community.

TALK 2: The Catalogue of Mental Health Measures: A Comprehensive Resource for Mental Health Data in UK Longitudinal Studies

Presenter: Daniel Yu, King's College London

The UK is home to some of the world's largest and longest-running longitudinal studies. These studies provide unique opportunities to answer key questions about mental health and wellbeing across the life course. The Catalogue of Mental Health Measures is designed to provide easy access to information about the mental health and wellbeing measures in UK longitudinal studies. It aims to facilitate mental health research, maximise the use of existing data and support researchers' search for information about mental health measures. To do this, the Catalogue provides a search engine to discover the measures administered at each sweep of data collection in over 60 UK studies. These measures are displayed in the context of each study, including overview information about the sample, linked data and data access policies.

The Catalogue aims to respond to the needs of the research community and is continuously expanding to include new studies and to report on further information about studies, such as personality and temperament measures, and physical health and socioeconomic data. This information on the Catalogue serves as a resource for researchers who may be interested in exploring existing longitudinal studies, identifying studies that include specific mental health and wellbeing measures, planning harmonisation studies and/or designing research projects and grant applications. The resource is particularly useful for early career researchers who wish to use longitudinal data and for researchers from disciplines outside mental health (e.g., demographers, economists) who want to include an element of mental health in their research.

This presentation will introduce the Catalogue and summarise the ways in which it continues to develop, including the recent progress on increasing its accessibility and usability as an open-access resource for the research community and beyond.

TALK 3: Co-Creating Discoverability: Building Research Platforms with Experts by Experience

Presenters: Jan Speechley and Michael McTernan, King's College London

Experts by experience must be an integral part of longitudinal health research, helping to design and develop studies from initiation to completion. Working with lived experience experts ensures research is relevant and accountable to people who experience mental health conditions and is clinically relevant. However, a recent review of the global longitudinal data landscape found that very few large studies have worked with lived experience experts when developing their research programme. Similarly, as data discoverability platforms are primarily researcher oriented, there are important barriers to the transparency and accessibility of the longitudinal data that they showcase. Co-production supports the transparency of longitudinal research, and ensures resources designed and produced for the public have public input.

Collaboration with lived experience experts in the development and expansion of the Catalogue of Mental Health Measures and the Atlas of Longitudinal Datasets has been vital in ensuring these platforms are usable and accessible for a diverse and global range of users. Our team of lived experience experts are based across the United Kingdom, Nigeria, Sweden, and Zimbabwe, and bring expertise by lived experience of mental health, neurodiversity and sensory impairments. Their feedback from individual pilot testing the platform has been crucial, with several suggestions already implemented, ensuring that the voices of those with lived experiences are integrated into the research development process.

While it remains the exception, co-production is rising in longitudinal research. However, it is still common for it to feel tokenistic rather than meaningful. This presentation will provide an overview of our process for implementing a meaningful co-production for the creation and development of the Catalogue of Mental Health Measures and the Atlas of Longitudinal Datasets. It will highlight activities, decision-making processes, outputs and methods for maintaining constant dialogue between the group.

TALK 4: How to Improve the Findability of Longitudinal Data: Lessons Learned from Landscaping Thousands of Global Longitudinal Datasets

Presenter: Malaika Okundi, King's College London

The Atlas of Longitudinal Datasets is designed to make longitudinal data from around the world more discoverable to people from all sectors, including researchers, students, funders, policy-makers, lived experience experts, participants, and the public. In developing the Atlas, we have identified and collected metadata for thousands of longitudinal datasets from across the world. Through this process, we have encountered a number of challenges in finding and summarising information about valuable longitudinal datasets and noticed patterns in these discoverability and access issues. This presentation will delve into the 'dos and don'ts' of dataset discoverability and offer practical strategies that can be integrated into both new and existing longitudinal studies.

This presentation will provide a range of methods that can make longitudinal datasets more searchable, discoverable, recognisable and memorable, with the broader aim of making their valuable data more findable, accessible, interoperable, and reusable according to the FAIR data principles. Additionally, this presentation will describe ways to make information about the collected data more accessible without using complex and hard-to-find data dictionaries. These strategies can be straightforward, cost-effective, relatively easy to implement and yield significant benefits. By making data and research more transparent and improving the uptake of research data, these strategies align with the priorities of funding bodies and allow the valuable data that study participants provide to reach a wider audience, enhancing the overall impact. Adopting these strategies will not only facilitate increased discoverability and accessibility of data but also foster a more collaborative and transparent research environment, ultimately advancing the field of longitudinal research.

5D STREAM: YOUNG LIVES

INDIVIDUAL CHILDHOOD 1 PAPERS

TALK 1: Patterns of Infants' Digital Ecology and Toddler-Age Language: Evidence from the Longitudinal BRISE-Study

Presenter: Dave Möwisch, Leibniz Institute for Educational Trajectories

Co-authors: Jessica A. Willard, Manja Attig, Leibniz Institute for Educational Trajectories; Sabine Weinert, University of Bamberg

The digital revolution has reshaped infants' developmental contexts, as they are increasingly surrounded by digital devices and engage with them in diverse ways—from active use to passive background exposure. Research indicates that daily digital exposure can range from none to over six hours, with higher usage often observed in disadvantaged families (Rideout & Robb, 2020; Brushe et al., 2023). However, our knowledge of the heterogeneity of very early digital exposure in infancy and its relation to later child development is limited.

Thus, the present study examined (1) patterns of infants' digital ecology in terms of frequency and duration of contact with various media devices, usage context (fore- versus background), co-viewing, and mothers' intentions for exposure; (2) how

these patterns are associated with infants' distal environmental factors (e.g., maternal education) and their proximal environment (including maternal behavior in observed mother-child interactions); and (3) how these patterns are related to later child vocabulary.

Methodologically, the study draws on data from N = 221 infants participating in the BRISE study (Bremen Initiative to Foster Early Childhood Development) conducted in Bremen's socio-economically disadvantaged neighborhoods. At 7 months, parents reported on a broad spectrum of aspects of digital ecology. Furthermore, various potentially associated facets of maternal/family characteristics (including observational data) were assessed. At 17 months, infants' language skills were measured using the ELFRA instrument (Grimm & Doil, 2006).

Using latent mixture modeling, three distinct patterns of digital ecology were identified: zero dosage, moderate background TV dosage, and high foreground and background dosage – with differential associations with other maternal and family characteristics. The findings further indicate that while high media dosage may have detrimental effects for later vocabulary, moderate dosage poses less risk. These results underscore the importance of a nuanced understanding of digital ecology in the context of family resources and risks.

TALK 2: Universal Provision, Unequal Outcomes: Secondary Analysis of Health Visiting and Child Development in the Born in Bradford's Better Start (Bibbs) Cohort

Presenter: Kate Mooney, University of York

Co-authors: Sarah L. Blower, Jennie Lister, Kate Pickett, University of York; Matthew Walker, Josie Dickerson, Kate Pickett, Bradford Institute for Health Research

Background: Persistent disparities in early childhood development, particularly within socioeconomically deprived and ethnically diverse communities, underline the need for health visiting services to be delivered universally and equitably. A universal 2-year health visiting review is mandated in England, however, services have faced reduced investment and workforce capacity. The objectives of this study were to (1) investigate the sociodemographic factors associated with receiving a 2- year health visiting review and (2) having a developmental assessment, and (3) investigate the association between socioeconomic status and early child development.

Methods: The Born in Bradford's Better Start (BiBBS) birth cohort represent high ethnic diversity and socioeconomic deprivation. The outcomes were: (1) receiving a 2-year visit, (2) having a developmental assessment and 3) achieving a 'Good Level of Development' (GLD). Covariates included socioeconomic status, parent language, ethnicity, and country of birth. Binary logistic regression models were estimated. RStudio was used for all analysis.

Results: BiBBS recruited 2510 women up to March 2020; of which 2032 children received a 2-year-visit, and 1542 had an ASQ recorded. Pakistani ethnicity mothers were most likely to receive a 2-year visit (OR=2.26). Other South Asian ethnicity (OR=1.75), speaking English as a first language (OR=1.28) and higher education (OR=1.54) were all significantly associated with increased odds of having a developmental assessment for their child. A high proportion of children were recorded as at risk of poor development (38%). Maternal education (OR=1.90), and financial status (OR=2.02) were significantly associated with higher odds of GLD.

Discussion: These significant inequalities in access to health visiting provision and children's developmental outcomes underscore the detrimental impact of under-resourced health visiting services in England. To mitigate these disparities and improve child development outcomes, increased investment in universal, preventative support for parents is essential.

TALK 3: Growing Up in Ireland: Key Findings of Cohort '98 at Aged 25

Presenter: Caragh Stapleton, Central Statistics Office (Ireland)

Growing Up in Ireland (GUI) is the national longitudinal study of children and young people in Ireland. This landmark survey is a principal data source for issues facing children and young people in Ireland. The main GUI survey themes are education and cognitive development; physical health and well-being; socioemotional well-being; sociodemographic factors and family structure; relationships, and social participation.

The GUI study is composed of three cohorts. Cohort '98 joined the study aged nine and 8,568 children and their families were interviewed in Wave 1. The children and their families were re-interviewed at 13, 17, and 20 years of age. For this latest wave, Cohort '98 Wave 5, at aged 25 just the young person was interviewed and the response rate for eligible respondents was 49.5% (achieved sample of 3,380). GUI Cohort 98 at age 25 was a landmark release in Ireland, the only Irish study to have followed the same group of respondents for so long into adulthood. This was also the first instance of extensively combining GUI survey data collection with administrative data, to reduce respondent burden and increase the analytical value of the data.

This paper presents some of the findings from GUI Cohort '98 at age 25, covering topics such as employment, education, health and well-being, society and relationships. Some of these findings include:

- One in eight (12.7%) of the respondents contacted to take part had emigrated.
- Of those still living in the parental home, more than six in ten (62.4%) were doing so for mostly financial reasons.
- A majority (58.5%) of respondents were in a romantic relationship.
- Nearly one-third (31.5%) of women in this group had been diagnosed with either depression or anxiety at some point in their lives.

TALK 4: The Long Arm of Childhood in 34 countries: Cross-national Comparisons

Presenter: Eduwin Pakpahan, Northumbria University

Co-author: Ridho Al Izzati, Northumbria University

Background: Using a life course framework, this study investigates the association between socioeconomic status and health during childhood and health in old age in 34 countries. Previous research has primarily focused on comparisons among high-income countries (HIC), while analyses that include upper- and lowermiddle- income countries (LMIC) remain limited, particularly in understanding the mechanisms through which childhood SES and health influence later-life.

Methods: We use cross-national cohort studies of people aged ≥ 50 in Europe (SHARE), England (ELSA), USA (HRS), China (CHARLS), Costa Rica (CRELES), Indonesia (IFLS), and India (LASI), with total sample size ($N=185,897$). Structural Equation Modelling was used to examine the mechanism of the long-lasting impact in four hypotheses: critical period, accumulative, chain of risk, and social drift across countries. Grip strength and self-rated health were used to represent measures in old age health.

Findings: The results show that the association between childhood SES and later life health is largely mediated by the adult SES in most countries for both outcomes, supporting the chain of risk hypotheses. Meanwhile, the association between childhood health and later life health indicates a strong critical period hypothesis while a weak social drift hypothesis. The relationship between childhood circumstances and later life health outcomes is relatively stronger in HIC compared to LMIC.

Interpretation: Using a comparable model, the crosscountry variation from this study indicates the presence of health inequality within and between countries. Fundamentally, the childhood hardships have profound and gradual effects on later life. This study provides a key contribution to cross-national comparative evidence within the long-arm childhood literature highlighting the role of social inequality in early life and health inequality in later life. Our findings support the policies addressing early-life disadvantages to reduce health disparities and multimorbidity burdens among aging populations.

5E STREAM: DISADVANTAGE / INEQUALITY 2

INDIVIDUAL MIGRATION PAPERS

TALK 1: Educational Pathways and Earnings Trajectories of Second-Generation Immigrants in Australia: New Insights from Linked Census-Administrative Data

Presenter: Francis Mitrou, The Kids Research Institute Australia

Co-authors: Ha Trong Nguyen, The Kids Research Institute Australia, The University of Western Australia; Tomasz Zajac, Wojtek Tomaszewski, The University of Queensland

This study employs 2011 Australian Census data linked to population-based administrative datasets to explore disparities in educational attainment and earnings trajectories among Australian-born children of diverse parental migration backgrounds from mid-adolescence to early adulthood.

Non-English Speaking Background (NESB) second generation immigrants exhibit superior academic outcomes, primarily driven by children of parents from select Asian countries. These individuals are more likely to complete higher education, particularly bachelor's and master's degrees, and specialise in fields such as management and commerce, health, natural and physical sciences, and engineering. Children of NESB immigrant parents initially earn less than their peers with Australian-born parents at ages 21–22. However, this gap closes by ages 23–24 and reverses by ages 26–27, with children of NESB fathers out-earning their counterparts by ages 28–29. Conversely, children of English-Speaking Background (ESB) immigrant parents, who exhibit weaker academic performance, also experience lower earnings compared to peers with Australian-born parents. This disparity emerges by ages 22–23 and widens throughout the study period, peaking at ages 28–29.

The findings underscore the academic and economic advantages of NESB second-generation immigrants, contrasting with the challenges faced by ESB migrant counterparts, and highlight the importance of considering parental migration backgrounds in understanding post-school outcomes of Australian-born children of immigrant parents.

TALK 2: Paradox between Immigrant Advantages in Morbidity and Mortality: Dynamic Patterns and Tentative Explanations

Presenter: Hui Zheng, University of Toronto

Co-author: Wei-hsin Yu, UCLA

Recent research indicates that immigrants are more likely to experience chronic conditions and disabilities than natives in older ages, yet they continue to exhibit lower overall mortality, thus suggesting a “morbidity mortality paradox.” We utilize the IPUMS National Health Interview Survey 2002-2018 with linked mortality data through 2019 (n=405,270) to comprehensively investigate how this paradox unfolds with age for various groups of immigrants. The analysis shows that immigrants’ advantages in chronic conditions and disabilities narrow or even disappear in old ages, whereas their mortality advantages continuously increase with age. These patterns exist for immigrants of different ethno-racial, gender, and educational groups. The decomposition analysis reveals that the narrowing gap in disability is due to immigrants’ increasing prevalence of mental illness and diabetes, shrinking advantages in lung diseases and musculoskeletal conditions and increasing vulnerability to the disabling effects of major chronic conditions.

However, immigrants are less likely to die from chronic diseases and disabilities, and this advantage strengthens with age, resulting in a widening nativity gap in mortality risk with age. We suggest that health-based selection might simultaneously postpone the onset of chronic diseases and disabilities to later ages for immigrants and enable them to better weather the mortality consequences of the diseases and disabilities.

TALK 3: Migrant Workers' Precarity in Times of Crisis and its Link to Changes in Migration and Social Policies Since the Mid-2000s

Presenter: Olga Ganjour, The University of Applied Sciences and Arts of Western Switzerland

Co-author: Eric Crettaz, The University of Applied Sciences and Arts of Western Switzerland

This paper is based on a research project analyzing the precarization of migrant workers in Europe, focusing on migration policy, social policy and labor market conditions. In recent years, the link between social and migration policies has been strengthened in many European countries. Renewal of residence and work permits, family reunification and naturalization are increasingly linked to financial independence, particularly the absence of dependence on social transfers. This paper examines labor market precarity among different categories of migrant workers, including 'old' and 'new' EU migrants, non-EU European migrants, migrants from non-European countries and 'native' workers, and its evolution since the mid-2000s. In this study, we introduce a multidimensional index of labor precarity that incorporates various employment conditions, including the temporality of contracts, the employment rate, the duration of contracts and personal income. In addition, we consider involuntary employment characteristics, such as accepting a temporary contract due to the inability to secure a permanent job or working part-time due to the unavailability of a full-time job.

Using cross-sectional panel data spanning over a decade (2009-2021) from the EU Labor Force Survey (EU-LFS), we assess the labor precarity index during three major crises: the Great Recession (post-2008), the 2015 refugee crisis and the COVID-19 pandemic.

We use multilevel fixed-effects linear regression models to account for the nested structure of repeated measures, capturing macro-level variation across twenty European countries and micro-level individual factors such as gender, age, migration history, and household composition.

The results suggest that labor precarity is strongly influenced by macro-level country characteristics and is particularly high in southern and eastern European countries. At the individual level, it is more prevalent among migrants from 'new' EU countries, non-EU European countries and non-European countries, as well as among men, those with lower levels of education and those living in single adult households.

TALK 4: Higher Education, Integration, and Happiness: Examining the Long-Term Happiness Trajectories of Immigrants in Germany and Australia

Presenter: Samitha Udayanga, University of Bremen

Co-author: Hilke Brockmann, Constructor University

With a shrinking population and a rising dependency ratio along with a growing ageing population, most high-income countries seek to attract well-educated and skilled immigrants who are willing to integrate and contribute to their socioeconomic development. Therefore, immigrant integration policies have also gained a considerable attention. However, it is unclear whether immigrants benefit from their higher education in terms of subjective well-being (commonly known as happiness). Using the German Socioeconomic Panel and Household Income, Labour Dynamics in Australia, we explored whether higher education contributes to immigrants’ subjective well-being during their life course since migration, the extent to which it mirrors better integration, and how this experience differs between immigrant men and women. We employed correlated random effect estimation, and fixed effects vector decomposition method to answer the research questions. We found that in both countries, highly educated immigrants are initially less content than their less educated peers; however, as the benefits of higher education accrue over time, subjective well-being gradually improves. This indicates that immigrant integration policies better answers to highly educated immigrants. Highly educated immigrant women benefit the most from these outcomes, while less educated immigrant women face significant

disadvantages compared to those who are highly educated. Highly educated immigrants have higher expectations, which require better life circumstances to meet them and achieve expected subjective well-being over their life course. Immigrant men, despite their high levels of education, are less happy than immigrant women. However, their subjective well-being gradually improves as compared to newly arrived cohorts. In both countries, immigrant men tend to realise their expectations over time, resulting in an increased subjective well-being regardless of their level of education. Structural and policy differences between Australia and Germany further moderate these dynamics, emphasising the importance of contextual factors in determining the extent to which education promotes subjective well-being.

5F STREAM: LONGITUDINAL STUDY 2

INDIVIDUAL WELLBEING PAPERS

TALK 1: Public Housing and Child Wellbeing: Longitudinal Trajectories of Socio-Emotional Development by Housing Tenure

Presenter: Jaimie Monk, Motu Economic and Public Policy Research

Co-author: Arthur Grimes, Motu Economic and Public Policy Research

Housing provides a central foundation for family life, particularly during the crucial early years of a child's development. While the effects of housing on children's physical health are well-understood, comparatively little attention has been given to its role in children's socioemotional wellbeing.

This study investigates whether residing in public housing during the developmentally crucial pregnancy and infancy periods supports later socio-emotional development. Using longitudinal data from 5,334 children in the Growing Up in New Zealand study, we use a multi-level growth curve model to examine socioemotional development trajectories of children who begin life in public housing versus those in other tenure types. Socio-emotional development is assessed using the Strengths and Difficulties Questionnaire at approximately two, four-and-a-half, and eight years of age.

Children who start life in public housing exhibit higher initial problem behaviour scores, likely reflecting selection effects into public housing. However, their scores decline at a significantly faster rate than children in other housing tenures, converging with their peers by later childhood.

To ensure the robustness of our findings, a placebo analysis was undertaken with a group of children from private rentals matched to the public housing group on initial behaviour problem scores and family material deprivation. The children in the placebo group did not have the same converging scores as the public housing group, suggesting the convergence was more likely due to public housing and not simply a function of higher initial problem scores, or the long-term effects of early deprivation.

These results suggest that the benefits of public housing during infancy may be cumulative over time. The findings support the provision of public housing as a policy intervention to mitigate developmental disadvantage.

TALK 2: Is the Age of Home-Leaving Causally Linked to Psychosocial Well-Being in Mid-Life? Findings from a Population-Wide Longitudinal Study of Norwegian Women and Men

Presenter: Michal Kozák, NOVA - Norwegian Social Research

Co-authors: Libor Potočár, Tilmann von Soest, University of Oslo; Hanna Vangen, Oslomet - Norwegian Social Research

Leaving the parental home has traditionally been recognized as one of the key transitional events marking the onset of adulthood. The previous research has extensively investigated factors associated with the timing of young adults' decision to leave home, macrolevel predictors of variation in the age of home-leaving across different countries, and, to a limited extent, the implications different ages of home-leaving have for socio-economic outcomes in adulthood. However, no study so far has explored the complex links between the timing of residential separation from one's household of origin and psychosocial well-being in later adult life. This study will use longitudinal population-wide survey data from the Young in Norway study (1992 to 2020; mean age 15 to 43, N = 2,215) and investigate the effects of age of home-leaving on three well-being domains: internalizing problems (depressive symptoms, anxiety symptoms, self-esteem), externalizing problems and substance use (conduct problems, heavy episodic drinking, smoking, illicit drug use), and social connectedness (loneliness, social support, close friendships, social capital). We will apply an inverse probability treatment weighting approach accounting for confounding due to participants' socio-demographic, socio-economic, and early family environment characteristics, as well as the baseline values of wellbeing outcomes in adolescence. The findings will be of great policy importance, as increasingly more young people nowadays struggle in the housing market and continue residing with their parents throughout their late 20s and early 30s.

TALK 3: Measuring Intimate Partner Violence in a Longitudinal Study: Relational, Ethical and Legal Complexities'

Presenter: Agatha Faulkner, Australian Institute of Family Studies

Co-authors: Jessica Walton, Amanda Vittiglia, Australian Institute of Family Studies

In Australia, a key priority under the National Plan to End Violence against Women and Children 2022-2032 is to build the evidence base on early intervention for people at risk of experiencing and/or using violence and to strengthen prevention work. Longitudinal studies can identify risk and protective factors that shape different trajectories and key transition points across the lifespan and so can make a unique contribution to this work. Although there is a recognised need for more comprehensive data on experiences and use of intimate partner violence (IPV), less attention is afforded to the methodological challenges within a longitudinal study, especially as most studies examining this area are cross-sectional and anonymous. In longitudinal studies, ongoing relationships are nurtured with participants in efforts to retain them in the study. As such, including measures on IPV require careful and in-depth multifaceted consideration of ethical and legal issues while prioritising the safety of the study participants and the relationship with them.

This paper discusses some of the challenges involved in including, testing and operationalising IPV survey content in The Longitudinal Study of Australian Children (LSAC). The study began in 2004 with a nationally representative sample of 10,000 children and their parents or caregivers. The children are now young adults and will be 23-24 or 26-27 years for the next data collection wave. This paper will focus on insights from engaging with people who have lived experiences of IPV and on the complexities of addressing mandatory reporting requirements. It will discuss these learnings in the context of how they have been applied to LSAC, while also highlighting the relevant issues for other cohort studies, such as participant safety and support, informed consent, and measuring IPV with respect to mandatory reporting.

TALK 4: The Development of Well-Being During Emerging Adulthood: A Systematic Review of Longitudinal Studies

Presenter: Yi-Jhen Wu, TU Dortmund University

Co-authors: Ming-Chia Yeh, Slippery Rock University; Michael Becker, TU Dortmund University; Ronny Scherer, University of Oslo

Emerging adulthood, generally at ages 18-29 years, is a life stage between the end of adolescence to adulthood, at least in developed countries. During this stage, emerging adults achieve physical, cognitive, and sexual maturity. Yet, they often have not established stable life structures, including long-term commitments to work, intimate relationships, and complete financial independence. Thus, emerging adulthood can be characterized as an unstable life stage. Given the increase in mental health problems in this phase, there is a need to understand how well-being develops during emerging adulthood. Although previous systematic reviews have investigated the development of wellbeing across the lifespan, no review has focused on the development of well-being during emerging adulthood.

In this study, we conducted a systematic review of longitudinal studies to close this gap. Specifically, we focused on the development of subjective well-being—a prominent concept often represented by a person's overall evaluation of life. However, no prior research synthesis has examined the development of subjective well-being during emerging adulthood. As emerging adults might follow diverse educational and occupational paths, we did not set any hypothesis of the developmental patterns of subjective well-being. We searched for longitudinal studies in education, health sciences, psychology, and sociology databases. About 4,870 studies were screened by researchers and an artificial intelligence screening tool. After screening, 213 studies were eligible for full-text review and coding.

The results of the analyses will be presented at the conference, along with a discussion of the theoretical and practical implications.

6A STREAM: HEALTH & WELLBEING 3

SYMPOSIUM

SLLS Interdisciplinary Health Research Group: Social to Biological Transitions 2

Chair: Bram Vanhoutte, Université libre de Bruxelles

The strong connection between the social positions we take up and our biology as expressed through biomarkers or health inequalities is a focal point of the contemporary research. Bringing together different strands of the longitudinal and life course research community, this symposium wishes to highlight recent advances in the study of the social production of health inequalities that make use of longitudinal data or a life course perspective.

TALK 1: The Exposome: A Challenge to Social Science

Presenter: Thomas O' Toole, University of Manchester

Co-authors: David Blane, Paolo Vineis, Imperial College London

The recently published Glossary of Social-to-Biological Research¹ includes a nuanced description of the internal Exposome; the biologists' five-level Omics cascade, from Genomics to Metabolomics. However, the wider psychosocial framework within which these nested biological processes sit requires more attention. An important area of development is the external Exposome, which refers to the rest of life that, among other things, has produced such biological phenomena as the demographic transition and the increase in life expectancy. The presently described bid seeks to extend Robertson et al.'s Glossary of Social-to-Biological Research.

One approach to developing the exposome concept has focused on the “low hanging fruit” of environmental contaminants which plausibly might affect health, like air pollution, micro-plastics and chemicals in drinking water. Another approach seeks to integrate genomics, epigenomics, transcriptomics, proteomics and metabolomics as intermediary processes between external exposomics and “hard” outcomes such as mortality, diagnosis or hospitalisation. This “meet in the middle” approach can allow for a detailed examination of plausible biological pathways between general (broader social, cultural and ecological constructs) and specific (chemical pollutants and lifestyle factors) external exposures and manifest health outcomes. A third approach might use sociology’s traditional differentiation into macro, meso and micro levels and the other social science disciplines relevant to each: economics and history at the macro social level; anthropology and geography at the meso level; and social psychology and literature at the micro level. 1. Longitudinal and Life Course Studies Volume 16, Number 1, Pages 75-121.

TALK 2: Is There a Cognitive Footprint of Political Systems? The Case of Separation and Reunification of East and West Germany and Later Life Cognitive Health

Presenter: Ariane Bertogg, University of Konstanz

Co-author: Jeffrey Stokes, University of Massachusetts

The division of Germany into East (GDR) and West (FRG) in 1946, followed by reunification in 1989, had lasting effects on individual life courses. Mortality and health disparities between East and West Germans even after reunification have been well-documented. With regard to mental health, findings regarding disparities between residents of (former) East and West Germany are mixed. Research on cognitive health is limited, but dementia prevalence appears higher in certain regions of East Germany. Crucial differences in the schooling system, access to early childcare, occupational differences, and post reunification labor markets may nevertheless impact cognitive health disparately.

Our study explores the “cognitive footprint” of the exposure to two different regimes on cognitive health in two ways: First, by studying the impact of exposure on cognitive trajectories in later life. Second, by identifying differential consequences of such exposure by age at reunification. Using data from the Survey of Health, Ageing, and Retirement in Europe (SHARE), we apply Growth Curve Modelling to estimate trajectories of memory, verbal fluency, numeracy, and orientation for a sample of adults aged 50 or older who lived in East or West Germany in 1989.

We find that respondents who lived in the GDR before reunification exhibit slower decline in all four cognitive outcomes. Moreover, while former FRG residents over time decline in memory and verbal fluency, former GDR residents remain stable or slightly improve in these functions. Supporting the idea of strongest impacts during a “critical period” in the life course, we find the largest gaps in all four cognitive tests between East and West Germans, who were in their forties during reunification. No differences were found in memory and verbal fluency for individuals who were very young during reunification. For persons who were close to retirement at reunification no differences between East and West Germans were found.

TALK 3: Understanding the Heterogeneity in Wellbeing Trajectories After Onset of Functional Disability in Later Life: Identifying Predictive Factors Over the Life Course

Presenter: Thibault Kohler, Université Libre de Bruxelles

Co-author: Bram Vanhoutte, Université Libre de Bruxelles

The challenges of ageing can profoundly impact wellbeing, affecting the social, psychological and physical dimensions of life. This is particularly true when functional disability emerges, creating significant barriers to autonomy and daily functioning. Previous research suggests that persistent functional disability leads to significant declines in wellbeing without long-term adaptation. However, studies on resilience highlight considerable variability in individual trajectories, with resilience often emerging as the most common response to adversity (Bonanno 2004). In the specific context of disability, research remains limited. While the link between social position and health outcomes is well established, less is known about how social and economic resources shape resilience or vulnerability in the face of disability. This study aims to assess the prevalence of different types of resilience and non-resilience trajectories in response to functional disability, and to examine the resources associated with specific patterns of adaptation.

We utilized data from waves 4 to 9 of the Survey of Health, Ageing, and Retirement in Europe (SHARE). Functional disability is defined as the transition from having no limitations to at least one limitation in activities of daily living (ADL). All individual trajectories were aligned at the point of transition, creating a time to/from disability metric. Growth Mixture Modeling (GMM) was performed to move beyond describing a single overall trajectory of change over time, allowing for the identification of distinct sub-groups within the data. Multinomial logistic regression was then used to identify factors influencing specific responses and to examine how different background characteristics were associated with different forms of coping.

These findings will enhance our understanding of resilience in ageing populations and provide insights into how to foster positive responses to age-related challenges and improve the wellbeing of older people.

TALK 4: Ageing Overnight? The Impact of Onset of Health Loss on Subjective Age

Presenter: Bram Vanhoutte, Université Libre de Bruxelles

Co-author: Thibault Kohler, Université Libre de Bruxelles

Health is most often conceptualised by referring to the classic WHO definition, presupposing there is a multidimensional but optimal and complete state of health. While this essentially ableist standard of simultaneous full mental, physical and social health is questionable for the general population, it becomes untenable in later life, where all three dimensions are challenged in ways that are interlinked and part and parcel of the ageing process. In this vein, this paper proposes to shift the perspective on health by studying how exactly we react and potentially adapt to experiencing a health challenge in later life. While aspects of mental or social health are most often used to study health impact, this study uses subjective age as a marker of how we cope. Subjective age, or felt age, reflects how we internalise and embody our age, and how we subjectively position ourselves against age norms, and potentially represents an understudied aspect of our habitus in Bourdieu's sense. We will make use of four waves of the English Longitudinal Study of Ageing (2004-2014) spanning ten years, which we align on the moment of health loss, so that we can discern not only how much people subjectively age overnight when experiencing different types of health, but also what the typical response in terms of felt age is to functional health shocks, in a linear spline growth model framework.

6B STREAM: EDUCATION / EMPLOYMENT 2

SYMPOSIUM

Inequalities in Career Pathways, With a Special Focus on Entry into STEM Occupations

Chair: Ingrid Schoon, UCL Institute of Education

This symposium examines inequalities in career pathways across three countries, taking into account the dynamics of career development for different subgroups in the population and those on different educational tracks.

The first study addresses gender segregation in the Swiss labor market (drawing on evidence from the Tree2 cohort) with a special focus on the development of gender disparities regarding interest in information and communication technologies (ICT) and the extent to which ICT interest and self-concept contribute to gendered vocational pathways regarding advanced ICT use (Andrés Gomensoro). The second study examines the role of ability concepts and educational attainment as predictors for employment in professional jobs, including different STEM occupations using data from the Longitudinal Study of Young People in England (Ingrid Schoon). The third study examines when and how inequalities emerge during the transition into STEM careers (Golo Henseke). Using data from the UK Longitudinal Education Outcomes (LEO) survey, barriers for underrepresented groups (characterized by gender and socio-economic background) are identified and whether employer practices mitigate or reinforce inequities in STEM career attainment. The fourth paper examines labor market careers of multiple cohorts of German high school graduates in times of educational expansion (drawing on the German Socio-Economic Panel Study) with a special focus on the medium and long-term returns to vocational versus general education (Hans Dietrich).

TALK 1: ICT Interest and Self-Concept as Determinants of Adolescents' Vocational Choices: Implications for Gender Segregation in the Labor Market

Presenter: Andrés Gomensoro, University of Bern

Co-authors: Leo Röhlke, Jessica M. E. Herzing, Dominique Krebs-Oesch, University of Bern

Like mathematics and science, information and communication technology (ICT) represent an important occupational content domain that adolescents may consider in their early vocational choices. Although both the shortage of ICT specialists and the underrepresentation of women in this field are widely acknowledged as important societal problems, the psychosocial processes leading adolescents to choose careers with differing levels of ICT use are still not fully understood. This knowledge gap is particularly pronounced in relation to transitions into vocational education and training (VET).

Drawing on Eccles' situated expectancy value theory (Eccles et al., 1983), we hypothesize that adolescents' ICT interest and self-concept should influence vocational choices in terms of the intensity of ICT use and contribute to gendered career pathways. We analyze longitudinal survey data from the TREE2 cohort (Transitions from Education to Employment; Hupka-Brunner et al., 2023) on 1,964 Swiss adolescents transitioning into firm-based VET, which we link to a novel European database on occupational task content (Fernández-Macías & Bisello, 2022). This external database provides indicators on the intensity of basic (e.g., word processing) and advanced ICT use (e.g., programming, specialized software) across occupations and industries.

Our results are strongly gendered. Girls' lower average ICT interest and self-concept explain almost half of the gender differences in the intensity of advanced ICT use. Higher ICT interest predicts selection into occupations with a higher intensity of both basic and advanced ICT use, but only for girls. A more positive ICT self-concept is a significant predictor of greater ICT use in future occupations only for boys, and this association is mainly driven by boys choosing careers as ICT specialists. These findings suggest that ICT are an important content domain in adolescents' vocational choices and highlight how gendered interests and self-concepts towards ICT perpetuate occupational gender segregation.

TALK 2: Pathways into Professional Careers: The Role of Gender, Ability Concepts and Qualifications

Presenter: Ingrid Schoon, University College London

Co-author: Andrew Jenkins, University College London

This study examines the role of teenage ability concepts and educational attainment in shaping pathways into professional careers, with a special focus on entry into STEM careers. While the role of ability concepts as predictors of subject choice has been extensively studied, there is less evidence on their role as predictors of actual occupational choice and attainment. Moreover, workers in STEM occupations have diverse educational backgrounds and this study will contribute towards a better understanding of skills required for different jobs.

Methods: The study draws on the Longitudinal Study of Young People in England (LSYPE), a national representative data following the lives of over 15,000 individuals born in 1990 into their adult years. The analysis examines the association between adolescent self-concepts regarding maths, English, science, and ICT assessed at age 14 and occupational attainment at age 32, controlling for gender, socio-economic family background, educational attainment.

Results: Women have made major strides into health professions but are underrepresented in core STEM and professional jobs in general. A high ability concept in English is positively associated with employment in a professional job, but negatively with employment in core STEM, Health or Nursing professions. Moreover, a high ability concept in science is associated with employment in Health and Nursing occupations, while ICT ability concept is associated with working in Core STEM occupations. Working in a Health profession requires the highest level of educational qualifications (NVQ5), while working in general professional jobs and STEM associated occupations is possible for those with advanced secondary education qualifications or advanced apprenticeships (NVQ3).

Conclusion: The STEM workforce is diverse and not all STEM occupations require a bachelor degree for entry. This study provides a better understanding of the perceived and required skills for professional jobs, including STEM occupations.

TALK 3: Vocational vs. General Education: Examining Labour Market Careers of German High School Graduates in Times of Educational Expansion

Presenter: Hans Dietrich, IAB - Institute for Employment Research

Co-author: Alexander Patzina, IAB - Institute for Employment Research

The study of vertical (i.e., degrees) and horizontal (i.e., vocational vs. general education) differences in life course returns to education has gained considerable scientific and political attention in the last decade. This study contributes to this literature and jointly investigates how employment, wages and socioeconomic status develop over the life course and scrutinizes cohort variation in these life course patterns. Furthermore, this study argues that it is important to focus on populations that have the same opportunity structure for postsecondary educational pathways because such an approach accounts for the institutional access routes into postsecondary education and therefore provides comparable life course estimates. Based on multi-cohort panel data (Socio-Economic Panel Study), non-parametric state probability and random effect growth curve models, the main results are as follows: While pronounced vertical and horizontal differences in wage and socio-economic status profiles throughout the life course exist, only vertical differences in life course employment after the age of 30 occurs. Before, vocationally educated academic high school graduates have an early advantage. Gender separated analyses reveal little variation in stratification patterns. Furthermore, vocational education was not devaluated during higher education expansion. Interestingly, horizontal differences in wages and socio-economic status attainment almost disappear in the youngest cohort because returns to vocationally oriented higher education increases. Our results implicate that when focusing on academic high school graduates (i.e., a population with comparable opportunity structure) no employment advantage for generally educated individuals exists. Furthermore, findings from the cohort analysis have important policy implications and should stimulate future work.

TALK 4: The Impact of Vocational Role Models on the Formation of Career Aspirations: Which Occupational Characteristics Make a Difference?

Presenter: Janina Beckmann, BIBB - Federal Institute for Vocational Education and Training

Forming career aspirations is a key developmental task during adolescence. While many young people express career aspirations, these are often limited to a small number of prestigious and gender-typical professions (Mann et al., 2020). Such restricted aspirations can complicate school-to-career transitions, leading to career compromises or preliminary dropouts (Holtmann & Solga, 2023; Kleinert & Schels, 2020).

Long-term socio-structural factors like family and school shape career aspirations, but short-term, random events also play a role (Krumboltz, 2009). Vocational role models, for example, can influence career aspirations through their informational and motivational function (Morgenroth, 2009). While role modeling effects are well-documented for STEM professions, less is known about their impact for non-STEM or vocational education and training fields. Understanding whether role model effects differ across professions is important and can contribute to a better understanding of young people's career choice process, especially from a social inequality perspective.

This study explores how adolescents align their career aspirations with those of role models, focusing on role models from a large set of occupations that vary in gender-typicality, social status and interest profile. Career choice theories are used to derive hypotheses regarding the relevance of occupational characteristics for role modelling effects. The study includes a regional sample of about 2,000 secondary school students participating in a large-scale role model intervention featuring commercial, craft, and technical occupations. Using pre-post comparisons within a quasi-experimental design, discrete choice models are applied to analyze whether students align their career aspirations with role models and whether occupational characteristics moderate this relationship.

Preliminary results suggest role models slightly increase career aspirations after up to 8 weeks. Gender-atypical professions and lower-status professions led to higher career aspirations after exposure to role models. These findings challenge theoretical expectations about gender and status and highlight the potential for role models to shape occupational perceptions.

6C STREAM: METHODS

SYMPOSIUM

Why Method Matters: Unpacking the Implications of Researcher Decisions in Quantitative Longitudinal Research

Chair: Kane Meissel, University of Auckland

This symposium critically examines the impact that methodological decisions can have for research findings and their substantive interpretation. We showcase demographic, sociodemographic, and social science construct examples that are commonly utilised in longitudinal and life-course research. In each example, the options presented are utilised widely and frequently interchangeably in the literature, yet these approaches can result in quite different results and understandings. Through these worked examples, we demonstrate the influence of these decisions, with the aim of fostering critical discussions about the need for increased transparency and reflexivity in quantitative research. Documentation of the specific methodological decisions made is frequently underdeveloped in quantitative research. We aim to draw attention to the need for improved documentation, transparency, and reflexivity about the decisions and methods selected by researchers.

The contributions of this symposium are twofold. First, the papers presented here, about measuring ethnicity, material hardship, and academic resilience over time, have important domain-specific implications for social science researchers. Second, beyond the domain-specific findings, we aim to highlight the role of the researcher within the research process and interpretation of outcomes, and to promote the production of rigorous quantitative research in longitudinal and life-course sciences.

TALK 1: Ethnic Identification from Pre-Birth to Early Adolescence: Stability, Change, and the Impact of Ethnic Classification Method

Presenter: Esther Yao, University of Auckland

Co-authors: Kane Meissel, Terryann Clark, University of Auckland

Ethnicity is an important variable for monitoring and addressing social inequities. However, due to its fluid and multiple nature, ethnicity is complex to operationalise, particularly in longitudinal research. This study examines the longitudinal stability and change in ethnic identification according to three ethnic classification methods: number of ethnic groupings reported (1, 2, 3+); (2) single/combination ethnic grouping (where participants are counted once in the group or combination of groups reported, e.g., Māori only, Māori/European); and (3) total response ethnic grouping (where participants are counted in each of the ethnic groups reported, e.g., Māori alone or in combination). Our aim is to inform researchers of the complexities and considerations required when working with ethnicity data.

Ethnicity data from five waves of the Growing Up in New Zealand birth cohort study (antenatal, 9-months, 4.5-years, 8 years, 12-years; N = 3,625) were analysed using alluvial plots and descriptive statistics (e.g., number of distinct states, common sequences, transition rates). Results showed the time-varying nature of ethnicity. More than half of the sample changed distinct states at least once over five data waves according to the number of ethnic groupings reported (55.4%) and single/combination grouping (76.1%). One or more changes in distinct states were less frequent according to total response ethnicity, with rates varying by ethnic grouping: 38.7% for New Zealand European, 26.0% for Māori (Indigenous New Zealanders), 19.5% for Asian, 19.4% for Pacific, and 16.9% for Middle Eastern/Latin American/African. Given the dynamic nature of ethnicity, ethnicity must be treated as a time-varying variable in longitudinal research and ideally collected at every data wave. We also argue that researchers need to make ethnicity-related methodological decisions with care, criticality, and reflexivity; ensure the most appropriate approach is selected based on the research question; and consider the implications of these decisions.

TALK 2: The Role of Method Choice in Defining Poverty

Presenter: Molly Grant, University of Auckland

Co-author: Kane Meissel, Daniel Exeter, University of Auckland

Material hardship, a key indicator of poverty, is a critical construct in socioeconomic research. Yet, how material hardship is operationalised can influence the outputted prevalence rate of material hardship and the development of policy interventions aimed at addressing this issue. Despite the availability of multiple valid methods for operationalising material hardship, their relevance and applicability remain underexplored.

This study examines three common approaches to measuring material hardship using a large longitudinal birth cohort study (Growing Up in New Zealand), drawing on data from birth to early adolescence. We assess how different measurement methods impact the classification of families as experiencing material hardship, to find that distinct methods result in substantial differences in the proportion of families classified as living in hardship within the same dataset.

This study demonstrates the role of measurement selection in shaping research outcomes. Different methods align with different research objectives, and choosing an appropriate approach requires careful consideration of study aims, contextual relevance, and practical utility. From a methodological perspective, this study offers guidance to researchers on selecting appropriate classification methods, emphasising the need for thoughtful judgment in aligning method choices with research goals. By advocating for more deliberate and contextually informed measurement practices, we contribute to improving the accuracy and applicability of material hardship assessments. Ensuring that measurement approaches are robust and fit-for-purpose will enhance both academic understanding and the development of effective interventions to address poverty.

TALK 3: Are You Talking About What I'm Talking About?: Exploring the Different Ways That Academic Resilience is Measured in Quantitative Research

Presenter: Georgia Rudd, University of Auckland

Co-authors: Kane Meissel, Frauke Meyer, University of Auckland

Researchers can use a range of different measures to generate results purportedly about the same social construct. A lack of transparency in this process can make it difficult to determine the statistical validity of the measure and compare findings, particularly when tracking developmental trajectories over time. This paper will provide an example of how different researchers use different measures to operationalise the same social construct.

Resilience became a buzzword during the COVID-19 pandemic. While the definition of resilience and, in particular, academic resilience, is generally agreed upon, there continues to be marked variation in how it is conceptualised and operationalised. A systematic review of over 100 studies that reported quantitative findings about academic resilience was conducted to document the different measurement approaches and investigate the implications of these approaches for the conclusions drawn about academic resilience. There are two key components of academic resilience: exposure to adversity and the demonstration of academic competence. There is variation in how researchers measure and then combine these two components to infer academic resilience. While the utilisation of longitudinal data in this field is limited, it arguably offers a more accurate representation of the nature of adversity experienced by students (e.g., acute versus chronic) and how they 'bounce back' from these experiences. The implications of variation among cross-sectional measures of academic resilience are also explored in terms of documenting changes in academic resilience within individuals over time.

The findings from this review are presented to highlight the influence that quantitative researchers have in shaping the results produced. These results can be used to perpetuate narratives about groups of people, emphasising the power of researchers and therefore the responsibility we have, to conduct rigorous and socially just quantitative research.

TALK 4: Why Method Matters: Bringing It All Together

Presenter: Kane Meissel, University of Auckland

Co-authors: Molly Grant, Georgia Rudd, Esther Yao, University of Auckland

Social constructs have been developed by humans to make sense of our lived experiences. Within the social sciences, such measures and constructs are typically latent and multi-dimensional, making accurate translation of definitions into precise and consistent quantitative measures challenging. Variation in the operationalisation of social constructs is not inherently concerning; indeed, different studies may require different measurement approaches for the same construct, depending on the study's purpose and the nature of the data. This flexibility allows researchers to tailor their methods to their specific research questions – and in turn, researchers hold significant power and responsibility in shaping research outcomes. However, these decisions and variation in measurement often go unexplained. Given these decisions frequently have important implications for results, synthesis of findings can be challenging and potentially risky, reducing the impact of the research.

This talk describes practical steps intended to help improve the transparency and reflexivity of longitudinal quantitative research, while recognising the constraints associated with requirements by journals to remain within word limits. Researchers should identify their assumptions and positionality with respect to the phenomenon they are studying, as these influence the interpretation and framing of results. Via the steps presented in this talk, we advocate for a shift from (post-)positivism to a reflexive quantitative paradigm, encouraging researchers to critically examine and challenge the rationale behind ‘status quo’ methods. Being reflexive and transparent requires a high degree of both content and methodological knowledge, but explicit description of the rationale behind selected methods, being open to challenging them when necessary, and openly describing any limitations, is crucial for advancing the field – particularly as it enables others to constructively engage with, critique, and build upon the research.

6D STREAM: YOUNG LIVES

INDIVIDUAL CHILDHOOD 2 PAPERS

TALK 1: What Types of Childhood Adversities Predict Depersonalisation and Derealisation? An Updated View Using Large Scale Data

Presenter: Evelyn Dilkes, University of Essex

Co-authors: Helge Gillmeister, Katie Daughters, Paul Clarke, University of Essex

Background: Depersonalisation and derealisation (DPDR) impact daily functioning highly, yet their links to early-life adversity remain underexplored. This study examines the influence of adverse childhood experiences (ACEs) on DPDR symptoms across ages 12, 17, and 24.

Methods: Using data from 7900 participants of the Avon Longitudinal Study of Parents and Children, generalised linear mixed models assessed whether ACEs—including abuse (emotional, physical), neglect (emotional, physical), and household instability (parental substance use, inter-parental violence, parental mental health problems, parental conviction, parental divorce)—predicted DPDR symptoms across three key developmental ages. Models adjusted for sex, attachment, anxiety, depression, and perseverative cognitions.

Results: ACEs were more strongly linked to depersonalisation than derealisation, suggesting distinct aetiological pathways. Emotional abuse, emotional neglect, parental substance use, interparental violence, parental divorce, and cumulative adversity types predicted depersonalisation. In contrast, only parental substance use, parental mental health problems, and parental divorce predicted derealisation. Covariate adjustments had minimal impact, reinforcing the robustness of these associations.

Conclusion: This study highlights that ACEs beyond abuse and neglect contribute to DPDR symptoms, but through distinct mechanisms. While depersonalisation was linked to abuse, neglect, and household instability, derealisation was only associated with household instability. Parental substance use and parental divorce were the only ACEs predicting both symptoms. These findings emphasise the need for early intervention and suggest that derealisation may develop through alternative pathways beyond childhood trauma, warranting further research.

TALK 2: Accumulation of Childhood Adversities, Parental Socioeconomic Position, and Mental Health Treatment: A Finnish Birth Cohort Study

Presenter: Lauren Bishop, University of Helsinki,

Co-authors: Joonas Pitkänen, Pekka Martikainen, University of Helsinki

Though childhood adversity is a known determinant of psychopathology throughout the life course, evidence on the developmental timing and accumulation of adversity exposures for subsequent mental health outcomes remains limited. Moreover, adversities attributed to family dynamics and socioeconomic conditions are often conflated, despite conceptual risk differences. By utilizing transition probabilities within a multistate framework, we aim to better understand the complex association between accumulated adversity exposures and psychopathology, and further address the social patterning of these associations. We use a total population sample of Finnish-born birth cohorts 1988–1994 (n=452,230), followed from birth until 2020. Exact event times of parental hospital-presenting mental ill-health and assault-related injury, death, and criminal sentencing are included as childhood adversity indicators, taken from the Care Register for Healthcare and data obtained from Statistics Finland. The data structure includes adversities stemming from the child’s biological parents as well as those from other parental figures (e.g., stepparents, parents’ partners) residing with the child during each given year, allowing us to disentangle biological and environmental exposures. We use the *mstate* package in R to quantify the effect of accumulated childhood adversities on the risk for mental ill-health—each adversity occurrence is included as a new state of exposure in the models, with treatment for mental ill-health as the absorbing state. We calculate the transition probabilities from each adversity state to mental health treatment by age, and further estimate the probabilities associated with these transitions as a function of parental socioeconomic position. This research can inform policy and practice by shedding light on the developmental periods during which children exposed to adversity could most benefit from mental health-related support.

TALK 3: The Long-Term Effects of Childhood Residential Mobility on Later Social Capital: The Paradox of Frequent Moves and Agency

Presenter: Mattia Vacchiano, University of Geneva

Co-author: Riccardo Valente, Autonomous University of Barcelona

This study examines the long-term consequences of childhood residential mobility, focusing on how frequent relocations shape the development of agency and collective self-orientation and how these, in turn, influence social capital formation in adulthood. Drawing on a combination of retrospective and panel data from a nationally representative sample of the Swiss population (N=4,451), the results show that individuals who moved frequently during childhood tend to develop higher levels of agency, reflecting an increased sense of personal responsibility and self-reliance. At the same time, frequent mobility is linked to a weakening of collective self-orientation, indicating a reduced sense of belonging to stable, place-based communities. International moves and crossing linguistic borders do not amplify these effects, whereas evidence for systematic social class-mobility interactions is also limited. Together, these findings reveal that childhood residential mobility leaves a lasting imprint on social capital formation, which operates indirectly through the shaping of psychological orientations toward self and society. This highlights the need for a sociological understanding of mobility beyond seeing it as a mere disruption of social ties. Instead, it recognises it as a formative biographical process that reshapes how individuals relate to communities and themselves.

TALK 4: The Social Gradient of Lives Throughout Childhood

Presenter: Silvia Behrens, University of Glasgow

Co-authors: Morag Treanor, Emma Russell, University of Glasgow

This paper draws on a large-scale longitudinal birth cohort study, Growing Up in Scotland (GUS) to explore the social gradient that emerges in all aspects of children's lives and outcomes. GUS began in 2004/5 and there are now 10 waves of data available. Measures of children's outcomes in relation to health, cognitive development, and social and emotional wellbeing are collected at each of the 10 waves. Income data are also collected at each wave and material deprivation measures are collected periodically. The richness and longitudinal depth of these data allow us to explore what the social gradient of income inequality looks like across time, for different groups of young people, and whether the effects of inequality remain the same, whether disadvantage accumulates or whether indeed it attenuates as young people become more independent and have more agency. There is a sustained focus on those living in poverty, as though they are a group different from everyone else. This paper will explore what happens from the lower to the upper end of the income scale, exploring income dynamics and examining the social patterning throughout. This will put inequality firmly in the frame and assess the central roles of governments and organisations in addressing inequality as well as poverty.

Key Research Questions:

What are the patterns, trajectories and dynamics of income over time in children's lives?

How does income inequality over time affect children's social and emotional wellbeing?

How does income inequality over time affect children's cognitive development?

How does income inequality over time affect children's subjective health?

6E STREAM: DISADVANTAGE / INEQUALITY 2

INDIVIDUAL DISABILITY PAPERS

TALK 1: Within-Education Transitions for Disabled Young People in Norway: Where and When Do They Drop Out?

Presenter: Jannike Gottschalk Ballo, NIFU

Co-author: Mari Amdahl Heglund, Oslo Metropolitan University

National governments and the OECD emphasize the importance of inclusive policies to ensure that vulnerable young people, particularly those with disabilities, successfully transition into education and work. However, previous research has demonstrated that early school leaving and lack of educational attainment among disabled youth significantly increase their risk of becoming NEET (Not in Education, Employment, or Training), potentially leading to longterm labour market exclusion. A significant body of literature has investigated the paths to employment for disabled young people using quantitative data. Despite these contributions to the literature, there has been limited research focusing on the transitions within upper secondary education and to higher education. Additionally, there is a lack of research exploring disabled pupil's choices and pathways in vocational education and training (VET).

This study aims to address these gaps in existing literature by utilizing rich and detailed Norwegian administrative register data combined with social sequence analysis to explore the within-education transitions of young disabled pupils. Specifically, we investigate how these pupils navigate upper secondary education and the extent to which their transitions differ between GEN and VET tracks. By examining patterns of movement within the education system, key transitions, and the association to individual factors such as socio-economic background, parental education and region of residence this research will provide new insights into the factors that facilitate or hinder educational progression for disabled students.

Furthermore, this study contributes to the literature on inequality in education by critically analysing how systemic structures shape educational experiences and opportunities for disabled youth. The findings will contribute to the growing body of knowledge on inclusive education and inform policymakers on how to improve educational pathways for disabled students, ultimately enhancing their chances of integration into the labour market and broader society.

TALK 2: Pathways In and Out of Temporary Disability Pensions: An Eight-Year Sequence Analysis Study in Finland

Presenter: Anu Polvinen, Finnish Centre for Pensions

Introduction: Every year, a significant number of working-age individuals leave the labor market prematurely due to health problems or disability. In Finland, approximately 20,000 people start to receive a disability pension each year, with half of them being granted a temporary disability pension with the aim of returning to work. Our study examines the different pathways into and out of a temporary disability pension and analyses how individual-level factors are associated with these pathways.

Methods: We used comprehensive register data of Finns aged 30-58 who received a temporary disability pension in 2018 and followed them for four years before and after their pension claim. Sequence analysis, in combination with clustering, was used to identify typical patterns in and out of temporary disability. In addition, we examined the association between individual-level factors and the observed pathways.

Results: We identified nine distinct clusters with unique pathways. Sixty-two percent of the study population belonged to five clusters in which the disability pension continued for several years. The majority had been employed before receiving the disability pension. Only 18% belonged to a single cluster characterized by a return to work, while individuals in the remaining three clusters (20%) ended up being unemployed or inactive. The different pathways also distinguished themselves by individual-level factors.

Conclusions: We identified several different pathways into and out of temporary disability pensions, most of them characterized by long-term disability pension instead of return to work. Understanding the different pathways, as well as the individuals associated with these, is crucial to developing more effective strategies to facilitate return to work and prevent long-term disability.

TALK 3: Life Course Approaches in Studies of Pain: A Scoping Review

Presenter: Saman Khalatbari-Soltani, The University of Sydney School of Public Health

Co-authors: Flavia P. Kapos, Duke University School of Medicine, Anupa Pathak, Fiona M. Blyth, The University of Sydney School of Public Health; Victoria Chen, Shannon Hong, Kathleen Daly-Jensen, Lauren Shaw, Tonya M. Palermo, Seattle Children's Research Institute; Elizabeth Chan, Campbell University School of Osteopathic Medicine

Background: Pain is one of the leading causes of disability globally, and life course approaches offer a valuable framework to understand the dynamic and reciprocal interactions among early- and later-life biological, psychological, social, and environmental factors that influence its development and persistence. The aim of our scoping review was to characterize studies of pain that incorporate life course approaches, whether explicitly or implicitly (e.g., considering biological, psychological, and social factors across the life course), with pain as either the exposure or the outcome variable across at least two distinct life stages (e.g., childhood to young adulthood).

Methods: We searched Medline, Embase, PsycINFO, Scopus, and Web of Science for peer-reviewed primary large-scale observational studies (≥ 1000 participants) or smaller-scale studies with representative samples that evaluated the risk, impact, and prognosis of pain across at least two distinct life stages. No restrictions were placed on language or publication date.

Results: A total of 141 studies were included (from 6,100 search results screened). Most were published recently (2010 onwards, $>80\%$) and were conducted in the US, UK, Finland, Australia, or New Zealand. Overall, 71% used a longitudinal design and 29% cross-sectional. Pain was considered an outcome in 105 (74%) studies, an exposure in 18 (13%), and both in 18 (13%). Forty-three percent of included articles did not explicitly mention life course terms in the aim, methods, results, or discussion, but referred to life course approaches only implicitly. Among those that did include life course terms, most did so in the discussion (47%) or aim (33%) sections. Only 23% explicitly referenced life course theories (e.g., critical, sensitive, cumulative), highlighting the need for greater clarity and consistency in articulating life course aims.

Conclusion: This review highlights a growing body of research on pain across the life course but emphasizes the need for more explicit engagement with life course frameworks and theories to strengthen future research and intervention strategies.

TALK 4: Talk withdrawn

6F STREAM: LONGITUDINAL STUDY 2

INDIVIDUAL METHODS 1 PAPERS

TALK 1: Evaluating Mode Effects on Cognitive Assessments in Longitudinal Studies: Experimental Insights from Face-to-Face, Web, and Video Interviewing

Presenter: Konstantinos Tsigaridis, University College London

Co-authors: Alessandra Gaia, Vanessa Moulton, Liam Wright, Matt Brown, Richard Silverwood, University College London

Accurately measuring cognitive ability is essential in social surveys, particularly in longitudinal studies where maintaining data quality over time is important for understanding life course trajectories. While cognitive testing is traditionally conducted in face-to-face surveys, the increasing use of web-based and remote methods prompts researchers to assess their effectiveness. A critical consideration is the extent to which data collection modes may result in variations in measurement and data quality, especially in longitudinal contexts where consistent assessment over time is critical for tracking changes and minimising attrition.

We investigate the impact of three survey administration modes- face-to-face, web, and video- on the Backwards Digit Span (BDS), a cognitive assessment for working memory. Participants aged 20 to 40 from England (n=1510) were randomly assigned to one of nine mode combinations across two survey waves conducted two weeks apart, completing the same BDS task at each wave. Our objective is to discern how different modes influence performance on the test while also addressing the methodological challenges inherent in longitudinal studies. Specifically, the adoption of alternative modes has the potential to reduce costs and increase participant engagement, thereby lowering attrition rates.

Using generalised linear models and generalised linear mixed models, we analyse mode effects in each survey wave separately and in both waves combined, accounting for individual variability and potential practice effects in the latter analyses. We examine differences by mode in successful test completion and scores. Further analysis explores mode combinations, subgroup differences (e.g., by gender, age, and education), and indicators of cheating or lack of effort.

This study tackles essential challenges in administering self-completion surveys within a longitudinal framework. The insights gained will inform best practices for mode selection and measurement design, guiding researchers in analysing mixed-mode data studies and developing cost-effective, participant friendly methodologies for tracking life course transitions.

TALK 2: The Longitudinal Impossible Dataset: Helping Users Navigate the ONS Longitudinal Study

Presenters: Andreas Mastrosavvas, University College London

Co-author: Nicola Shelton, University College London

The Office for National Statistics Longitudinal Study (ONS-LS) follows a 1% sample of the population of England and Wales through each decennial Census, linking Census data with data from birth, death, and cancer registers. As one of the largest datasets of its kind in the UK, the ONS-LS is used for public good research on topics ranging from public health to labour market outcomes. However, access to the data is highly controlled and only possible via secure settings, meaning that researchers must often identify required variables and develop code prior to seeing the data. With thousands of variables available, navigating and exploring the available metadata can be a complex task for users.

This presentation will showcase the ONS-LS and the opportunities that it offers for longitudinal research. It will also showcase the Longitudinal Impossible Dataset (LIDS): a new customisable artificial dataset intended to familiarise prospective users with the data structures and variable domains represented in the ONS-LS.

TALK 3: Innovative Uses of Digital Object Identifiers (DOIs) at UK Longitudinal Linkage Collaboration to Manage a Complex Data Integration and Support Interoperability with Other Research Infrastructures

Presenter: Katharine Evans, University of Bristol

Co-authors: Samuel Neale, Richard Thomas, Andy Boyd, University of Bristol

UK Longitudinal Linkage Collaboration (LLC) is the national Trusted Research Environment (TRE) for record linkage in longitudinal research. Uniquely, LLC has secured permissions to link Longitudinal Population Study (LPS) collected data to participants' health and socio-economic records and place-based data from across the UK's four nations. While this provides unparalleled data capabilities and scientific opportunities, the breadth and volume of data, and the many different data owners, requires innovative and flexible data management approaches to ensure LLC supports FAIR data principles.

In consultation with Office for National Statistics, UK Data Service (UKDS) and British Library, we have designed a data management model based on assigning Digital Object Identifiers (DOIs) to data and related research assets. LLC wants to encourage 'reusable research' where clarity of data used by researchers promotes discovery of data and outputs, and enables replication analyses.

Currently, the LLC sample includes 323,696 participants from 20 LPS, but this will change over time as LPS join and participant permissions change. Following quarterly updates from LPS, LLC establishes a 'data freeze', which fixes the sample at that point in time – data provisioned to researchers is linked to a specific freeze. LLC therefore assigns DOIs to: (1) individual datasets; (2) logical groupings of datasets; (3) data sources; and (4) data freezes. In addition, DOIs are assigned to approved projects, reflecting the often unique combination of provisioned data and the related data freeze. All DOIs will resolve to UK LLC Guidebook (<https://guidebook.ukllc.ac.uk>) and will be accompanied by rich metadata supported by LLC's metadata catalogue, UK LLC Explore (<https://explore.ukllc.ac.uk/>).

Our priority is to ensure the LLC data management model aligns with other infrastructures, e.g. CLOSER, UKDS and internationally. We are collaborating with the longitudinal research community to define a metadata specification that will be interoperable with the DataCite and Data Documentation Initiative schemas.

TALK 4: Using Residential Energy Performance Certificate Data to Enrich Longitudinal Population Studies for Cross-Cutting Policy Research

Presenter: Abigail Hill, University of Bristol

Co-authors: Richard Thomas, Katharine Evans, Rachel Calkin, Andy Boyd, University of Bristol

Energy Performance Certificates (EPCs) were introduced by the EU's Energy Performance of Buildings Directive in 2002 and contain detailed property-level information including floor area, environmental impact and fuel type. EPCs can be used as a key policy tool to improve building efficiency and environmental impact. Since their introduction, they have been implemented in different ways across Member States. For example, in 2008 it became mandatory in England and Wales to issue an EPC when a dwelling is sold or rented, creating a large historic database.

The UK Longitudinal Linkage Collaboration (UK LLC) have sustainably linked EPCs with Longitudinal Population Study (LPS) participants' health, socioeconomic and environmental records. We describe the methodological development implemented to facilitate the linkage of EPCs with LPS databanks in a privacy preserving manner. This provides systematic and low burden linkage across >20 LPS and >320,000 participants. UK LLC enables researchers and policymakers to interrogate pooled LPS participant data that are systematically linked to diverse records. Linking together LPS and household-level data raises concerns relating to disclosure risk management and respecting participant rights. Risks that need to be mitigated include disclosure resulting from geographical boundary changes and properties with unique and identifiable qualities. Through implementing the Five Safes framework, we are able to control disclosure risk. Our disclosure control measures consider both the user needs for data utility and the context in which the data will be analysed to enable us to come to a well-informed decision about what controls are needed. EPCs linked at household level can support the investigation of the health and social impacts of energy deprivation and housing quality and help inform policy relating to suitable housing provision and transition to net-zero climate targets. Central to this linkage is the maintenance of participant trust, co-creation and public involvement.

7A STREAM: HEALTH & WELLBEING 3

SYMPOSIUM

Soc-B ECR Symposium: Adversity, Distress and Social Connections Across the Lifecourse

Chairs: Thomas O'Toole, University of Manchester; Katie Taylor, University College London

This symposium brings together cutting-edge research from the Soc-B Centre for Doctoral Training Programme, highlighting the social-to-biological pathways through which adversity, distress and social connections impact health outcomes across the lifecourse.

The research highlighted in this symposium uses a variety of quantitative analytical techniques across a number of the UK's flagship longitudinal studies. Paper one examines how different dimensions of childhood adversity impact midlife heart rate variability and perseverative cognition, using multivariable linear regression modelling and data from the 1946 British birth cohort. Paper two identifies latent clusters of childhood social relationships and explores their links to adolescent mental health and inflammation, implementing latent class analysis and logistic and linear regression modelling using data from the Avon Longitudinal Study. Paper three investigates the longitudinal impact of psychological distress on physical health using longitudinal outcome-wide design and data from the 1970 British Cohort Study linked to Hospital Episode Statistics. Paper four evaluates lifecourse models to determine how peer social connections from childhood to adolescence relate to adiposity in early adulthood using a Structured Lifecourse Modelling Approach and data from the Avon Longitudinal Study.

TALK 1: Dimensions of Childhood Adversity and Midlife Unconscious Stress in the 1946 British Birth Cohort

Presenter: Sidonie K. Roque, University College London

Co-authors: Michele Orini, King's College London; Peter Martin, Yvonne Kelly, University College London; Rebecca Lacey, City St. Georges - University of London

Childhood adversity (CA) is linked to altered physiological and psychological stress systems, including subtle changes in vagal function and increased worry and rumination. Research focus has shifted from cumulative risk scores to dimensional models (i.e., deprivation, threat, and unpredictability) to better understand CA's impact on brain development and later psychopathology risk. Few studies have examined how dimensions of adversity affect autonomic nervous system (ANS) regulation. While findings on the link between CA and resting-state vagal function and reactivity remain mixed, apparent associations emerge when accounting for the modifying effect of age and current mental and physical health. This relationship remains largely untested in UK population survey data.

Heart rate variability (HRV), reflecting overall autonomic balance and adaptability to environmental changes, serves as a potential index for cardiac vagal tone, self-regulation, and unconscious stress. Perseverative cognition (PC), intrusive thoughts about past or future stressors, prolongs the physiological stress responses and activates the sympathetic nervous system (SNS). PC is linked to ANS rigidity (indexed by HRV) and alterations in brain connectivity.

Using data from the 1946 UK National Study of Health and Development birth cohort (n=5,362), this study will examine how CA dimensions (threat, material and cognitive/social deprivation, and unpredictability) relate to midlife HRV and PC, comparing dimensional and cumulative risk models. The moderating role of midlife mental health will also be assessed.

Multiple imputation by chained equation will be used to impute missing data. Linear regression will be used to model HRV at age 64 and PC at age 70, accounting for confounders.

TALK 2: Latent Clusters of Childhood Social Relationships Properties and Their Links to Adolescent Mental Health and Inflammation

Presenter: Alison Nicoll, University College London

Co-authors: Rebecca Lacey, City St. Georges - University of London; Jessica Bone, Anja Heilmann, Yvonne Kelly, University College London

Background: As a sensitive period of socio-emotional development, childhood social relationships may influence life course health. However, few studies have used longitudinal data to examine the underpinning psychobiological pathways.

This study aims to identify clusters in the properties of childhood social relationships with parents, peers and teachers. Psychobiological pathways will subsequently be investigated by examining longitudinal associations linking cluster membership to adolescent mental health and inflammation.

Methods: Using data from 5,043 participants in the Avon Longitudinal Study of Parents and Children, we used Latent Class Analysis to identify distinct groups based on patterns in relationship properties. Childhood social relationships were assessed at ages 8-11 using 21 items that measured the structure, function, and quality of relationships with parents, peers, and teachers. Associations with mental health and inflammation will be analysed using logistic and linear regression. Depression symptoms were measured at age 16 using the Short Moods and Feelings Questionnaire, while anxiety and depressive disorders were assessed at age 17 using the Revised Clinical Interview Schedule. Inflammatory markers included CReactive Protein and Glycoprotein Acetylation.

Preliminary results: Four clusters were identified: a cluster of positive relationships with peers, parents and teachers (comprising 29% of the sample); difficulties with classmates (39%), characterised by exclusion and hostility by classmates; friendship and school difficulties (21%), marked by issues with friends and less teacher support; and a relationship difficulties cluster (10%) characterised by difficulties across all relationships.

Conclusion: Clusters capture differential exposure to difficulties across relationships during mid-childhood. These initial findings underscore the prevalence of challenges in the school environment. Future analyses will explore whether cumulative exposure to relationship difficulties is differentially associated with adolescent mental health and inflammation.

TALK 3: Health Consequences of Psychological Distress in Mid-Life: Comparing Self-Reported and Linked Hospital Data from the 1970 British Cohort Study

Presenter: Martin Danka, University College London

Co-authors: Jessica Bone, George B. Ploubidis, Richard Silverwood

Psychological distress is a major contributor to global disease burden. Yet, the specific impact of psychological distress on diverse physical health conditions remains poorly understood due to inappropriate confounding adjustment, selection bias, and inconsistent findings in existing studies. Reporting is an underexplored source of variation. Self-reported health data are prone to recall and reporting bias. Meanwhile, medical records may also be biased when conditions are missed due to limited access to healthcare or underreporting and undertreatment by medical professionals.

Drawing on data from the 1970 British Cohort Study, this investigation examined the effect of psychological distress at age 34 on a range of physical health conditions at age 42, using a longitudinal outcome-wide design. Building on our previous work that relied solely on self-reported data, we extended our approach by incorporating linked Hospital Episode Statistics (HES) data. Using the same eligibility criteria and multiple imputation to address attrition, the analytical sample comprised 14,974 participants. We mapped ICD-10 codes to closely match the self-reported health conditions and estimated risk ratios for each condition using modified Poisson regression with inverse probability of treatment weighting to adjust for a common set of confounders.

Our earlier analysis of self-reports found most prominent effects of psychological distress on chronic back issues, gastrointestinal conditions, migraines, and hypertension, potentially reflecting stress-responsive physiological pathways. However, the effects were generally smaller than those reported in existing studies, and even weaker or null effects were found for other health conditions such as diabetes or cancer. The presentation will compare these results to those using HES-derived outcomes, offering both substantive and methodological insights into the connections between mental and physical health.

TALK 4: Investigating Lifecourse Theories Linking Peer Social Connections in Early Life to Adiposity in Early Adulthood

Presenter: Katie Taylor, University College London

Co-authors: Daisy Fancourt, Liam Wright, Yvonne Kelly

Interdisciplinary research has provided compelling evidence that social connections are important for lifecourse health. Social connections have been linked to adiposity, potentially representing one of the biological pathways for their established association with mortality. Research exploring these associations are typically conducted among adults. However, peer relationships evolve substantially from childhood to adolescence, making earlier life stages critical to understanding these associations. Stronger peer connections in early life have been linked to reduced risk of obesity and healthier body mass index trajectories into adulthood, yet little is known about how the timing, duration and changes in peer social connections influence adiposity in young adulthood.

This study examines three lifecourse models – sensitive period, accumulation and mobility – to determine how peer social connections from childhood to adolescence relate to adiposity in early adulthood.

Using data from the Avon Longitudinal Study of Parents and Children (ALSPAC), this study will assess peer social contact, perceived and received support, and loneliness measured in middle childhood, early adolescence and late adolescence. Adiposity in early adulthood will be measured using total fat mass and android fat mass from dual-energy X-ray absorptiometry scans at age 24. Multiple imputation will be used to handle missing data. A Structured Lifecourse Modelling Approach (SLCMA) will compare the fit of different lifecourse hypotheses using least angle regression and post-selection inference methods. Analyses will adjust for sociodemographic factors, parental BMI, psychological factors and timing of puberty.

Findings will provide new insights into how peer relationships influence long-term health and identify key developmental windows for intervention. By clarifying the role of social connections in obesity prevention, this research can inform public health strategies and school-based interventions to promote healthier weight trajectories across the lifecourse.

7B STREAM: EDUCATION / EMPLOYMENT 2

SYMPOSIUM

Institutional Opportunity Structures and the School-to-Work Transition: Cross-National Perspectives on Education and Labour Market Outcomes

Chairs: Ingrid Schoon, UCL Institute of Education; Wojtek Tomaszewski, The University of Queensland

This symposium brings together four papers that examine variations in educational and labour market outcomes across different national contexts, highlighting the role of institutional opportunity structures. It focuses on the school-to-work transition period, encompassing secondary and post-secondary education and training, as well as entry into the labour market.

Drawing on evidence from multiple countries (England, Switzerland, Australia, and South Korea), the symposium explores how young people's socioeconomic backgrounds influence their educational and occupational aspirations, higher education enrolment and dropout rates, experiences of being Not in Education, Employment, or Training (NEET), and the likelihood of entering managerial or professional occupations. The papers will discuss the role of available opportunity structures—including features of education and training systems, labour market policies, and welfare and support systems—in shaping these outcomes across different national contexts.

The first study (Anna Yong) examines socio-economic disparities in educational aspirations and associated academic time investment within South Korea's highly stratified education system. The second paper (Francesca Mele) investigates the mechanisms underlying socio-economic differences in NEET experiences, focusing particularly on the role of school engagement among relatively disadvantaged young people in England's comprehensive education system. The third paper (Andrés Gomensoro) explores how educational system structures influence the development and fulfilment of aspirations for high-level occupations, comparing Switzerland's highly stratified system with Australia's comprehensive education system. The fourth paper (Wojtek Tomaszewski) examines socio-demographic gaps in university enrolment continuity and dropout rates in Australia.

TALK 1: From Aspirations to Action: Socioeconomic Disparities in Academic Time Investment During Early Adolescence

Presenter: Anna Yong, University College London

Educational aspirations are powerful predictors of academic achievement, yet their influence depends on students' capacity to invest time in learning activities. While previous research suggests a positive relationship between aspirations and academic time investment, three critical gaps remain, namely (a) insufficient attention to the reciprocal nature of this relationship, (b) limited understanding of how this relationship changes across time, and (c) inadequate examination of how socioeconomic status (SES) moderates students' capacity to translate aspirations into time investment.

This study investigates how educational aspirations shape time allocation in self-study and private tutoring among Korean students, examining age-related changes and socioeconomic disparities whilst accounting for feedback effects. The analysis draws on the Korean Education Longitudinal Study 2013, following a nationally representative sample of Korean students (N=7152; surveyed from age 10 to 14; 50.76% female) and utilises dynamic panel models. Results reveal distinct patterns by socioeconomic status and age. Among high-SES students, educational aspirations significantly predict self study time in early adolescence, with the effect weakening over time. For private tutoring, the relationship strengthens with age exclusively among high-SES students, with a four-year difference in aspirations predicting an additional 23.3 minutes of daily tutoring at age 14. This suggests that the pathway from aspirations to achievement becomes increasingly dependent on private tutoring as students progress. In contrast, low-SES students show no significant relationship between aspirations and time investment across both activities and all ages. Moreover, high-SES students demonstrate superior capacity to coordinate multiple learning strategies, showing complementarity between self-study and private tutoring. These findings reveal that socioeconomic status significantly affects students' capacity to translate educational aspirations into strategic time investment, contributing to our understanding of persistent educational inequalities despite rising aspirations among disadvantaged students.

TALK 2: Social Origin, School Engagement, and NEET Experiences During the School-to-Work Transition

Presenter: Francesca Mele, University of Potsdam

Co-authors: Ingrid Schoon, University College London; Kaspar Burger, University of Potsdam

Little is known about the mechanisms underpinning socioeconomic differences in NEET experiences during the school to-work transition. While contemporary school-to-work transitions increasingly require youth to display agentic behaviour, the latter varies by social origin. Despite this, the specific contribution of agentic behaviour in explaining socioeconomic differences in NEET experiences is still unclear. Using data from the nationally representative Longitudinal Study of Young People in England (N=15,770), this study aims to address this gap. The results from a structural equation model indicated that social origin (age 14) was positively associated with agentic behaviour (captured by emotional school engagement at age 15), which in turn was significantly and negatively associated with the number of months spent in NEET during the school-to-work transition (age 16-20). Additionally, the negative association between school engagement and the months spent in NEET was stronger among more socially disadvantaged youth compared to their more advantaged peers. We further found that school engagement significantly mediated the effect of social origin on the months spent in NEET.

Moreover, the index of moderated mediation revealed that the mediation effect of school engagement was stronger the lower individuals stand in the social origin distribution. Finally, the results from causal mediation analysis indicated that if socially disadvantaged youth (20th percentile) were to have the same levels of engagement as socially advantaged youth (80th percentile), the socioeconomic differences in NEET experiences between the two groups would shrink on average by roughly 12 percentage points. Overall, these findings suggest that although emotional school engagement might partially contribute to socioeconomic differences in NEET experiences, initiatives targeting it might only marginally reduce social inequality in NEET experiences.

TALK 3: Occupational Expectations and Their Fulfilment in the Swiss Highly Stratified Versus the Australian Comprehensive Education Systems

Presenter: Andrés Gomensoro, University of Berne

Co-authors: Jenny Chesters, Quentin Maire, University of Melbourne

Associations between family background and educational and labour market outcomes persist over time and across countries, and the organisation of education systems plays an important role in the links between occupational aspirations and educational trajectories. We explore how the educational system structures influence the development and fulfilment of aspirations for high-level professions. Specifically, we compare two countries characterised by contrasting education system structures: Switzerland, with its highly stratified system and early/rigid tracking, and Australia, with a comprehensive system and a largely unified curriculum. We draw on the Swiss Transitions from Education to Employment (TREE) data and the Longitudinal Surveys of Australian Youth (LSAY) data, following two nationally representative youth cohorts from ages 15-16 into their upper-secondary education.

We follow a two-stage analytical approach for each country. First, we fit a regression model between occupational expectations measured at the end of compulsory education ('managerial/professional occupations' versus 'other occupations') and characteristics of the education system. Second, we fit a logistic regression model to examine whether education system structures condition the likelihood being on track to achieve aspirations for professional or managerial occupations by the age of 20-21.

Preliminary results show important differences between countries in terms of occupational aspirations: In Switzerland, the early streaming system and the prominent role of vocational education steer students away from professional/managerial aspirations; in contrast, the comprehensive Australian school system allows such aspirations to be widespread. Contrasting patterns are also observed in the pathways: the Swiss system leads men to be comparatively less likely to engage in professional and managerial pathways, while the reverse is true in Australia.

TALK 4: Socio-Demographic Gaps in Enrolment Discontinuity and University Attrition in Australia: Evidence from Longitudinal Administrative Data

Presenter: Wojtek Tomaszewski, The University of Queensland

Co-authors: Andrew Harvey, Griffith University; Matthias Kubler, The University of Queensland

Following a major review in 2023, the Australian Government set ambitious targets for higher education growth and equity, aiming to increase the proportion of 25 to 34-year-olds with a Bachelor degree from 45% to 55%, and achieve population parity in university enrolments for under-represented groups by 2050. These groups include Indigenous people, those from low socio-economic status (SES) backgrounds, regional, rural and remote (RRR) communities, and people with disabilities. Central to this agenda is a focus on student retention and completion, including a proposed needs-based funding model to support at-risk students. However, limited attention has been directed towards enrolment discontinuity and its impact on student attrition. Internationally, initiatives have sought to reengage students with 'some college, no degree', yet in Australia, there has been minimal exploration of patterns surrounding enrolment discontinuity, and subsequent attrition for some students.

This paper leverages national longitudinal administrative data from the Higher Education Information Management System (HEIMS) in Australia, to assess how socio-demographic characteristics associated with under-represented groups influence enrolment discontinuity and university attrition. We further explore the mediating role of prior achievement, measured through the Australian Tertiary Admission Ranks (ATAR), study status (full or part-time), and study mode (internal, external, or multi-modal), on these relationships. Our findings highlight significant inequities, with some groups—particularly those from low SES backgrounds and Indigenous students—demonstrating higher risks of enrolment discontinuity and ultimate attrition. While some risks are directly linked to socio-demographic characteristics of these groups, for many under-represented students, these risks are primarily mediated by other factors, such as prior academic achievement and part-time study status.

7C STREAM: METHODS

PANEL

Population Research UK: Moving from Consultation to Delivery

Chair: Lisa Calderwood, University College London

Panellists

Andy Boyd, PRUK – Population Research UK, University of Bristol

Paul Bradshaw, ScotCen - Scottish Centre for Social Research

Susan Morton, University of Technology Sydney

Doris Hanappi, FORS - University of Lausanne

Aisling Murray, Department of Children, Disability and Equality (Ireland)

Population Research UK (PRUK) is a national initiative in the UK which aims to maximise the use and benefits of UK Longitudinal Population Studies (LPS) across social, economic, and biomedical sciences.

The UK supports a large and diverse collection of over 240 cohorts, panel studies and biobanks. Currently, these studies are spread across different systems and platforms, making it difficult to access and use them efficiently.

PRUK aims to support connected working across these studies to benefit researchers, policymakers, and study teams and to achieve this through enhancing existing resources – such as CLOSER and UK Longitudinal Linkage Collaboration – and connectivity between them.

Our pan-UK consultation in 2024 built on previous consultation and audits to clarify the current challenges the community face. This identified significant barriers to discovering data, with existing metadata resources only covering a fraction (32%) of the total number of studies; barriers to access, with 137 LPS relying on contact via the study team for access and 57 having no access mechanisms at all; and that stronger support is needed in terms of infrastructure functionality, advocacy, training and capacity building.

PRUK's vision is for an enriched and simplified data infrastructure landscape for LPS users in which they can experience a streamlined and seamless journey for discovering, accessing, and analysing UK LPS data. Wrapped around this is the provision of LPS advocacy – a unified voice for UK LPS - alongside coordinated training in the use of these data, and in innovative open science methods.

Building on the momentum of our 2024 symposium at Society for Longitudinal and Lifecourse Studies Annual Conference, this panel session will update the community on our efforts to drive change aligned with our vision - focusing particularly on our policy work.

Our policy work aims to connect policy stakeholders with evidence needs to LPS researchers, provide evidence syntheses and quantify LPS impact. The session will begin with an overview of our approach, followed by contributions from invited international speakers who will present diverse models of policy exchange. These case studies will offer valuable insights into how different contexts foster effective collaboration between research and policy, helping to inform and inspire future directions for our work.

7D STREAM: YOUNG LIVES

INDIVIDUAL ADOLESCENCE 1 PAPERS

TALK 1: Withdrawn

TALK 2: Characterising the Longitudinal Relationship Between Social Media Use and Psychiatric Diagnoses in Secondary Care in Adolescents in England

Presenter: Tom Metherell, University College London

Co-authors: Luisa Fassi, University of Cambridge; Rana Rashid, Independent researcher; Helena Thornton, University of Bristol; Joseph F. Hayes, George B. Ploubidis, Darío Moreno-Agostino, University College London

Concerns that excessive use of social media platforms may be driving increased incidence of mental health conditions in adolescents have attracted significant media and research attention. However, epidemiological studies investigating these concerns generally focus on self-reported symptom ratings and not on diagnosed mental health disorders. With the linkage of the NHS Healthcare Episode Statistics (HES) dataset to the Millennium Cohort Study, it is possible to directly analyse the health service use of participants in England. Therefore, we aimed to relate measures of social media use collected in the Millennium Cohort Study with health service use related to diagnosed mental health disorders.

We used data from the Millennium Cohort Study of more than 19 000 UK residents born between 2000 and 2002. Social media use was assessed by self-reported measures at ages 11 and 14. We assessed the relationship between this use and

interactions with secondary mental health services recorded in HES between ages 11 and 14 and 14 and 17 respectively using Cox proportional hazards models. The inclusion of covariates in models was governed by a theoretical framework co-produced with advisors with lived experience of mental distress and social media use. We did not find any relationship between social media use and instances of mental health service use in either time period. However, post hoc exploratory analyses indicate that our linear consideration of social media use may be masking non-linearities in the relationship between social media use and mental health service use. It may be that both non-use of social media and excessive use have deleterious mental health associations, but further research is required to firmly establish this. In the meantime, we conclude that wide-reaching interventions to limit adolescent social media access are not supported by the available evidence, and call for a more nuanced consideration of online risks and harms

TALK 3: Body Mass Index Trajectories from Adolescence to Early Adulthood

Presenter: Eoin McNamara, Department of Children, Equality, Disability, Integration and Youth (Government of Ireland)

Introduction: Positive physical health in childhood lays the foundation for good health throughout the life course. Establishing healthy habits at an early age can help prevent or delay a variety of health issues in adulthood, supporting overall well-being throughout life. Maintaining a healthy weight is a core component of positive physical health. Through longitudinal research, individual health trajectories can be explored to better understand how risk factors for negative health outcomes develop over time. This study aims to explore trajectories in body mass index (BMI) from childhood to adulthood in a large cohort of young Irish people, identifying associated risk factors, potential risky time-points, and the extent to which specific BMI trajectories predict chronic illness in early adulthood.

Methods: Utilizing data from five waves of Growing Up in Ireland, this study tracks body mass index trajectories and chronic illness from ages nine to 25 years (2007-2023). Data were collected via interview and physical measurements; height and weight were measured by trained interviewers, while extensive information on a range of other health outcomes and wider socio-demographic and family factors was also gathered. Body mass index trajectories were identified using latent growth modelling.

Results: At age nine, more than one-quarter of children (26%) were overweight or obese, while 11% had a chronic illness or disability. However, differences in health outcomes according to social class and gender were already observable. By age 20 years, 37% of participants were overweight or obese, and 16% had a chronic illness or disability. Distinct body mass index trajectories are identified, and interactions between these trajectories, socio-demographic factors and chronic illness are investigated.

TALK 4: What Counts as Bullying? The Perspectives of 13-Year-Olds

Presenter: Emer Smyth, Economic and Social Research Institute (Ireland)

Co-author: Merike Darmody, Economic and Social Research Institute (Ireland)

Previous research has highlighted a discrepancy between the views of young people and 'official' labelling of bullying, with young people less likely to include intentionality and repetition in their definition of bullying (Vaillancourt et al., 2008). This paper uses data from Cohort '08 of the Growing Up in Ireland study to explore the circumstances under which young people label behaviour as bullying. The 13-year wave had two measures of bullying behaviour, a direct question and a question for all on experience of bullying-type behaviours. Eight per of the 13-year-olds indicated they had been 'bullied' in the three months prior to the survey. However, almost a third of those who had not been bullied reported experiencing bullying-type behaviour on at least two occasions. The 13-year-olds are more likely to count behaviour as bullying if it is more frequent, if the same person or people are involved and if they see the behaviour as causing greater harm. When the dimensions of harm are considered separately, being made angry by the behaviour has the strongest effect on the likelihood of labelling it as bullying. Looking at separate types of behaviour, someone circulating an upsetting photo, name-calling and having something hurtful posted online are more likely to be labelled as bullying than other types of behaviour. The patterns of labelling also differ by gender and having a disability. The study findings have implications for policy and practice since those who label the behaviour as bullying are more likely to tell an adult about it. As a result, a significant group of young people who experience repetitive behaviour that causes them harm do not see their experience as fitting within the existing parameters of anti-bullying policy.

7E **STREAM: Disadvantage / Inequality 2**

INDIVIDUAL GENDER 1 PAPERS

TALK 1: The Qualification and Gender Structure of Occupational Aspirations and Their Realisation in Germany and Switzerland

Presenter: Sara Möser, University of Bern

Co-author: Corinna Kleinert, Leibniz Institute for Educational Trajectories

This study examines how structural and institutional contexts shape the formation and realisation of adolescents' occupational aspirations in Germany and Switzerland. Both countries exhibit high occupational gender segregation and traditional gender roles, yet differ in their education systems, labour markets, and family policies.

Using longitudinal data from the DAB panel (German-speaking Switzerland) and the NEPS SC4 cohort (Germany), we analyse trajectories from 9th-grade occupational aspirations to outcomes ten years later. Combining panel survey data with occupational structure data (Microcensus and Structural Survey), we classify adolescents' aspirations and later outcomes by gender and qualification profiles.

Our analysis addresses three questions:

- How do occupational aspirations reflect or deviate from occupational structures and trends in educational expansion?
- What role do country-specific barriers and opportunities in education and labour market play in shaping aspirations?
- To what extent do employment outcomes align with the gender and qualification typologies of adolescents' aspirations, and what predicts realisation or deviation?

Preliminary findings reveal significant differences in both aspirations and occupational structures. Swiss adolescents show more gendered aspiration patterns than their German counterparts, reflecting traditional gender roles and stronger labour market segmentation. In both countries, a higher proportion of girls than boys aspire to tertiary occupations. However, German students are more likely to aspire to tertiary qualifications despite the smaller tertiary employment sector, which is likely to reflect Germany's stronger emphasis on academic pathways compared to Switzerland's focus on vocational pathways. Future analyses will examine how these aspirations translate into employment outcomes by exploring the patterns and determinants of the match between initial aspirations and later outcomes, focusing on the interaction between institutional factors and individual characteristics. This study contributes to the understanding of how policy and institutional contexts shape life course transitions and ties in with wider discussions on fostering equitable and effective pathways from education to employment.

TALK 2: Unemployment, Inactivity, and Job Insecurity: Exploring Health Effects on Couples in Germany Using the Longitudinal Actor-Partner Interdependence Model

Presenter: Malgorzata Mikucka, Mannheim University

Co-authors: Oliver Arránz-Becker, Martin Luther University Halle-Wittenberg; Christof Wolf, GESIS – Leibniz Institute for Social Sciences

This study examines the long-term impact of adverse employment conditions, such as unemployment, inactivity, and job insecurity, on individuals and their cohabiting partners' health. It offers a comprehensive framework that encompasses the health effects of unemployment, inactivity, and job insecurity, in contrast to previous research that primarily addressed unemployment while neglecting inactivity and job insecurity. Additionally, our analysis departs from previous studies that focused on immediate health effects and instead employs a risk accumulation model to assess the cumulative consequences of prolonged adverse employment conditions. We also investigate variations across education levels.

We use data of German Socio-Economic Panel; our sample consists of 3,753 heterosexual cohabiting (married and unmarried) couples in Germany observed consistently over a nine-year period. Health measure (physical and mental) relies on the SF-12 scale. Our dyadic analysis uses the Longitudinal Actor-Partner Interdependence Model.

Our findings reveal that adverse employment of men is associated with long-term health declines for both men and their partners. In contrast, women's adverse employment does not have a lasting impact on their health or their partners. In couples with lower education the effects of adverse employment on actors' and their partners' health were more pronounced than in couples with higher education.

Our analysis highlights gender asymmetry in long-term effects of adverse employment on health of couples. The stronger effects among lower educated couples suggest that economic insecurity and traditional gender roles exacerbate the health consequences of adverse employment.

TALK 3: Navigating Life Under a Four-Day Workweek: A Multimethod, Gendered Life Course Examination of Time-Work Boundary Strategies and Work-Life Fit

Presenter: Youngmin Chu, University of Minnesota

Co-authors: Phyllis Moen, University of Minnesota; Wen Fan, Juliet Schor, Boston College

The combination of technological and organizational policy changes is upending work at a pace not seen since the Industrial Revolution, with organizational experiments around a four-day work week (32 hours, full pay) the latest innovation. We examine the timework boundary strategies of workers navigating the work-life nexus when employers enable more time for life outside work. How do workers strategize work-life boundaries in light of an extra non-workday? How are different strategies distributed across life stages and gender, and which best facilitates a sense of work-life fit? Drawing on qualitative data on 42 employees in three organizations and supplemented by quantitative data on 518 employees in 48 companies -- all of which are conducting four-day workweek trials in the U.S. and Canada -- we examine workers' shifting time-work strategies in managing boundaries between their jobs and the rest of life. We theorize these strategies vary at the intersections of gender and life stages. In-depth interviews reveal three time-work strategies: 1) sharp boundaries, 2) selective flexibility, and 3) blurred boundaries. Younger adults tend to establish sharp boundaries between work and personal life, while older men are more likely to blur the lines between the two. Women often express a strong preference for sharp boundaries, largely to manage childcare responsibilities. Both women and men, however, engage in selective flexibility—choosing to work occasionally on their days off when it feels necessary. Quantitative analysis reveals that work-life fit improves most significantly for those who do not work at all on the off weekday.

TALK 4: Maternal Social Origin and Intergenerational Labour Market Advantages

Presenter: Seraphim Dempsey, Economic and Social Research Institute (Ireland)

Co-author: Michael Vally, Economic and Social Research Institute (Ireland)

Increased female labour market participation has changed the historical dynamic of two-parent households. Single earner (father) households have shifted to dual earner (mothers and fathers) households, and mothers increasingly work in jobs of the same occupational class same or even "higher" than their male counterparts. These trends have important repercussions for the continued appropriateness of the "social dominance" approach in social mobility analysis — an approach which proxies social origin according to the parent with the "highest" occupational class. Our research examines the combined contribution made by both parents on the transmission of the social origin pay gap to the next generation. Using longitudinal survey data from Understanding Society, the UK Household Longitudinal Study, we examine the impact of dominant parental gender on the average life-time earnings, highest level of education, and occupational class between the ages of 38-42 for individuals born in the UK between 1954-1981. Our results highlight the complex interplay between social class and dominant parental gender during the inter-generational transmission of the social class pay gap to the next generation.

7F STREAM: LONGITUDINAL STUDY 2

INDIVIDUAL METHODS 2 PAPERS

TALK 1: ORIGINS: A Rare Opportunity for Families to Receive Early Intervention via Real-Time Feedback in a Longitudinal Study

Presenter: Sarah Whalan, The Kids Research Institute Australia

Co-authors: Jacqueline Davis, Desiree Silva, The Kids Research Institute Australia

ORIGINS is a longitudinal birth cohort designed to explore the key factors that contribute to a 'healthy start to life' through the prevention of non-communicable diseases. Another key objective of ORIGINS is for research findings to be highly translational through the provision of real-time feedback to families and informing clinical practice and policy changes. The aim of this paper is to describe the provision of real time feedback to participants in the first year of life. As part of ORIGINS, a comprehensive clinical assessment is undertaken with families once their child reaches one year of age. This follow-up provides early detection of general health issues, growth and developmental assessment, blood testing, and allergic disease assessments, including food and environmental allergen sensitisation determined by skin prick testing (SPT). An Ages and Stages Questionnaire (ASQ) is completed when the child is aged 4 months, 9 months and one year, reviewed by a Paediatrician and referral pathways are provided to the family where required. Out of 2,882 children who were seen for their one-year assessment, 412 children (14%) received early intervention, through a referral to health specialists or services. Of the 2,565 children who had a SPT at one year, 276 children (11%) had a positive response to at least one allergen. Referral letters were provided to 15% of the children who had completed a 4-month ASQ, 17% of the children who had completed a 9-month ASQ and 20% of the children who had completed a one-year ASQ. ORIGINS provides a unique and invaluable gateway for community engagement, research and education aimed at investigating and remediating modern health challenges. As part of the first year of life, ORIGINS has instigated early referral pathways for many children, providing an opportunity to change a child's developmental path and improve outcomes for children, families, and communities.

TALK 2: Advancing Healthy Ageing Measurement: An Individual-Level Index Using Longitudinal Survey Data

Presenter: Andreea Piri, Bocconi University

Co-author: Aleksandra Torbica, Bocconi University

Background. Healthy ageing (HA) encompasses physical, mental, and social well-being alongside environmental and systemic factors, yet the absence of a standardized measurement framework hinders cross-national comparisons. Building on insights from a systematic review on HA operationalization (Piri et al., 2025), this study develops and validates a Healthy Ageing Index (HAI) using longitudinal data from the German Socio-Economic Panel (GSOEP).

Methods. We construct a Healthy Ageing Index (HAI) using 40 individual-level variables systematically selected from 133 GSOEP candidate variables (2006–2020). Variable selection is guided by the HA dimensions identified in Piri et al. (2025), organizing evidence across three domains: intrinsic capacity (IC), functional ability (FA) and enabling environment (ENV), in keeping with the WHO HA framework. We employ an iterative multi-method process involving dimensionality reduction and validation techniques i.e., Principal Component Analysis (PCA) for key component identification, Lasso regression for feature selection, and Structural Equation Modelling for construct validation. Internal consistency was assessed using Cronbach's alpha. Analysis relied on two samples: all ages ($n=361,164$ observations, 55,487 individuals) and aged 50+ ($n=160,604$ observations, 24,164 individuals). Associations with subjective well-being (SWB), morbidity risk (chronic diseases, CD) and mental health (MH) were examined, adjusting for age, education, and marital status.

Results. The HAI (mean=0.117, SD=0.221) demonstrated strong internal consistency (Cronbach's alpha=0.7808). PCA confirmed that components can be traced back to individual variables attributable to the IC, FA, and ENV domains. Higher HAI scores correlated with improved outcomes in both samples of individuals. For the 50+ subsample, scores were associated with ~3% increased SWB ($\beta=0.196$, $p<0.01$), ~11.6% reduced CD risk ($\beta=-0.06$, $p<0.01$), and ~21% improved MH ($\beta=10.78$, $p<0.01$), with consistent results for the all-ages sample.

Conclusion. Through a validated, methodologically robust set of variables, the HAI can help cross-context comparability and advance measurement standardization in global healthy ageing research, policy and practice.

TALK 3: Multidimensional Inequality and Vulnerability to Poverty Throughout the Lifecourse: Longitudinal Evidence from Uruguay

Presenter: Andrea Vigorito, Universidad de la Republica (Uruguay)

Co-authors: Elisa Failache, Gonzalo Salas, Universidad de la Republica (Uruguay)

Uruguay experienced a severe economic crisis between 1999 and 2003, followed by one of the periods of largest economic growth in the Uruguayan history, driven by the increase in international demand for commodities. We analyse the evolution of income and multidimensional poverty among Uruguayan children from 2004 to 2016 and explore the determinants of different trajectories, assessing the role of several triggering events, including changes in adult employment in the household, access to social protection and household structure. We use three waves (2004, 2011 and 2016) of a longitudinal study of Uruguayan children who spent their early childhood during the recession. We compute Alkire and

Foster multidimensional poverty indices, transitions into and out of poverty and assess the role of a set of different triggering events (Jenkins, 2003). Whereas income poverty reduced almost by 50%, multidimensional poverty remained almost steady. Households in better conditions in 2004 were the more able to overcome multidimensional and income poverty.

Faced against the same triggering events, multidimensional poverty reacted to a lower extent. The changing relevance of the dimensions in accounting for multidimensional poverty can be related to the different ways in which the effects of the economic crisis impact children throughout the life course. These results are indicating that households were not able to translate their increased income into achievements in two critical dimensions of multidimensional poverty: education and health and socioemotional well-being.

TALK 4: Understanding Educational Gradients in Diabetes and Hypertension: Triangulating Survey, Pharmacy, and Biomarker Data from High School & Beyond

Presenter: John Warren, University of Minnesota

Co-authors: Jennifer Manly, Adam Brickman, Columbia University; Eric Grodsky, University of Wisconsin-Madison; Chandra Muller, University of Texas at Austin

Background: Educational gradients in health conditions are profound, but our understanding of how to address them is limited by the data available to us. In large scale population-based research, we typically evaluate the relationship between educational attainment (or years of schooling) and either (a) self-reported incidence of adverse health events or diagnoses of health conditions; (b) biomarkers of those diseases; or (c) administrative records that indicate disease incidence. Until now, we have not had – for large, population-representative cohort studies – all three of (a) people's self-reports of disease; (b) biomarkers of disease; and (c) pharmaceutical records that indicate disease treatment. How do inferences about educational inequities in disease – specifically hypertension and diabetes – change when we have full information about all three?

Methods: To address this question, we use new data from the U.S. High School & Beyond (HS&B:80) cohort study, which has followed a nationally representative sample of ~26,830 people from high school in 1980 through midlife in 2021. HS&B:80 data from the 1980s includes rich information about educational contexts, opportunities, and outcomes; early life socioeconomic and family circumstances; spatial location; and demographic group memberships. Data from 2021 include all three of (a) self-reports of hypertension and diabetes; (b) blood pressure and A1C levels; and (c) pharmacy records on treatments for both conditions.

The results of this study will inform our understanding of health equity, and either reinforce our confidence in the reliability and validity of self-reported health conditions or qualify how we interpret them.

8A STREAM: HEALTH / WELLBEING 3

INDIVIDUAL SMOKING PAPERS

TALK 1: Susceptibility to E-cigarette Initiation: Longitudinal Family and Personal Risk Factors Across Adolescence

Presenter: Jeremy Staff, Pennsylvania State University

Co-authors: Jessica M. Mongilio, University of Michigan; Mike Vuolo, The Ohio State

Objectives: The use of e-cigarettes has proliferated among adolescents around the world. Studies have identified cognitive susceptibility (i.e., intentions and willingness to use) as a powerful predictor of initiation into substance use among adolescents, including for e-cigarettes. We examined the personal- and family-risk factors that predict youth susceptibility to e-cigarette initiation. **Methods:** Nationally representative longitudinal data from parents and youth aged 12 to 17 in the U.S. Population Assessment of Tobacco and Health (PATH) Study were used. Over 7 observations between 2015 and 2023, youth were coded as being susceptible to e-cigarette initiation if they were curious about using e-cigarettes, thought they would try vaping soon and use an e-cigarette in the upcoming year, and believed they would vape if a friend offered them an e-cigarette. Youth were susceptible to e-cigarette initiation in about 26% of observations. **Results:** The panel data included 16,088 nicotine-naïve youth (i.e., never vaped or used other nicotine products), and youth's e-cigarette susceptibility was assessed over 43,531 longitudinal observations, until youths' first e-cigarette use (10% of observations were excluded after e-cigarette initiation), or until never vaping youth turned age 18 or stopped responding to the survey. Using hybrid panel models, results show that the odds of susceptibility were lower when youth resided in homes with strict vaping bans, controlling for parent e-cigarette use, youth problem behaviors and alcohol use, and friends' vaping, which each increased odds of e-cigarette susceptibility. Youth were also more susceptible to vaping when they felt that e-cigarettes were safer and less addictive than tobacco cigarettes, and were easy to buy. Girls were also more susceptible to vaping than boys. **Conclusions:** Prevention efforts must account for a comprehensive set of risk and protective factors to disrupt youth's plans to start vaping.

TALK 2: Did E-Cigarette Use Disrupt Declines in Adolescent Cigarette Smoking? Evidence from Three Birth Cohorts

Presenter: Jessica Mongilio, University of Michigan

Co-authors: Jeremy Staff, Jennifer L. Maggs, Pennsylvania State University; Christopher H. Seto, Purdue University;

Rebecca J. Evans-Polce, University of Michigan

Objective: We used longitudinal data from three UK birth cohorts (born in 1958, 1970, and 2001) to: 1) document the historic decline in adolescent cigarette smoking; and 2) examine whether adolescent e-cigarette use is associated with a disruption in this steady decline.

Methods: The prevalence of adolescent cigarette smoking was assessed in 1974 from 11,969 youth in the National Child Development Study (NCDS), in 1986 from 6,222 youth in the British Cohort Study (BCS), and in 2018 from 9,733 youth in the Millennium Cohort Study (MCS). In logistic regression models, we estimated the odds of adolescent smoking (ages 16-17) based on a common set of childhood risk and protective factors; adolescent e-cigarette use was included as a predictor in the more recent MCS.

Results: Adolescent cigarette smoking declined from 33% in 1974 to 25% in 1986 and to 12% in 2018. 11% of MCS youth reported current e-cigarette use. Though childhood risk factors for later adolescent smoking were mostly similar across the three cohorts, the risk of cigarette smoking in the MCS varied greatly by e-cigarette use. Among MCS youth with an otherwise same risk for cigarette use, the predicted probability of smoking ranged from 1% among e-cigarette naïve youth to 33% among youth currently using e-cigarettes.

Conclusions: This study suggests that e-cigarette use is associated with a disruption in the decline in youth smoking in the UK. Efforts to reduce cigarette smoking should focus on adolescents who currently use e-cigarettes to maintain the promising declines in youth cigarette use.

TALK 3: The Effect of Long-Term Smoking on Later Health Differs According to Adverse Childhood Experiences: Findings from a British Birth Cohort

Presenter: Camille Joannès, Inserm - Université Paul Sabatier

Co-authors: Lola Neufcourt, Raphaële Castagné, Michelle Kelly-Irving, Inserm, Université Paul Sabatier; Hélène Colineaux, Imperial College London

Adverse childhood experiences (ACEs) and long-term smoking are associated with impaired later health. It has also been suggested that the effect of smoking on health may vary according to previous history, particularly the experience of ACEs.

This ongoing study aims to examine the differential susceptibility of longterm smoking to later health in relation to ACEs. Data are from 17 304 individuals of the National Child Development Study (NCDS 58). ACEs were measured at ages 7, 11, and 16 on six distinct dimensions - child in care, physical neglect, contact with probation, parental separation, family mental illness, alcohol abuse – and summarized into a cumulative variable (none; one; two or more). Long-term smoking (never; fluctuating; persistent) was assessed from ages 23 to 42. An optimal/medium/impaired overall health measure was constructed by the sum of three selected indicators at 44-45y: chronic widespread pain, clinical interview schedule, and allostatic load. The interaction effect between long-term smoking and ACEs on health was examined using marginal effects with predicted values obtained post-estimation of a multinomial regression.

Results indicate that 22% of individuals have experienced one ACE and 8% two or more. 26% have smoked persistently (22% if no ACE, 34% if one and 44% if two or more). If all individuals had smoked persistently, the estimated probability of impaired overall health would be: 28% (CI95% = [0.25; 0.31]) in the absence of ACEs (+12% compared to individuals who had never smoked), 31% (CI95% = [0.27; 0.35]) in the presence of one ACE (+11% compared to individuals who had never smoked) and 38% (CI95% = [0.31; 0.45]) in the presence of two or more ACEs (+16% compared to individuals who had never smoked).

These results suggest that the effect of long-term smoking in relation to ACEs may influence health decades later, underlining the necessity of considering ACEs in smoking cessation programs.

TALK 4: Impact of Tobacco Advertising Restrictions in Switzerland: A Staggered Difference-in-Differences Study on the Effect of Tobacco Billboard Bans on Smoking Behavior

Presenter: Andreas Stoller, University of Fribourg

Co-author: Martin Huber, University of Fribourg

Introduction. The acceptance of the popular initiative “Yes to protecting children and young adults from tobacco advertising” in 2022 and the subsequent ongoing revision of the tobacco product law, turn tobacco advertising regulation into a topic of increased importance in Switzerland. The Swiss confederation and cantons restrict tobacco advertising only partially and thus leave room for stricter regulations. With the goal to inform tobacco politics, we measure the impact of tobacco billboard bans on smoking in Switzerland, based on Swiss health survey data, using a staggered difference-in-differences approach.

Data and methodology. The analysis is based on the Swiss Health Survey 1997-2017 provided by the Federal Statistical Office and data on tobacco prevention policies provided by the Federal Office of Public Health. The Swiss context displays a considerable intercantonal variation in tobacco prevention policies, with cantons playing an important role in shaping tobacco politics. Exploiting the inter-cantonal variation in tobacco prevention policies, we apply the staggered difference-in-differences method by Callaway and Sant'Anna (2021) to measure the impact of tobacco billboard bans.

Preliminary results. In our main difference-in-differences analysis, we evaluate the effect of tobacco billboard bans on the smoking rate when controlling for other tobacco policies and socio-demographic factors. Our preliminary results suggest that tobacco billboard bans lead to a significant but small reduction of the smoking rate, which persists up to 5 years after the policy introduction. We further explore heterogeneous effects by gender and age. Finally, we apply a generalized synthetic control method by Xu (2017) as a robustness check.

Conclusion. Our preliminary findings indicate a significant but small reduction in the smoking rate due to tobacco billboard bans in Switzerland. This is in line with other quasi-experimental studies on Swiss tobacco prevention policies which report either small effect sizes or no significant effects.

8B STREAM: EDUCATION / EMPLOYMENT 2

INDIVIDUAL INCOME & WEALTH PAPERS

TALK 1: The Effects of Delaying State Pension Age on Subsequent Healthcare Usage: A Cohort Analysis Using Linked Hospital Episode Data

Presenter: Laurence Rowley-Abel, University of Edinburgh

In response to population ageing, many countries have implemented policies to delay the age at which individuals are entitled to a state pension. Governments have argued that current entitlement ages are not financially sustainable in the context of longer life expectancies. However there has been limited assessment of how the extension of work further into later life might be impacting health and whether this puts further strain on healthcare systems. In the United Kingdom, the 1995 Pensions Act delayed women's age of entitlement from 60 to 65. The cohort of women first affected by this reform have now aged through their 60s, presenting a unique opportunity to analyse the impacts of delayed pension entitlement on their health and healthcare usage. We make use of largescale, linked hospital episode data in the UK Biobank to compare two cohorts of women – those born in 1949 who were unaffected by the reform, and those born in 1954 whose entitlement age was delayed. Poisson regression models were used to model differences in the number of hospital episodes between the two cohorts. We also examined whether the reform had different effects depending on individuals' economic situation, given that reliance on a public pension will differ by socioeconomic status. Results show that while overall differences between the cohorts were minimal, low-income groups in the 1954 cohort had a significantly higher number of hospital episodes than low-income groups in the 1949 cohort. This suggests that policies delaying entitlement to pensions may have adverse consequences on the health of low-income individuals, which in turn puts additional strain on healthcare systems.

TALK 2: The Dynamics of Financial Satisfaction in Older Age

Presenter: Liisa-Maria Palomäki, Finnish Centre for Pensions

Co-authors: Kati Ahonen, Anu Polvinen, Ilari Ilmakunnas, Finnish Centre for Pensions

There is an emergent lack of longitudinal analysis of subjective economic wellbeing in older age. This study aims to address this gap by examining the dynamics of financial satisfaction during old-age retirement. Despite the common association of older age with losses in resources such as health and relationships, these changes do not necessarily lead to decreased subjective wellbeing (SWB).

This study utilizes data from the longitudinal Finnish survey "Pensioners' income and economic well-being," conducted in 2017, 2020, and 2023, to analyze changes in financial satisfaction among old-age retirees. The study is based on a sample of old-age recipients aged 55–85 years, including 2,296 pensioners with responses for two or three waves. The analysis considers the association of financial satisfaction with a wide range of factors beyond age, including household size, self-rated health, incomes, housing tenure, and employment. Using a hybrid model, the study differentiates within- and between cluster effects, combining the strengths of random- and fixed-effects models. This approach allows for a consistent estimation of both level-one and level-two variables, enabling differentiation within individuals and between individuals effects.

Initial results show that financial satisfaction generally increased during retirement, with more variation observed between individuals than within individuals. Regarding within-individual changes, changes in household size did not significantly affect financial satisfaction. However, a decline in self-rated health was associated with a decrease in financial satisfaction. Additionally, stopping work led to a decrease in financial satisfaction, even though retirees who were not working were generally more satisfied. The findings will provide insights into how financial satisfaction evolves during retirement and the factors influencing it. This research aims to contribute to a deeper understanding of economic wellbeing in older age, informing policy interventions and helping individuals plan for a financially satisfying retirement.

TALK 3 & 4: Withdrawn

TALK 1: Enriching Longitudinal Population Studies with Shopping Data

Presenter: Romana Burgess, University of Bristol

Co-author: Anya Skatova, University of Bristol

Traditional epidemiological methods face challenges in consistently measuring health indicators over the life course. Declining participation rates and nonresponse can affect sample representativeness, leading to distorted associations. In the case of dietary surveys, biases like recall and social desirability further compromise accuracy—in particular when participants under-report unhealthy food consumption. A novel solution is the use of supermarket data—collected by loyalty cards at the point of purchase—which contain detailed records of purchases, including what was bought, how frequently, and when. While not without their own biases, these records are often span many years, providing an efficient way to track changes in dietary patterns over time. Linking supermarket shopping records with longitudinal population studies (LPS)—which typically follow participants over extended periods—can provide new understanding of dietary behaviours during life transitions.

We present the linkage of supermarket shopping data into the Avon Longitudinal Study of Parents and Children (ALSPAC), based in Bristol, UK. ALSPAC recruited over 14,000 mothers and babies between 1994 and 1995 and has since collected extensive phenotypic, genetic, lifestyle, demographic, and health data for over 30 years. This rich dataset spans key life course transitions—from infancy to adulthood. Currently, loyalty card data from a major UK supermarket has been successfully linked for 244 individuals, including information on products, categories, quantity, cost, frequency, and store location. To maximise the value of this linkage, we are assessing potential biases—such as demographic differences in loyalty card owners—and ensuring the data is usable for research.

By linking these two data sources, we gain a unique opportunity to explore how social, economic, and environmental factors intersect with dietary behaviours during these transitions. Understanding these intersections can provide policymakers with stronger, data-driven evidence to create targeted strategies that promote healthier life course transitions and improve long-term outcomes.

TALK 2: Investing in Metadata: Improving Survey Data Management and Data Sharing

Presenter: Jon Johnson, University College London

Co-author: Paul Bradshaw, Scottish Centre for Social Research (ScotCen)

One of the biggest challenges of survey research - especially in longitudinal survey research which covers a wide range of topics - is transmitting the ideas, rationale and methodology that goes into designing a well-constructed questionnaire to the user of that data many years later, especially a 'naïve', secondary data user.

Over many years and across many studies, research teams have produced data documentation – or 'metadata' – which seeks to serve this purpose. Increasingly, there have been moves to standardise the approach to producing metadata – for example, utilising the Data Documentation Initiative (DDI) standards – to ensure consistency and comparability across different studies and over time. However, such approaches are often manual and thus resource intensive. This presentation will provide an overview of a new generation of metadata platforms built around the DDI lifecycle.

Although initially focused on improving data discovery these platforms can also provide the basis for improvements in survey question provenance and assist in better data management and data sharing to meet the needs of survey managers, data managers and data providers such as archives more efficiently. The presentation will also talk to the way in which improvements in metadata quality and quantity can, with an appropriate use of machine learning and AI, generate new tools which enable new areas of research for example through enhanced discovery and tackle long standing problems such as managing disclosure in TREs.

TALK 3: Mapping Life Trajectories: A Machine Learning Approach to Clustering Multidimensional Life Courses

Presenter: Zerui Tian, University of Oxford

Taking a life-course perspective, this paper uses novel machine-learning methods to identify typologies of life trajectories by classifying multi-dimensional life trajectory data with transformer-embeddings. This paper also demonstrates how demographic characteristics predict trajectory typology memberships and how typology memberships are associated with later-life outcomes. Using data from the 1970 British Cohort Study, I first establish a two-dimensional life trajectory data combining individuals' partnership histories and work/education histories. I apply transformer-based embeddings to capture temporal dependencies and dynamics from multi-dimensional trajectory data. I then apply K-Means and Gaussian Mixture Models (GMM) clustering methods to classify individuals based on learned representations.

Preliminary results identify four female clusters and five male clusters with distinct work-life trajectories. Qualitatively, the four female clusters can be described as "late bloomers", "independent & steady", "marriage & caregiving first", and "career-family jugglers". The five male clusters can be described as "early cohabitation with continuous struggles",

“cohabiting careerists”, “late committers, long learners”, “traditional breadwinners”, and “young settlers”. Among them, the “independent & steady” and “marriage & caregiving first” women are associated with worse economic and health outcomes and “early cohabitation with continuous struggles” men are associated with worse economic and health outcomes at age 46. Incorporating interactions between cluster membership and baseline characteristics consistently improves model fit to predict life outcomes at age 51, suggesting that life pathways may create different “risk environments” where socioeconomic factors work differently in leading to health outcomes. Another key finding is that GMM performs better for women while KMeans performs better for men in clustering. It might suggest gendered differences in life-course patterns—with women having more fluid, overlapping, and nonlinear trajectories. This research makes both a methodological contribution as one of the first studies to apply transformer-based embeddings to life trajectory data, and a substantive contribution by advancing the understanding of the gendered typologies of life trajectories.

TALK 4: Application of a Data-Driven Approach to Support Handling of Non-Response in the UK Millennium Cohort Study

Presenter: Martina Narayanan, University College London

Co-authors: Aase Villadsen, Brian Dodgeon, Michalis Katsoulis, George B. Ploubidis, Emla Fitzsimons, Richard J. Silverwood, University College London

Non-response is common in longitudinal studies, reducing efficiency and introducing the potential for bias. We examine non-response in the Millennium Cohort Study (MCS), a national cohort study which follows the lives of around 19,000 young people born across England, Scotland, Wales, and Northern Ireland in 2000-02. Our aim is to provide a robust, data-driven approach for users of MCS to help deal with selection bias due to non-response. Across seven sweeps of data collection between age 9 months and 17 years, MCS has collected rich data on areas such as participants’ physical, socio-emotional, cognitive and behavioural development, as well as detailed information on their daily lives, behaviours and experiences. We apply a systematic data-driven approach to identify predictors of non-response at each sweep of MCS from within the set of variables observed at earlier sweeps. Our goal is to identify a set of important predictors of non-response that can be used as auxiliary variables (in principled methods of missing data handling, such as multiple imputation) to restore baseline sample representativeness and reduce bias in applied research using MCS data. We will present predictors of nonresponse for each of the MCS sweeps and demonstrate how these can be used in analyses to restore sample representativeness. We will also discuss how these identified predictors of non-response compare to those identified in other British cohort studies including the 1958 National Child Development Study (NCDS), 1970 British Cohort Study (BCS70) and Next Steps.

8D STREAM: YOUNG LIVES

INDIVIDUAL ADOLESCENCE 2 PAPERS

TALK 1: Suicidal Thoughts and Behaviours in Adolescence and Early Adulthood

Presenter: Agatha Faulkner, Australian Institute of Family Studies

Co-authors: Neha Swami, Paul Hockey, Australian Institute of Family Studies

Background: Suicidal thoughts and behaviours (STBs) are a preventable public health concern. Mid to late adolescence is a period of elevated risk, where some adolescents experience a single instance, and others experience more persistent STBs over time. However, few studies examine the longitudinal trajectory of STBs during adolescence and emerging adulthood, using a nationally representative sample. Objectives and Method: This study uses a nationally representative sample of more than 2,200 adolescents from the Longitudinal Study of Australian Children (LSAC) to investigate the patterns of STBs and predictors for increased risk. The data is from three waves, with participants aged 14-15, 16-17 and 18-19 years who self-reported experiencing suicidal ideation, planning or attempt(s). Several key family, peer, school and health service use factors at age 16-17 years were used to predict STBs at age 18-19 years, accounting for key socio-demographics factors and prior STBs at ages 14-15 years and 16-17 years. Results: Most young people did not report any STBs across adolescence, with the proportion higher for males (77%) than females (71%). For those who experienced STBs, the most common trajectory was “emerging or increasing”, which was young people who did not report STBs at age 14-15 years but reported STBs at age 16-17 and/or 18-19 years (around 10% of females and males). Logistic regression models found that positive parent-adolescent relationships, higher parental involvement, positive peer-adolescent communication, increased levels of school participation and belonging at ages 16-17 years were associated with lower odds of STBs at ages 18-19 years. Conversely, having a perceived unmet health-related care need, and not seeking help for personal or emotional problems at age 16-17 years were associated with higher odds. Conclusion: Preventing STBs requires community-wide strategies and actions. Promoting strong relationships among adolescents with their parents and peers, and encouraging school participation and involvement, can help decrease the likelihood of future STBs. Understanding and addressing barriers to service use or help seeking among adolescents also warrants an increased focus.

TALK 2: Eliminating Unhealthy Behaviors in Adolescence to Reduce Diabetes in Adulthood: A Population-Based Cohort Study

Presenter: Cristian Carmeli, University of Fribourg

Co-author: Nicholas Grubic, University of Toronto

Background: Addressing unhealthy behaviors during adolescence might reduce the population-level risk of diabetes in adulthood and mitigate intergenerational disparities in this risk. We aimed to quantify the effects of eliminating unhealthy behaviors in adolescence on adult diabetes and disparities by parental education.

Methods: Data were from the U.S. National Longitudinal Study of Adolescent to Adult Health (n=4435). Unhealthy behaviors included self-reported cigarette smoking, alcohol use, insufficient physical activity, excessive recreational screen time, and short/long sleep duration, as measured at ages 12 – 19 (1994 – 1995, study baseline). Parental education (low for completed high-school or less, high otherwise) was self-reported by parents at baseline. Diabetes (self-reported antidiabetic medication or blood biomarker values within pre-diabetic and diabetic ranges) was assessed at ages 33 – 43 (2016 – 2018). Using double-robust inverse probability weighted methods, the change in diabetes risk and disparities by parental education were estimated by comparing an elimination of unhealthy behaviors against their observed prevalence.

Results: After 21 years, 22% of adolescents had diabetes. Adolescents from families with low education had a 9.9% higher proportion of diabetes compared to those from families with high education. Eliminating alcohol use led to 1.6% fewer diabetes cases (95% compatibility interval [CI]: 0.4% – 2.8%) and an inconclusive disparity reduction of 0.5% (95% CI: 2.2% – 3.2%). Eliminating insufficient physical activity led to 2% fewer diabetes cases (95% CI: 0.3% – 3.8%) and an inconclusive disparity reduction of 0.5% (95% CI -4.4% – 5.4%). Eliminating other unhealthy behaviors led to smaller or inconclusive changes in diabetes prevalence and disparity.

Conclusion: Our findings indicate that diminishing adolescent alcohol consumption and insufficient physical activity may lead to small reductions in adult risk of diabetes. Future studies should examine cumulative effects of eliminating unhealthy behaviors from adolescence to adulthood and joint effects of eliminating multiple unhealthy behaviors.

TALK 3: Major Life Events from Adolescence to Young Adulthood: A Longitudinal Natural Language Processing Analysis of a Large Urban Cohort

Presenter: David Bürgin, University of Zurich

Co-authors: Christina Haag, Lynn Alison Büeler, Laura Bechtiger, Clarissa Janousch, Denis Ribeaud, Manuel Eisner, Lilly Shanahan, Viktor von Wyl, University of Zurich

Background: Recent research shows an increase in mental health problems among young people often times labelled 'youth mental health crisis'. Even though youth mental health is a growing area of concern, much of the research is based on predefined survey instruments. This limits the understanding of the subjective experiences and evolving priorities of youth.

Aims: Our study addresses this gap by integrating youths' first-hand accounts using innovative Natural Language Processing (NLP) techniques to uncover risk and protective factors. Specifically, we aim to investigate openly assessed major life-events in youths and describe how key life-event topics change from mid adolescence to early adulthood.

Methods: In the Zurich Project on Social Development from Childhood to Adulthood (z-proso), 1,442 participants answered a single-item open-ended question on their most significant life-event in the previous years at four measurement occasions between the ages 15 to 24. We analyzed themes in N=5,708 text narratives using topic modelling with the Python library 'BERTopic', combining conventional techniques with large language models (LLMs) and analyzed shifts in life-event topics over time.

Results and Conclusion: Results display a diverse range of youths' life-events across multiple life domains (education & career development; social relationships, leisure activities & successes; mental health & wellbeing; and life-events related to other transitions & independence). Most life-events were of positive valence (83.2%). Major life-event topics showed distinct developmental shifts over time. Our work, thus, highlights salient life-event topics across different ages and illustrates how longitudinal population-based research can draw on text data through NLP techniques to assess lived experiences of youth.

TALK 4: Adverse and Positive Childhood Experiences and Their Associations with Youth Violence: Analyses from the Millennium Cohort Study

Presenter: Aase Villadsen, University College London

Co-authors: Nicolas Libuy, Adolfo Ibáñez University (Chile); Emla Fitzsimons, University College London

Youth violence is a cause for concern with offences such as knife and other weapon offences showing an increase in the last five years in England and Wales. A better understanding of the risk and protective factors associated with youth violence is a crucial first step in informing policy makers and practitioners on routes to prevention and intervention. This study uses data from the Millennium Cohort Study, a birth cohort study of around 19,000 children born at the start of the century in the UK who have been followed up at regular intervals through early childhood into adolescence. Three youth violence outcomes measured at age 14 and 17 are examined in the current study (assault, weapon involvement, gang affiliation). We examine how these outcomes are associated with the number of adverse childhood experiences (ACEs) and the number positive childhood experiences (PCEs) that cohort members were exposed to during childhood. In addition, we examine whether positive childhood experiences can buffer against the detrimental effect of adverse childhood experiences on youth violence.

8E STREAM: Disadvantage / Inequality 2

INDIVIDUAL GENDER 2 PAPERS

TALK 1: Gendered Paid and Unpaid Task Division Patterns Among Swiss Dual-Earner Couples and Their Determinants: A Multichannel Sequence Analysis

Presenter: Flavien Bonelli, University of Lausanne

Co-authors: Stephanie Steinmetz, Boris Wernli, FORS - University of Lausanne

Despite notable progress in recent years, balancing professional and personal commitments in dual-earner relationships continues to pose a significant challenge. Gender disparities in career advancement and income distribution persist in Switzerland, where traditional labor divisions continue to obstruct the realization of a gender-balanced workforce. This imbalance not only perpetuates inequality in paid employment but also reinforces gendered expectations surrounding unpaid domestic and caregiving responsibilities.

While a substantial body of international literature has examined the division of paid and unpaid labor in dual earner couples, there is limited understanding of how these dynamics manifest in Switzerland and how they evolve over time. Moreover, this issue is often addressed primarily with a focus on women. In contrast, this study analyzes the couple level to understand the longitudinal effects for both men and women, as well as their interactions with each other.

Data from the Swiss Household Panel is analyzed to identify and classify patterns in how dual-earner couples divide paid and unpaid labor. Multichannel sequence analysis is used to uncover distinct division of labor trajectories, focusing on couples observed over at least seven years. This approach enables a nuanced exploration of how these patterns develop and change over time, providing insights into the stability of household arrangements.

Furthermore, the study examines key determinants – such as socioeconomic status, educational background, number of children, and cultural attitudes – that impact how couples organize their work and family responsibilities. By examining these patterns, this research seeks to enhance our understanding of the factors influencing household labor division and establish a foundation for future studies on the broader implications of these arrangements. Specifically, it will provide insights into how various divisions of labor impact women's career advancement and men's participation in unpaid work, contributing to discussions on gender equality and work-life balance in Switzerland.

TALK 2: When Fathers Thrive at Home, Mothers Face the Same Struggles: Gender and Caregiving Differences in the Mental Health Effect of Working from Home

Presenter: Constance Beaufils, King's College London

Co-author: Heejung Chung, King's College London

Although working from home is presented as a gender equality policy promoting work-life balance, its effects on mental health remain insufficiently understood. While working from home may benefit men and women differently depending on caregiving roles, such heterogeneity has not been examined. Existing studies are also limited by endogeneity and unobserved confounding factors, that undermine their causal claims. This paper examines the mental health effects of working from home among men and women, differentiating between individuals with childcare, elder care, or no caregiving responsibilities. We use data on adults aged 18 to 65 from fourteen waves (2009–2023) of Understanding Society (US), a panel-representative survey of adults resident in households in the United Kingdom. We use an innovative methodological approach inspired by Carrino et al. (2022) that exploits within-occupation variation in working from home to identify a causal link between working from home and mental health. For each four-digit SOC code and quarter in Understanding Society, we assign the prevalence of individuals reporting working mainly from home at the same SOC level and quarter in the UK Labour Force Survey (2009–2023). We then estimate the effect of working from home prevalence on depressive symptoms, measured with GHQ index and SF-36 Mental Component Summary. We use fixed effects models to remove unobserved time-invariant heterogeneity. We find that working from home significantly reduces depressive symptoms for

men, but not for women. Among men, fathers experience a significantly greater reduction in depressive symptoms than non-fathers. However, we measure no significant effects for men and women with elder care responsibilities. Notably, the positive effects of working from home disappear from 2020, suggesting that its wider use during the pandemic may have altered the results. These results suggest that working from home is particularly beneficial for fathers, but not for mothers or other caregivers, limiting its role as a gender equality policy.

TALK 3: How a Quantitative Biographical Approach Can Help in Understanding the Complex Intersections of Breast Cancer, Migration and Gender? The Case of the SENOVIE France Study'

Presenter: Karna Coulibaly, Institut National d'Études Démographiques (INED)

Co-authors: Clémence Schantz, Université Paris Cité, IRD, INSERM; Luis Teixeira, Joseph Larmarange, Université Paris Cité; Gaëtan Des Guetz, Hôpital Delafontaine; Laurent Zelek, Hôpital Avicenne; Anne Gosselin, Institut National d'Études Démographiques (INED)

Breast cancer is a major global public health challenge. It is the most commonly diagnosed cancer (2.3 million new cases diagnosed worldwide in 2022) and the leading cause of cancer-related mortality among women. Significant social inequalities exist among women affected, both across and within countries, driven by the complex interplay of life course exposures and social determinants such as living conditions and access to healthcare. In France, women from sub-Saharan Africa could face many challenges in living with breast cancer because of earlier cancer onset than in general population, poorer living conditions and obstacles to access to healthcare. However, to our knowledge there is no quantitative data available to describe their life trajectory with cancer, compared to non-immigrant women.

In order to better understand how migration and gender intersect in the experience of breast cancer, the SENOVIE France study was designed using an original method: a quantitative biographical approach. This method captures immigrant and non-immigrant women's life courses year by year from birth to the date of survey using a biographical grid, in order to i) understand how breast cancer (diagnosis, treatment and possibly reconstruction) impacts the life trajectories of women in many spheres (migration, family life, professional life, financial situation, etc.); ii) study their access to healthcare and its determinants; and iii) examine how gender relations may shape breast cancer experience (i.e. sexuality, body image, domestic tasks in the household...). The recruitment of 1,000 women (500 born in France and 500 in Sub-Saharan Africa) began in March 2024 and is ongoing until June 2025.

This presentation will describe the biographical approach used in the SENOVIE France study and discuss – using the preliminary results – how this approach can help to understand the interaction between gender, migration status and breast cancer.

TALK 4: Gendered Pathways in Occupational Sorting: The Enduring Effects of Humanitarian Immigrants' Premigration Occupation Histories

Presenter: Rennie Lee, The University of Queensland

Co-author: Janeen Baxter, The University of Queensland

Humanitarian immigrants' labour market integration is a key outcome for understanding their settlement and is necessary for achieving a core goal of Australia's resettlement policy: to move immigrants toward self-sufficiency and non-reliance on governmental support. While labour market integration has primarily focused on whether humanitarian immigrants are employed, we know less about the occupations where they work. If humanitarian immigrants are channeled into lower-paying jobs, they will face difficulty in attaining upward mobility. This study explores humanitarian immigrants' labour market integration during the first 10 years in Australia and identifies potential mechanisms associated with diverging labour market stratification. We employ advanced regression modeling using longitudinal nationally representative data of humanitarian immigrants from the Building a New Life in Australia survey. Our sample consists of humanitarian immigrants who received permanent residency (which entails work rights) shortly before the first wave of data collection. Our findings show that gender plays an important role in how humanitarian immigrants are sorted into jobs in Australia. Whereas refugee women and men are employed in jobs with similar levels of prestige shortly after arriving in Australia, ten years later, women hold more prestigious jobs than men. Premigration occupational prestige is particularly important in explaining gender disparities in humanitarian immigrants' occupational prestige in Australia. Not only do refugee women hold more prestigious jobs than men prior to arriving in Australia, women are also more effective in engaging their premigration occupations to achieve greater occupational mobility in Australia. Our study demonstrates the importance of harnessing humanitarian immigrants' premigration occupational experience in the settlement process. While Australia's resettlement policy is mostly concerned with facilitating refugees into paid employment regardless of the occupation type, facilitating refugees' entry into occupations that match their premigration skills and occupation histories would be a more effective long-term strategy.

8F STREAM: LONGITUDINAL STUDY 2

INDIVIDUAL NEW INITIATIVES PAPERS

TALK 1: Withdrawn

TALK 2: Introducing Equalise: ESRC Centre for Lifecourse Health Equity

Presenter: Yvonne Kelly, University College London

Co-author: Anne McMunn, University College London

Despite decades of research, health inequities persist in the UK and elsewhere. This presentation will introduce Equalise: ESRC Centre for Lifecourse Health Equity. Equalise is a major new lifecourse research investment in the UK which brings together partners from a range of disciplinary and methodological expertise across academic and third sector organisations, as well as policy makers at national, regional and local levels to address the challenge of intersectional health inequity from a lifecourse perspective. The Centre seeks to meet this challenge through:

1. delivering a co-produced scientific programme which generates solutions across the themes of learning, work and care, with a cross-cutting theme on place and a synthesis theme drawing together findings across the Centre's programme.
2. maximising impact through close partnerships with communities, third sector organisations and government at all levels.
3. developing the next generation of lifecourse researchers with skills in mixed-methods approaches which combine quantitative analysis of longitudinal survey, administrative and synthetic data with insights from public scrutiny panels and citizen's juries.

The Centre builds on 15 successful years of the ESRC International Centre for Lifecourse Studies in Society & Health (ICLS) and includes The Research Department of Epidemiology & Public Health and the NIHR Centre for Children, Families and Policy Research at UCL, The Population Health Research Group at City St. George's University of London, the Centre for Health Policy at the University of Strathclyde, The Social and Public Health Sciences Unit at the University of Glasgow, The Bradford NIHR Health Determinants Research Collaboration (HDRC), the Centre for Coastal Communities at the University of Essex, and the Centre for Epidemiology and Population Health Research in Inserm at the University of Toulouse as well as 19 further government and third sector organisations.

TALK 3: Recent Challenges and Innovations in Panel Surveys: Insights from the U.S. Panel Study of Income Dynamics

Presenter: Narayan Sastry, University of Michigan

Co-author: Katherine McGongle, University of Michigan

Longitudinal and life course research relies significantly on data from panel surveys, which in recent years have faced many challenges, such as maintaining high response rates and containing costs, while also adapting to societal changes, such as increased use of the internet and smartphones. We provide an overview of how these challenges have affected the U.S. Panel Study of Income Dynamics (PSID) and how the study has adapted and innovated to address these challenges. PSID is the world's longest-running panel survey. It collects detailed information on income and wealth dynamics, but also extensive data on social and demographic behavior and outcomes. Data are collected on the original families and their descendants, providing information on intergenerational connections in behavior and outcomes. PSID data are widely used by social and behavioral scientists. Since the inception of PSID in 1968, and over the course of data collection for 43 waves over 56 years, the study has encountered challenges that are common to almost all large-scale population-based surveys around the world. We provide an overview of recent challenges faced by PSID and descriptions of the innovations that have been developed, tested, and implemented in response. Many of these innovations have used randomized controlled experimental designs to more convincingly assess their effects. Among the recent challenges we address are declining response rates, the need to sample and incorporate new immigrants, respondents' interest in completing interviews by the web rather than by telephone or in person, effects of web versus telephone interview mode on survey responses, changing the duration of fieldwork, and increasing pressure from sponsors to reduce or limit the increase of costs. We conclude with an assessment of future challenges and a discussion of research priorities and interventions that are needed to address these future challenges.

TALK 4: Towards a National Data System to Support Research and Policy: The Case of Australia

Presenter: Mark Western, The University of Queensland

Co-authors: Marcel van Kints, Australian Bureau of Statistics; Claire Sparke, Australian Institute of Health and Welfare

In Australia a distinctive set of policy arrangements, institutional conditions, and partnerships between universities and other stakeholders, is enabling a coordinated system-wide approach to developing research infrastructure for large-scale, whole-population research. Research infrastructure includes equipment and facilities, standardised data assets, research infrastructure expertise, specialist personnel, and services such as data linkage and development, training and capacity building. This paper describes Australia's research infrastructure policy and funding environment and its national research infrastructure planning and development process. It also describes how Australian researchers and data infrastructure agencies have partnered across universities and government to lay foundations for a national data research infrastructure supporting policy development, analysis and evaluation and academic research. One example is the Decadal Plan for Australian Social Science Research Infrastructure which lays out a ten year strategy for the development

of the Australian Research Infrastructure Ecosystem for Social Science (ARIESS), an integrated national network of facilities, data, personnel and services to support large-scale advanced research. Making ARIESS a reality means addressing a number of critical issues including: adopting common standards and frameworks for interoperability across data, systems and platforms; embedding support for Indigenous self-determination in research and Indigenous data governance into the ARIESS architecture; and being attentive to technological and societal challenges and opportunities. The paper discusses how these issues are being addressed towards the development of a national system.

Wednesday 10th September 2025

KEYNOTE 3 *(delivered remotely)*

Longitudinal Data and the Policy Process: A Cautionary Tale

Presenter: Mel Bartley, University College London

In the Black Report's 3 explanations for health inequality, one candidate was "the artefact explanation". Maybe apparent differences in mortality between the social classes had been produced by different ways in which occupation was measured on different occasions? For example, when filling out a census form, a person with no job might not put down an occupation at all, but at death registration the relatives would tend to state the work that person had mostly done. So the decennial reports on health inequality, which took their denominator from the census, might have mistakenly put too few people in "unskilled" and manual occupations with a lot of unemployment, exaggerating the death rates in these social classes.

The ONS Longitudinal Study, the biggest compilation of longitudinal data ever constructed in the UK (or more accurately England and Wales), was partly intended to investigate the question of whether health inequality was a measurement artefact. The LS linked records from Censuses and death registrations so that the same people were used in both the numerator and denominator figures for calculating social class mortality rates. When first analysed, it seemed to show that indeed a more correct method of analysis yielded a much smaller health gap. But nobody believes the artefact explanation anymore. Indeed, younger scholars may have never even heard about it. The story of how this came about is a cautionary tale that throws light on the real relationship between research and policy.

9A STREAM: PARENTHOOD / FAMILY 1

SYMPOSIUM Harmonisation of Health, Fertility and Relationships in the British Cohort Studies

Chair: Martina Narayanan, University College London

The five UK national longitudinal studies form the only series of national birth cohort studies in the world, including the Millennium Cohort Study (MCS, born 2000/1), Next Steps (born 1989/90, followed since adolescence), the 1970 British Cohort Study (BCS70), the 1958 National Child Development Study (NCDS), and the 1946 National Study of Health and Development (NSHD). They are recognised internationally for their unique ability to address major issues relating to society and population health through their rich life course data. However, robust longitudinal and cross-cohort research requires data harmonisation to create comparable measures over time and across cohorts. The goal of the current project was to harmonise measures of physical health and variables on relationships and fertility across all five cohort studies. In this symposium we first present the general project aim and approach for harmonising data across all five cohorts. After this we present three specific examples on how the derived harmonised variables are currently used in empirical research, with one paper making use of the harmonised variables for childhood asthma, another paper including harmonised variables of type 2 diabetes, and a third paper exploring predictors of childlessness.

TALK 1: Introduction to the Project: Overview and Learning

Presenter: Rebecca Hardy, Loughborough University

Co-authors: Laura Gimeno, Martina Narayanan, Sam Parsons, Aase Villadsen, Alice Goisis, University College London

Creating comparable data across studies is a key challenge in cross-study analysis. The challenges of data harmonisation are particularly complex when creating longitudinal histories – such as for health, fertility and relationships – which require integration of information from multiple data sweeps within each study. In this talk, we introduce the goals of the harmonisation project, present the overall approach to data harmonisation, and highlight potential uses of the harmonised datasets. We highlight similarities and differences in approaches between the health and family projects, drawing out key challenges and learning around best practice in data harmonisation. Finally, we describe the created datasets and resources produced to ensure usability by the research community.

TALK 2: Childhood Asthma and Mental Health and Educational Outcomes: A Cross-Cohort Comparison

Presenter: Martina Narayanan, University College London

Co-authors: Laura Gimeno, University College London; Emily Petherick, Rebecca Hardy, Loughborough University

Childhood asthma affects around 1.1 million children in the UK which is approximately 9-10% of the population under 18 years old. This makes it one of the most common chronic conditions among children. Childhood asthma has consistently been linked to adverse mental health outcomes, specifically anxiety and depression. It has also been linked to school absence and worse educational outcomes. In this paper we examine whether the relationship between childhood asthma and mental health and educational outcomes differs in four British cohort studies including NSHD, NCDS, BCS and MCS.

We use harmonised measures of diagnostic status of childhood asthma, as well as mental health and educational measures. We will present results from cross-cohort comparisons in relationships between childhood asthma and mental health and educational outcomes. We will further explore if results differ depending on gender and groups of socio-economic status.

TALK 3: Childhood Socioeconomic Position and Type 2 Diabetes: How Have Associations Changed Across Cohorts?

Presenter: Laura Gimeno, University College London

Co-authors: Martina Narayanan, University College London; Rebecca Hardy, Loughborough University

Prevalence of self-reported type 2 diabetes has increased in recent decades, reflecting the impact of both increasing exposure to obesogenic environments and changes in screening and diagnostic techniques.

Social inequalities in health expectancy in the United Kingdom have widened since 2011, yet the extent to which inequalities in self-reported diabetes have changed across cohorts is less well understood. We present work using newly harmonised variables on self-reported diabetes from three British birth cohort studies, which have followed people born in 1946, 1958, and 1970 from birth until today. We first describe diabetes prevalence within each cohort over age and quantify cohort differences in age-adjusted diabetes prevalence. We then explore associations between diabetes risk and childhood socioeconomic position (SEP) based on parental occupational social class, using Redit scores to estimate the Slope Index of Inequality (SII). We find that the prevalence of self-reported diabetes increased substantially across cohorts when comparisons were made at similar ages, echoing known cohort differences trends in obesity. Lower childhood SEP was consistently associated with greater risk of type 2 diabetes. We plan to expand on this work by exploring the extent to which SII varies across cohorts.

TALK 4: Predictors of Childlessness in Three UK Cohort Studies

Presenter: Aase Villadsen, University College London

Co-authors: Sam Parsons, Alice Goisis, University College London

Patterns of family formation in the UK and in many other western countries have change significantly across time, with younger generations postponing starting a family and having fewer children. There has also been an increase in childlessness among each subsequent cohort born since the end of the second world war. In this study we examine factors that predict childlessness for women and men at age 50 in three UK longitudinal birth cohort studies covering individuals born in 1946, 1958 and 1970. Factors examined include cohort members characteristics such as partnership status, educational attainment, socio-economic status of the family of origin, physical health, mental health, and cognition. Differences between cohorts are examined for men and women separately.

9B STREAM: GENDER SYMPOSIUM

Exploring Diverse Adolescent Trajectories Through Longitudinal Research

Chair: Kate Pincock, Gender and Adolescence: Global Evidence (GAGE), ODI Global

Gender and Adolescence: Global Evidence (GAGE) is a longitudinal mixed methods multi-country study following 20,000 adolescents in the global South over the second decade of life from 2016-26. The study explores how gender shapes young people's trajectories into adulthood, and which strategies are thus most effective in transforming adolescent girls' and boys' lives. Data collection for GAGE is undertaken at three timepoints (baseline, midline and endline) with two cohorts, aged 10-12 and 15-17 years at baseline, combined with nested impact evaluations of specific policies and programmes.

Papers in the symposium share insights from timeline exercises undertaken at endline with adolescents and their caregivers who had also participated in interventions aimed at improving adolescent outcomes. Focusing on the experiences of adolescent boys, married girls, young people affected by conflict, and young people with disabilities, papers explore participants' reflections on key events that have shaped their trajectories through adolescence. Papers explore the impact attributed to interventions relative to broader macro-level shifts (e.g. the pandemic, political transitions, conflict or economic crises) and policy changes (e.g. cash transfers for education or disability rights legislation), identifying implications for adaptation and scale-up of interventions with specific groups of young people.

TALK 1: Masculinities in Times of Social Change and Upheaval: Understanding Boys' Coping Strategies

Presenters: Nicola Jones and Joost Vintges, Gender and Adolescence: Global Evidence (GAGE), ODI Global

The global socioeconomic upheaval of the past decade has reshaped the lives of young people around the world. For young men in contexts where the achievement of male adulthood has traditionally been implicitly linked to entry into paid work and obtaining the ability to provide for a family, shrinking opportunities and growing precarity presents a challenge for what it means to become a man in the 21st century. Yet while studies of masculinity and men have paid attention to what is often termed a 'crisis of masculinity', wherein boys and young men face confusion over what it means to become a man in these conditions, there has been less work on how interlinked health, economic, political and environmental concerns are contributing to a reshaping of masculinities, particularly in lower- and middle-income contexts.

Focusing on findings from a timeline exercise with adolescent boys and girls undertaken as part of GAGE longitudinal research, we explore shifts in masculinity through an analysis of the behaviour of young men over the past decade in Lebanon, Jordan, Ethiopia and Bangladesh from a variety of backgrounds and social identities, with reference to the wider macro-level shifts in each context. We observe increasing pressures to act out dominant masculinity norms through

externalising behaviours, including work, surveillance (including via violence) of sisters, girlfriends and wives, and use of drugs, alcohol and other substances. We also find that there is a significant role played by peer pressure amid very limited support or advice in navigating adolescence by fathers and trusted adults.

TALK 2: Disability, Identity and Transitions Through Adolescence in the MENA Region

Presenter: Kate Pincock, Gender and Adolescence: Global Evidence (GAGE), ODI Global

Disability has a major impact on individuals' self-perception and interaction with the world. Research on disability and identity observes that identity development is a fundamentally social process, and life course research on disability has emphasized the dynamic, sociocultural, and intersubjective dimensions of meaning-making about identity in relation to impairment. Nonetheless, there has been limited longitudinal research in lower- and middle- income contexts into the self-perception or identity-making of adolescents and young people with disabilities.

This paper draws on findings from GAGE research with adolescents and young people with disabilities in Jordan to explore the evolving ways in which young people choose to forefront or not their identity as a young person with a disability at different junctures in their adolescence through a timeline exercise used as a starting point for reflecting on these changes over time.

The research included Syrian and Palestinian refugees, alongside local Jordanian young people, with a range of visual, hearing and physical impairments. We find gender differences in how young people relate to their disability over time, with the social networks of young men with disabilities growing as they age through adolescence, bolstering their self-esteem and confidence. For young women meanwhile, stigma attached to disability, especially when congenital, can compound growing constraints on mobility and social exclusion as they get older. Differences are also found for young people as to whether their disability was congenital or acquired through conflict or injury; for young Syrian refugees, for example, conflict-acquired impairments may offer a sense of heroism and access to material support for older adolescents. Finally, we find that shifting access to services such as education, health, empowerment and psychosocial support impacts disability identity; when inclusive services are made available, a strong identity as a person with a disability can open up possibilities for self-development and participation for young people.

TALK 3: 'Lost Generations'? Global Protracted Displacement and Young Lives

Presenter: Sarah Alheiwidi, Gender and Adolescence: Global Evidence (GAGE), ODI Global

The majority of forcibly displaced people globally now live in protracted displacement, wherein there is neither a solution to the conditions that led to their displacement nor options for full integration within host communities. With numbers of young people living in forced displacement more than doubling in the past decade and expected to grow, this paper draws on the use of a timeline exercise with Syrian, Palestinian and Rohingya refugee adolescents in Jordan and Bangladesh to explore the ways that their lives are being shaped by the broader shifting politics of refugee support or neglect.

In Bangladesh, the Rohingya refugee crisis that began in 2017 when hundreds of thousands of Rohingya fled to Bangladesh to escape targeted violence and persecution in Myanmar continues into its' eighth year. While there was very early support by Bangladeshi citizens, greater restrictions on work and education for young Rohingya were implemented as the crisis lengthened, and there has been increasing resentment due to labour market tensions and yet another wave of refugees fleeing violence in Rakhine State in 2023/2024. There have also been significant peaks and troughs in relation to support and funding for Rohingya by the international community.

In Jordan, the Syrian crisis and Jordan Compact of 2016 attracted extensive funding, and the concomitant No Lost Generation initiative explicitly sought to address concerns about the impact of protracted displacement on young refugees in the MENA region, leading to integrated efforts to improve outcomes for vulnerable host and refugee youth. However, the Ukraine and Gazan crises diverted funding, and the rising negative spill-over effects of the Syrian crisis, in particular a growing drug trade and unemployment in Jordan, have contributed to growing unrest. Palestinians without citizenship in Jordan also face intergenerational marginalisation and deprivation, and most recently exacerbated by UNRWA funding cuts.

Overall, we find that funding volatility, and policy and legal shifts that have impacted access to services and employment, have contributed to growing rates of psycho-emotional distress, reliance on negative coping strategies, including substance abuse, and distress migration.

TALK 4: Child Marriage Over the Long Term: Perspectives of Girls Who Were Married as Children

Presenter: Wafa Al Almeirah, Gender and Adolescence: Global Evidence (GAGE), ODI Global

Co-authors: Workneh Yadete, Fitsum Workneh, Gender and Adolescence: Global Evidence (GAGE), ODI Global

Being married under the age of eighteen is widely recognised to contribute to a range of negative impacts for girls and women across the life course, including worse maternal and child health outcomes, vulnerability to sexually transmitted disease, curtailed education opportunities, diminished voice and agency.

Child marriage in Ethiopia has significantly decreased in the past two decades, but it remains widespread; and the overall decrease in child marriage at the national level masks significant regional differences in the types and age of child marriage, as well as complexities in the drivers of the practice around the country.

In this paper, we draw on GAGE research in Afar (Hari Rasu [Zone 5]), Amhara (South Gondar Zone), and Oromia (East Hararghe Zone), sites which reflect Ethiopia's uneven development and religious and cultural diversity. In Afar, arranged cousin marriage is common, and most girls are married before they are eighteen; while in Oromia, girls in some locations are 'choosing' child marriage. Observing the diverse experiences of girls who married below the age of eighteen over the longer term and contextualising these in relation to girls' wider opportunities and options, can help to identify ways for expanding girls' agency and improving initiatives aimed at delaying marriage.

The timeline exercise, used with girls who were married as children and inviting their reflections on their trajectories, elucidated differences in girls' experiences across adolescent-initiated and arranged marriages. For girls who were subject to arranged marriages, the exercise highlighted how marriage disrupted their aspirations for education in particular, inhibiting their development trajectories. For girls who entered into adolescent-initiated marriages, their new marital status brought new challenges and risks, especially early motherhood. Girls also described divergent coping strategies, from conformity to dominant norms, increased agency and cynicism, or taking an exit option of early divorce.

9C STREAM: EDUCATION

INDIVIDUAL WELLBEING PAPERS

TALK 1: A Linked Lives Perspective on the Role of Education in Preventive Behaviours

Presenter: Katrijn Delaruelle, Ghent University

Co-authors: 'Prevent Too' consortium

Previous research has revealed educational inequalities in participation rates for cancer screening and flu vaccination programs, often explained through the lens of Fundamental Cause Theory (FCT). According to this theory, higher-educated individuals typically have more access to knowledge, money, power, prestige, and beneficial social connections that enable them to adopt preventive strategies and create a health advantage over their lower-educated counterparts.

However, FCT is strongly centred on a rational action model of human behaviour, which highlights individuals as the primary actors making purposeful decisions based on their own available resources. Yet, it overlooks the intricate web of social networks that may significantly shape individuals' preventive behaviours. Drawing on the concept of 'linked lives,' we argue that the education and associated resources or socialization processes of close family members also impact individuals' preventive behaviours, regardless of their own educational background. Using data from Waves 8 and 9 of the Survey of Health, Ageing and Retirement in Europe (SHARE) (Ncolorectal = 29,499; Nmammography = 11,227; Nflu = 11,227), we demonstrate that partner, parent, and parent-in-law relationships can extend the influence of education as a fundamental determinant of preventive health, though in different ways for men and women. Our findings reveal three key points: First, apart from colorectal cancer screening for women, a partner's education influences preventive health outcomes beyond an individual's own education. Second, consistent with the 'long arm of childhood' thesis, we found that for colorectal cancer screening in men and flu vaccination in women, parents' education also has an impact beyond individuals' own educational attainment. Third, men's participation in flu vaccination is linked to the educational level of their parents-in-law.

TALK 2: Trajectories of School Absences Over Time for Pupils With and Without Additional Support Needs

Presenter: Silvia Behrens, University of Glasgow

Co-authors: Morag Treanor, University of Glasgow; Patricio Troncoso, Bethany Lee-Shield, Lee Williamson, University of Edinburgh; Cecilia Macintyre, Scottish Government

Children with special educational needs (SEN) have consistently been found to be more likely to be absent from school. School absenteeism is negatively associated with educational achievement and long-term outcomes. However, research on SEN is often narrowly focused on medical conditions and looks at absences on an aggregated level. In Scotland, pupils' needs are referred to as additional support needs (ASN), which include needs resulting from health and disability but also extend to family circumstances, the learning environment, and socio-emotional difficulties.

This paper differentiates between these different categories of needs, as well as specific additional support needs. Using linked administrative data covering mandatory school years, it analyses the trajectories of absences over time for pupils in Scotland with and without additional support needs. The data comes from the Pupil Census, Scottish government data on school attendance, additional support needs and medical prescriptions, and the Census 2011. Multilevel modelling and growth curves are used to investigate the association between ASN and school absences. These also account for variations in absences for pupils with additional support needs across local authorities and schools. Furthermore, the outcome variables look at absence as an aggregated variable and as authorised and unauthorised absence on their own. The results show that there are distinct differences in school absenteeism over time between pupils with and without additional support needs and that there is great variation among the different types of needs. The effects of additional support needs on authorised and unauthorised absence also vary and are affected by further disadvantaging factors, such as socio-economic status. While special educational needs are regularly considered to be adversely influencing attendance, less differentiation has been made between different support needs and types of educational absence. This paper helps identify these differences and inform dedicated support and interventions.

TALK 3: Understanding the (Dis)Agreement of Students' Internalizing Problems Ratings Between Self- and Teacher-Reports Across the Educational Trajectory

Presenter: Marlis Buchmann, University of Zurich

Co-authors: Jeanine Grütter, Ludwig-Maximilians University; Antonio Zuffianò, Sapienza, University of Rome

There is only scarce evidence of whether students and their teachers converge in their assessment of student internalizing problems (i.e., anxiety, depressive symptoms) – not at one point in time but from late childhood to mid-adolescence. Attempting to fill this gap, this study examines: (a) the degree of convergence of student and teacher ratings; (b) differences in convergence by student characteristics, and (c) student characteristics as predictors of the unique perspectives of each informant. Data are from the multi-informant panel study COCON (Buchmann & Grütter, 2024), representative of Switzerland's German and French-speaking parts. Student internalizing problems are rated by both teachers and students with identical items (Döpfner et al., 1994): 3rd- and 6thgrade teachers (student ages 9 (T1), 12 (T2)), class teacher in secondary schooling (student age 15 (T3)), and students at these ages. Correlations at the observed level showed only a modest degree of convergence between the two informants (r s from .17 to .27). A latent trait-state model (LTS; Steyer et al., 2012; Zuffianò et al., 2018), instead, revealed — after establishing metric invariance at the latent trait level (across informants and time) — a high rank-order convergence between the two informants at the trait level ($r = .71$, $p < .001$). Using student gender, educational background, and migration status as predictors of the degree of convergence, boys turned out to be more discrepant than girls. When used as predictors of the unique perspective of each informant, adolescents' unique perspective on internalizing problems was only predicted by gender with girls reporting higher problems than boys. However, girls, students from lower backgrounds, and those with migration status are seen as having higher internalizing problems in teachers' unique perspective on adolescents' internalizing problems. The diverging relevance of social background and migration status in the unique perspectives of each informant is intriguing and calls for further scrutiny.

TALK 4: Understanding Social Inequalities in Teacher-Student Relationships

Presenter: Emer Smyth, Economic and Social Research Institute (Ireland)

Co-authors: Katherin Barg, Valentina Perinetti Casoni, University of Bristol

There is now a large body of research which focuses on the determinants and implications of the quality of teacher student relationships. To date, however, this research pays relatively little attention to the role of student socioeconomic background, especially not for younger students. This paper looks at social differentiation in teacher-student relationships on entry to primary education and seeks to disentangle the signals of social background used by teachers in shaping their perceptions of, and relationships, with students.

This paper draws on data on Cohort '08 of the Growing Up in Ireland (GUI) study to examine the nature of teacher-pupil relationships for 5-year-old children. Analyses focus on two subscales of the Pianta Teacher- Student Relationship Scale: closeness and conflict.

Three potential mechanisms for explaining social differentiation are examined: teacher perceptions of the child's preparedness to engage in learning (e.g. coming to school hungry or late); perceived parental interest in the child's education; and the child's own behaviour. Teachers report closer and less conflictual relationships with children from middle-class families than they do with their working-class counterparts; closeness levels are lowest, and conflict levels highest, for those from jobless households. Low closeness for children from jobless households is driven by lower levels of perceived readiness to engage in learning while differences in closeness for other working-class groups are largely explained by less informal contact with the parent and lower perceived levels of parental interest in the child's education. Social class differences in levels of teacher-child conflict are explained by lower levels of perceived readiness to learn.

This paper therefore provides new insights into the signals of social background used by teachers in shaping their perceptions of learners.

9D STREAM: PARENTHOOD / FAMILY 2

INDIVIDUAL TRANSITIONS PAPERS

TALK 1: Capturing and Managing Data on Emerging Parenthood: Insights from the Longitudinal Study of Australian Children

Presenter: Paul Hockey, Australian Institute of Family Studies

Co-author: Agatha Faulkner, Australian Institute of Family Studies

Background: Emerging parenthood is a significant life course transition, often characterised by increasingly complex family dynamics and circumstances. However, few longitudinal studies have collected data on this phase of life and so guidelines on capturing and managing emerging parenthood data are limited. Recent experience from the Longitudinal Study of Australian Children (LSAC) can provide insights on data management practices that improve the quality and usability of longitudinal data collected during emerging parenthood. Our learnings provide valuable lessons for other cohort studies considering collecting these data.

Methods: LSAC is a nationally representative study with two cohorts, one recruited at infancy (Birth cohort) and the other at 4-years old (Kinder cohort), who are now aged 19-21 and 23-25 years respectively. LSAC now collects data on birth, health and parenting measures for any biological children or children for whom the participant plays a parenting role, irrespective of whether they're within or outside their household. Records for each child are maintained longitudinally, with details preloaded each survey to allow survey questions for each child to be asked each wave. Researchers can access these data in a longitudinal data file (with the new data appended each wave), that allows them to follow families longitudinally, and to identify children in different circumstances to suit their research needs.

Conclusion/relevance: Well-developed data management practices allow us to capture the growing complexity in family dynamics and life transitions. Capturing this complexity is important as it enhances our understanding of parenthood which in turn supports the development of better policies for families. We will discuss the strengths and limitations of LSAC's approach and share our learnings around content structure and timing in the cohort lifecycle and data and metadata management. This will offer insight to other studies to assist them in developing their methodologies.

TALK 2: Maternal Depression Across Early Childhood: Similarities and Differences Across Three Liberal Democracies

Presenter: Shannon Cavanagh, University of Texas at Austin

Co-author: Asya Saydam, University of Texas at Austin

Women who parent report higher rates of depression and anxiety disorders than others. Much of the research is framed around postpartum depression; yet, many mothers continue to report depression well beyond the postpartum period, but our observations of how depression changes over time, at the population level, is limited. Depressive symptoms are associated with women's own health and well-being, their parenting behaviors, and their children's outcomes in the short and long term. These risks suggest the need to study women's mental health during the early years of childrearing, a period of the life course marked by elevated children rearing responsibilities, changing romantic union demands, and for some, shifting work responsibilities.

This study addresses this question by considering maternal depressive symptoms as they unfold across children's early childhood as mothers adapt to stress, manage risks, and potentially gain footing in their role as mothers. This unfolding likely varies according to the supports available to women as they manage family and other challenges in the countries they live as well as their individual circumstances. We expect maternal depression to decline as children age from birth through school entry, especially in countries with more supportive family policies but unevenly within countries based on women's own educational attainment and union status.

The countries for this comparison are the US, the UK, and Australia. All three nations shared a linked colonial history, and each is a liberal democracy with modest levels of public support for families. Yet, they differ in terms of income inequality and family policy. Drawing on life course theory, we explore how mothers' reports of depressive symptoms change as their children age, differ across country, and are conditioned by her own social status. This comparison relies on three birth cohort studies: the Early Childhood Longitudinal Study- Birth Cohort (US), the Millennium Cohort Study (UK), and the Longitudinal Study of Australian Children. Each study began in the early 2000s and follows families across multiple waves from children's infancy through at least the start of formal school.

Using within and between growth curve modelling, we find country-level differences over time, with higher baseline but sharper declines among mothers in the UK and modest declines among mothers in Australia. Mothers in the US started at lower levels but demonstrated no 'recovery' over time. Depressive symptoms declined more sharply over time for advantaged mothers in countries with more generous supports but change little for mothers in the US, regardless of their advantage.

TALK 3: Transitioning into Parenthood: Comparing Support Networks in First-Time and Subsequent Parenthood

Presenter: Franka Römig, DJI - Nationales Zentrum Frühe Hilfen

Co-authors: Anna Mues, Ilona Renner, Juliane van Staa, DJI - Nationales Zentrum Frühe Hilfen

The transition into parenthood represents a significant life change for young adults, often associated with various challenges. Universal and selective support programs within early childhood intervention (ECI) serve as an initial access point to the support system and provide guidance through family transitions. We examine the transition to first-time parenthood compared to the transition to additional children, with a specific focus on the role of private and institutional support in these processes.

The KiD 0-3 2022 study surveyed families with children aged 0–3 in Germany about family life, psychosocial adversities, and support service usage. Participants were recruited through physicians to ensure a broad and diverse sample. The data was weighted accordingly, and a follow-up survey was conducted 2024 with a subset of participants.

We examine the existing support available to families or individuals with a young child, focusing on emotional support, childcare assistance, and ECI usage. Controlling for sociodemographic factors we predict estimations for the support received by the two groups. Families with a single child received significantly more emotional and social support, as well as greater access to ECI. The use of childcare facilities did not differ between the groups.

The follow-up survey allows for a precise analysis of the development of supportive factors over a two-year period by applying a fixed-effects regression model using a within-subject estimation framework. We will assess the effect of childbirth on experienced support, taking into account the moderating factor of whether the individual is transitioning into first time or subsequent parenthood.

By analysing these findings, we aim to identify potential starting points for ECI to improve support during the transition into parenthood. These insights can contribute to the development of targeted interventions addressing specific needs of families in early parenthood.

TALK 4: Punk Rockers Become Daddies, Later: Traditional Culture Guides Towards Normative Family Formation

Presenter: Juho Hänninen, European University Institute

Life courses are changing. This change has been explained by a material and cultural theory. The cultural explanation, endorsed by, among others, the second demographic transition and the individualisation thesis, proposes that the introduction of new priorities and the pluralisation of lifestyle options to early adulthood postpone settling down, thus increasing life course variance.

Because lifestyle and identity factors evade traditional data sets the cultural explanation has proven difficult to test. This case study has been designed to overcome these obstacles and directly evaluate culture's role in life course development. Investment in post-traditional lifestyle is evaluated with original survey (n = 186) and interview (n = 20) data collected from the turn of the 1980s Finnish DIY (do-it-yourself) music scene's active participants.

With event history models, I first compare the timing and completion rate of the post-traditional group's five key 'markers' of adulthood to a matched comparison sample from the nationally representative European Social Survey (2018). I then evaluate culture's role in structuring early adulthood and life course decision making through the qualitative sequence and data emergent categorical content analysis of life narratives.

The results suggest that post-traditional lifestyle practices delay settling down, but the persistence of traditional culture continues to govern life course behaviour towards normative trajectories.

9E STREAM: DISADVANTAGE / INEQUALITY 3

INDIVIDUAL SOCIAL MOBILITY PAPERS

TALK 1: Neighbourhood Disadvantage and Residential Mobility from Early Life into Adulthood: Impacts on Socio-Economic Outcomes

Presenter: Sergi Vidal, Universitat Autònoma de Barcelona

Co-authors: Maël Lecoursonnais, Maria Brandén, University of Linköping; Riccardo Valente, Universitat Autònoma de Barcelona

The socio-economic outcomes of individuals are deeply intertwined with the environments they inhabit, making it vital to explore how neighbourhood disadvantage and residential mobility affect long-term life trajectories. While prior research has examined the effects of neighbourhood disadvantage and residential mobility, these factors have largely been studied in isolation and often focusing on specific life stages such as childhood or adulthood. This fragmented approach overlooks the potential cumulative and interrelated impacts of both residential context and mobility across life stages. Our research aims to overcome these limitations by collectively addressing the role of exposures to neighbourhood disadvantage and experiences of residential mobility since birth for a range of socioeconomic outcomes (i.e. high income, relying on social welfare, high status occupation, and working-class occupation) by early midlife. For the empirical exercise, we extract information on residential trajectories since birth and individual outcomes in the early 30's for four entire birth cohorts (1990-1993) from longitudinal Swedish registers. We test theory-informed hypotheses deploying regression models with residualized time varying confounders to acknowledge that context exposures and mobility experiences in earlier life stages can affect the values of confounders in later stages.

Our preliminary results show that residence in disadvantaged contexts correlates with worse socioeconomic outcomes, but continued exposure has limited cumulative effects. Both staying in place and frequent moves across the life course associate with worse outcomes. Residential change in childhood does not inherently lead to negative outcomes, but moving across multiple stages—especially during adolescence—does. In contrast, moving relates to better socioeconomic outcomes than staying through early adulthood. Importantly, we find a compounding effect of context disadvantage and residential mobility, accumulating from early life.

Our study highlights that the effects of context disadvantage alongside patterns of residential mobility can provide critical insights into the mechanisms driving inequality.

TALK 2: Heterogeneity in Childhood Residential Mobility Trajectories: Implications for Adult Preventative Healthcare Use

Presenter: Justė Lekštytė, Universitat Autònoma de Barcelona

Preventative healthcare is a cornerstone of overall health and well-being, playing a crucial role in reducing healthcare costs and improving both the length and quality of people's life. However, various social and life course factors, such as poverty, parental separation, and residential instability, can significantly disrupt the development of preventative health behaviours from an early age. In particular, residential mobility has been shown to disrupt relationships with healthcare providers, leading to delays or difficulties in accessing new services. However, prior research on the impact of residential mobility on healthcare use often treats it as a uniform experience, overlooking the heterogeneity of residential trajectories.

Furthermore, little attention has been given to the long-term consequences of residential mobility on preventative healthcare utilization. Therefore, this study examines how different residential mobility trajectories during childhood influence preventative healthcare use in adulthood in Sweden. Using population register data from a cohort born in the 1990s, the study tracks residential moves between ages 0 and 16, considering the number, timing, distance, and socio-spatial impact (i.e., upward or downward mobility). Preventative healthcare utilization will be assessed through hospital-based outpatient visits, focusing on screenings such as cervical smear tests for women. The analysis will employ sequence analysis to identify distinct residential mobility trajectories and logistic regression to evaluate their impact on preventative healthcare use in adulthood.

TALK 3: Give It Some Time: Unpacking the Longitudinal Effects of Intragenerational Mobility on Political Attitudes

Presenter: Guillaume Bornet, University of Lausanne

A central point of many models of class and its effects on political attitudes is that beyond social status effects, socialisation into an occupational class, shapes preferences. Studying intragenerational class mobility presents an ideal testbed by focusing on the influence of class changes. Indeed, socialisation effects imply expectations of acculturation-like mechanisms whereby newcomers into a class end up resembling its non-mobile members. Recent studies levying the strengths of panel data find that socioeconomic and sociocultural attitudes may be influenced by intragenerational mobility, but effect sizes are much smaller than cross-sectional studies suggested.

However, the notion of socialisation also implies that mechanisms of change surrounding class mobility should unfold over time rather than being immediate switches. This central aspect of the socialisation effect of class on political attitudes remains untested. In addition to a theoretical mismatch, failing to account for dynamic effects across time leads

to potential underestimation. Our study addresses this gap and relies on the frameworks of leads-and-lags analysis and asymmetric effects to analyse Swiss and British panel data. Thus, we unpack how intragenerational class mobility impacts socioeconomic and sociocultural attitudes around (instead of just at) the time of mobility. Consistent with recent class schemes (Oesch 2006), we consider both vertical and horizontal mobility. We find that effects indeed develop in the few years following class mobility rather than immediately when mobility happens. This is even more apparent for horizontal (work logic) than vertical mobility. Additionally, effects on sociocultural attitudes are clearer for horizontal than vertical mobility. For socioeconomic attitudes, horizontal and vertical mobility both matter. Thus, our results highlight the importance of socialisation phenomena that unfold through time in the effects of occupational class on political attitudes. They also reaffirm the added value of horizontal distinctions between occupational classes in this respect, beyond social status.

TALK 4: Social Mobility and Health: Evidence from the 1958 British Birth Cohort

Presenter: Yiling Guo, University College London

Co-authors: Alina Pelikh, George B. Ploubidis, Alissa Goodman, University College London

Social mobility's effect on health remains contested, with upward moves often linked to better wellbeing and downward shifts tied to adverse outcomes. However, empirical findings are mixed, suggesting that methodological and conceptual variability may obscure the true nature of these relationships.

In this study, we revisit the social mobility–health nexus using data from the 1958 British birth cohort (NCDS), distinguishing between intergenerational mobility (father's occupational class at age 11 to current class at age 50) and intragenerational mobility (first job to current class at age 50). We adopt an outcome-wide approach, evaluating mental, physical, and behavioural health measures—including self-rated health, SF-36 general health, psychological wellbeing, psychological distress, life satisfaction, and smoking status.

To isolate the independent contributions of origin, destination, and mobility, we employ the diagonal reference model (DRM) and address potential attrition bias via multiple imputation. Results indicate that social mobility per se exerts limited overall effects on health. Notably, however, upward intragenerational mobility among women is associated with improved self-rated health—beyond the benefits linked to their current class—suggesting that midlife transitions can carry additional advantages. While destination class primarily shapes mental wellbeing, origin class exerts a stronger influence on physical health and health behaviors, highlighting distinct roles for one's family background and current status.

These findings align most closely with the “acculturation” perspective, in which both origin and destination matter, while also offering partial support for the “rising from rags” hypothesis, given the positive impact of upward mobility within a single lifetime. By combining cohort specificity, multiple health domains, and robust modeling techniques, this study clarifies the nuanced ways in which social mobility influences midlife wellbeing.

9F STREAM: HEALTH / WELLBEING 4

INDIVIDUAL FERTILITY & BIRTH PAPERS

TALK 1: Fertility Histories, Social Capital, and Physiological Health: Unravelling the Long-Term Health Impacts of Reproductive Patterns

Presenter: Sînziana-Ioana Oncioiu, University of Oxford

Co-authors: Eveliina Hanski, Lucy Bowes, University of Oxford

Population aging and declining fertility rates pose significant challenges to healthcare systems worldwide. This study examines the association between fertility histories and physiological “wear and tear” in post reproductive adults and investigates whether social capital moderates this relationship. Using data from Understanding Society, a UK longitudinal household study, we analysed 13,130 adults who provided blood samples during the 2010–2012 Nurse Health Assessment. Participants included women over 45 and men over 50 years of age to assess complete fertility histories. Fertility characteristics included: the number of children, age at first and last childbirth, and births within a two-year period. Physiological “wear and tear” was measured using the Biological Health Score (BHS), a composite measure incorporating biomarkers from the endocrine, metabolic, cardiovascular, inflammatory/immune, liver, and kidney systems. Social capital was modelled as a latent factor derived from personal relationships, network support, civic engagement, and cooperative norms. Sex-stratified regression models tested: (1) the association between each fertility history indicator and BHS, and (2) the interaction between each fertility indicator and social capital in predicting BHS. We expect a non-linear association between the number of children and BHS: individuals with two or three children are hypothesized to exhibit better BHS than those who are childless, have one child, or four or more children. Early primiparity (<20 years) and compressed birth intervals (<2 years) are expected to correlate with lower BHS due to increased physiological strain. Better social capital is anticipated to be associated with better BHS and may buffer the effects of fertility characteristics on BHS.

This study contributes to empirical research on how social resources modulate the physiological costs of reproduction and could inform theory and the development of more effective public health strategies across generations.

TALK 2: Consistent Patterns Across Birth Parities? Psychological Measures and Birth Parity Transitions Among Swedish Men

Presenter: Steffen Peters, Max Planck Institute for Demographic Research

Co-authors: Kieron Barclay, Stockholm University; Monika Mynarska, Cardinal Stefan Wyszyński University;

Mikko Myrskylä, Max Planck Institute for Demographic Research

Psychological factors have become increasingly important for fertility, particularly among men. Only a few studies have examined the association between psychological factors and birth parity transitions. Moreover, previous studies typically measured psychological factors at the end of fertility histories, i.e., when most individuals have completed their fertility trajectories. We study the prospective association between several psychological factors (leadership skills, social maturity, emotional stability) and birth parity transitions among Swedish males. We further analyze a) single-partner fertility (suggesting the relevance of multi-partner fertility) and b) age at first childbirth as potential mechanisms. This study makes use of high-quality Swedish register data. Information on psychological factors for males comes from military conscription data, and civil registers track the fertility histories of these men up to age 39 and older. We apply linear probability and linear regression models. Findings indicate positive associations between all psychological measures and first and second birth parities. However, lower scores on all psychological factors predict higher probabilities of transitioning to the third and the fourth childbirth, reversing the patterns for the lower birth parity transitions. Further analyses suggest that multi-partner fertility and age at entry into fatherhood may drive these patterns.

TALK 3: Zero or Two? Fertility Trends in Switzerland Since the Turn of the Century

Presenter: Valérie-Anne Ryser, FORS University of Lausanne

Co-author: Jean-Marie LeGoff, University of Lausanne

The study of fertility in Switzerland highlights a tension between the two-child family model, which has progressively established itself since the end of the baby boom, and an emerging model of childlessness. This model of childlessness is particularly prevalent among women with higher education degrees. However, current fluctuations in the Total Fertility Rate (TFR), especially its decrease, mainly reflect choices of maternity postponement for women born up to the 1990s and, therefore, do not necessarily indicate current or future trends.

This research aims to address this issue by examining SHP data on children's desires from the early 2000s to the present, thereby shedding light on the mechanisms that could influence future fertility behaviour. Questions about the number of desired children have been asked to the SHP respondents each year since 2002, allowing for longitudinal analyses such as sequence and/or Markov family analysis to be applied to patterns of desired fertility across the life course before women reach middle age.

Preliminary results indicate an entanglement of period, age, and cohort effects regarding the increase in the number of women who declare they do not want children. Younger cohorts of women born during the 1990s are more prone to declare their intention to remain childless, especially since 2017. Similarly, the number of women aged 30 to 39, born during the 1980s, who do not want children has also increased, notably since 2019. These trends suggest that more young people aged between 20 and 29 in the 2020s, compared to the 2000s, tend to opt out of having children.

TALK 4: Mothers' Labour Market Shocks in Youth and Children's Early-Life Development

Presenter: Seraphim Dempsey, The Economic and Social Research Institute (Ireland)

Co-author: Xhiselda Demaj, Ca' Foscari University of Venice

Mothers' life-cycle events play a crucial role in shaping their children's outcomes. This paper examines how maternal exposure to adverse economic conditions during youth influences both newborn outcomes and the early childhood development of their future offspring. Our estimation strategy leverages cohort and regional variation in unemployment rates experienced by mothers at the age of 16, many years prior to giving birth to their first child. We find that children born to first-time mothers who experienced unfavourable youth economic conditions face poorer birth outcomes, such as increased risks of preterm birth and low birth weight, with gender-specific vulnerabilities influenced by maternal educational levels. By age three, these conditions are linked to negative effects on children's health and developmental outcomes, including adaptive behavioural skills. We suggest that these negative effects could be caused by delayed fertility and are driven among highly educated mothers, who are more likely to postpone childbearing. We conclude that maternal initial labour market conditions spill over into their children's early development, contributing to the intergenerational transmission of inequalities.

10A STREAM: PARENTHOOD / FAMILY 1

SYMPOSIUM Family Diversity in a Life Course Perspective

Chairs: Julia Sauter and Laura Bernardi, University of Lausanne

This symposium explores the increasing diversity of family forms and their implications across the life course. Bringing together interdisciplinary research, it examines how family configurations—such as single-parent households, stepfamilies, and cohabiting unions—shape individuals' life trajectories, social relationships, and well-being. Emphasizing temporal and contextual dynamics, the presentations will address key life stages from childhood and adolescence to adulthood and aging, highlighting patterns of continuity and change. By adopting a life course perspective, this symposium aims to deepen our understanding of the long-term consequences of family diversity and its intersection with broader social, cultural, and policy contexts.

The presentations in these two symposia will examine a broad spectrum of themes related to family functioning, relational dynamics, and disruptions across the life course. Drawing on both quantitative and qualitative longitudinal methods, the contributions will explore how family relationships evolve over time, how support is exchanged among family members, and how these dynamics shape individual well-being. By capturing change and continuity across different life stages, the papers will offer nuanced insights into the temporal processes that underlie family life and provide a richer understanding of the social, legal, and psychological aspects that concern diverse family forms.

TALK 1: Adapting to Lone Parenthood: Navigating Manifest and Latent Vulnerability Over Time

Presenter: Benjamin Moles, University of Lausanne

Despite the increasing number and diversity of lone-parent families, most researchers still address lone parenthood as a family status, that is, a static condition at a particular point in time. Predominantly using quantitative and cross-sectional research designs, studies have largely focused on the negative outcomes averagely associated with lone parenthood, in most cases overlooking the dynamic nature of the challenges that the transition to lone parenthood entails, including how lone parents adapt to, cope with, and, in some cases, overcome vulnerable situations across life domains and over time. From a life-course and qualitative perspective, this study aims to contribute to fill this gap by examining the diversity of living conditions and experiences of twenty lone mothers' trajectories over more than 10 years (2012-2022) living in Switzerland. This study is the first to propose a dynamic and empirically grounded model of lone parenthood, identifying three distinct phases: (1) initial shock and activation of personal networks, (2) search for new resources and overall improvement, and (3) long-term stabilization. Building on the characteristics and transitions within these phases, the study identifies four trajectory typologies: non-vulnerable, resilient, vulnerable, and chronically vulnerable. The findings show that while most lone mothers initially experience a depletion of resources, the majority recover over time, except for those in chronic vulnerability. However, for those following vulnerable trajectories, this recovery remains fragile, experiencing renewed stressors in the later phase significantly impacting their mental health. In contrast, non-vulnerable and resilient trajectories demonstrate greater stability, maintaining the recovery achieved in the previous phase. These insights highlight the need for social policies that provide sustained, long-term support tailored to the evolving challenges faced by lone parents.

TALK 2: Prevalence and Characteristics of Custody Arrangements in Switzerland

Presenter: Magdalena Spasic, University of Lausanne

This study aims to provide an overview of custody arrangements in Switzerland. First, it assesses the prevalence of lone physical custody (LPC), equal shared physical custody (equal SPC), and unequal shared physical custody (unequal SPC) with EFG 2023 data. Secondly, it aims to describe characteristics associated with custody arrangements. Those characteristics comprise family characteristics, parental characteristics, parental ex-couple characteristics, and child characteristics. And finally, it helps to determine through multinomial logistic regression analyses how those characteristics are linked to the practice of different custody arrangements. We draw on the newly launched Famych survey, a national longitudinal survey representative of the population of separated families with children in LPC and SPC as well as non-separated families. Rich data on parents' and children's (aged 0-14) socio demographic characteristics and wellbeing indicators are collected in conjunction with retrospective residential, union, fertility and custody histories. The analyses will use the first wave to provide a first overview of the post-separation situations in Switzerland.

TALK 3: The Associations Between Generational and Marital Placements over the Life Course and Wellbeing in Later Life

Presenter: Julia Sauter, University of Lausanne

This study explores the intricate association between family and partnership transitions and later-life well-being and health. Drawing on life course, family systems, and role theories, the research investigates to which extent transitions into and out of various intergenerational family roles and marital statuses impact individuals as they age. This approach allows to consider the complexity arising from the interconnected effects of multiple life course events. The study mobilizes the concept of 'generational and marital placement trajectories' to capture individuals' vertical positions in their intergenerational family structure and their marital transitions over time. Analyzing data from the second and third waves of the Norwegian Life Course, Ageing and Generations (NorLAG) survey (n=2276) through sequence, cluster, and regression analyses, the study examines associations between generational and marital placement trajectories from age 23 to age 65

TALK 4: The Cost of Family Complexity: How Multi-partnered Fertility Shapes Earnings Trajectories in the Netherlands

Research has highlighted the role of childbearing, union dissolution, and re-partnering in shaping the economic well-being of women and men. However, less is known about the economic consequences of fertility after re-partnering, especially in contexts where children are born in successive relationships. Childbearing with a new partner, also known as multipartnered fertility (MPF), is part of Europe's demographic landscape. It reflects current changes in the stability and the number of unions across the life course and in the partnership context of childbearing and contributes to the increasing levels of family complexity in Western societies. Using Dutch administrative data, our study examines the outcomes of MPF in terms of personal earnings. We analyze the partnership, fertility, and earnings life courses of more than 840,000 residents in the Netherlands born between 1977 and 1985 and use fixed-effect models to examine how union formation, union dissolution, re-partnering, and childbearing across successive partnerships influence the income trajectories of women and men. Our findings extend previous knowledge on the economic consequences of union dissolution and re-partnering in the Netherlands by showing that MPF is associated with a pronounced reduction in earnings. While we find a moderate penalty when men have more children with a new partner, the economic consequences of MPF are more severe for women. Results show that, although motherhood penalties after first childbirth already contribute to gendered economic inequalities, MPF results in further substantial earnings losses for women that go well beyond the cost of parity progression with the same partner. Consequently, having children in a context of family complexity not only reduces women's income but also deepens economic disparities among them. For men, deviations from the pattern of fertility within stable unions lead to smaller lifetime earnings losses, and within-gender inequalities associated with family complexity are less pronounced.

SYMPOSIUM **Gender and Intersectionality**

This symposium aims to unite ongoing research that integrates gender (panel 1) or intersectional (panel 2) perspectives through social-to-biological lenses, within the longitudinal and life-course study fields.

Co-authors: Margot Guth, Michael Amiguet, Joëlle Schwarz, Aurélie Lasserre, Carole Clair, University of Lausanne; Julien Vaucher, Lausanne University Hospital

This project is a data analysis of the CoLauS|PsyCoLauS study, a single-centre prospective cohort initiated in 2003 in Lausanne, Switzerland. Using data from the third follow-up (2018–2021), we conducted an Exploratory Factor Analysis (EFA) on a randomly selected half of the participants to identify latent constructs based on sociodemographic and health behavior variables. We will confirm this structure on the other half using a Confirmatory Factor Analysis (CFA). These dimensions will be incorporated as predictors of obesity (BMI, waist circumference, body fat) in regression models. Finally,

we will test the interaction effect of administrative sex (woman, man) on the relationship between these factors and obesity outcomes.

Participants (N=3751, 55% women) had a mean age of 66.26 years (SD = 9.89) and a mean BMI of 26.36 (SD = 4.77). Preliminary findings suggest a four-factor model emerged, capturing gender-related dimensions of precarity, healthy lifestyle, stressful lifestyle, and unhealthy diet.

By considering gender-related factors, this study seeks to refine the methodological approach to understanding the sociocultural determinants of obesity. The findings will enhance understanding of obesity disparities and inform strategies for prevention.

TALK 2: Gender, Chronic Inflammation and Health: The Role of Parenthood

Presenter: Verena Schneider, University College London

Co-authors: Baowen Xue, Martin Danka, Anne McMunn, University College London; Birgitta Rabe, University of Essex

Gender is a social determinant of health, shaping health through complex mechanisms involving gender roles and gendered exposure to psychosocial stress. However, disentangling sex and gender presents conceptual and analytical challenges. Various approaches have been proposed, including comparing the causal effect of sex on health in contexts with differing gender role expectations and behaviours. Gender roles and norms evolve over time and across the life course. The transition to parenthood reinforces traditional gender roles, leading among others to inequalities in unpaid labour, employment opportunities, and income, all of which are known predictors of health outcomes.

This study seeks to examine gender health inequalities in chronic inflammation and health, by assessing how sex differences vary across gendered contexts in the UK, such as generation, parental status and the age of children.

The study will use data from men and women between 16 and 65 years old from the UK Household Longitudinal Study and Harmonised British Household Panel Survey, with outcome data at baseline and at least two follow-up time points and/or cross-sectional biomarker measures of chronic inflammation. Chronic inflammation will be assessed using CRP and fibrinogen levels from non-fasting blood samples and analysed cross-sectionally using multiple linear regression models. Mental health (General Health Questionnaire-12 and SF-12 Mental Component Summary), physical health (SF-12 Physical Component Summary) and self-rated health will be analysed using multi-level growth curve models. Effect modification of the sex-health association by generation, parental status and age of the youngest child will be assessed via statistical interaction terms.

Findings will be interpreted with consideration of the strengths and limitations of using the chosen effect modifiers as proxies for gendered contexts. The challenges of using an effect modifier that occurs after the exposure will be discussed, alongside proposed next steps to enhance the study's conclusions.

TALK 3: Mapping intersectional inequalities in self-rated health across gender identity, sexual orientation, migration, class and age: A multilevel Analysis of Individual Heterogeneity and Discriminatory Accuracy (MAIHDA) using the 2022 Swiss Health Survey

Presenter: Geraldina Mottini, Unisanté, University of Lausanne

Co-authors: Margot Guth, Michael Amiguet, Carole Clair, Joëlle Schwarz, Unisanté, University of Lausanne; Renaud Lieberherr, Federal Statistical Office (Switzerland)

Social health inequalities remain a pressing public health concern, yet research often examines them in isolation, overlooking their intersectionality. This study aims to describe multiple social gradients of health in the Swiss population using an intersectional perspective.

Using data from 18,341 individuals in the 2022 Swiss Health Survey, we applied the Multilevel Analysis of Individual Heterogeneity and Discriminatory Accuracy (MAIHDA) to assess self-rated health (SRH) disparities across 108 intersectional strata. These strata were constructed based on key social factors, including gender identity, sexual orientation, migration background, socioeconomic status, and age. Five partially adjusted models were constructed by adding each social dimension separately as a fixed effect to the null/first model, followed by a fully adjusted intersectional model, incorporating all five social dimensions.

Stratum-specific predicted probabilities ranged from 2.67% to 52.44%, emphasizing substantial health inequities. The variance partition coefficient (VPC) from the null model indicated that 17.91% of SRH variation was attributable to between-stratum differences, highlighting the role of social identity intersections in structuring health inequalities. Partial models revealed age and financial difficulties as primary contributors to SRH disparities. In the final model, 94.12% of the variance was explained by additive effects, with 5.88% due to intersectional interactions.

Our findings highlight the critical need for intersectional approaches in health research, as traditional models may fail to capture the full complexity of social determinants. By identifying high-risk intersectional strata, MAIHDA enhances understanding of structural health inequities and informs targeted public health interventions in Switzerland.

TALK 4: Intersectional Inequalities in Systolic Blood Pressure by Gender, Age, Ethno-Racial Origin, and Education in France

Presenter: Léna Silberzan, UMR1295 - Toulouse III University-Paul Sabatier

Co-authors: Fé-e Santos, Ainhoa Ugarteche Pérez, Nathalie Bajos, Michelle Kelly-Irving, INSERM / UMR1295 - Toulouse III University-Paul Sabatier

Many studies have demonstrated the existence of unidimensional -sometimes bidimensional, but rarely more- socio-economic gradients in systolic blood pressure (SBP). This study moves beyond such traditional approaches by simultaneously considering additional demographic and socioeconomic dimensions, including ethnoracial origin -an aspect seldom investigated in health studies in France.

Using data from the CONSTANCES (2012-2021) cohort in the general population, we applied intersectionality theory and multilevel analysis of individual heterogeneity and discriminatory accuracy (MAIHDA) to examine SBP levels among 152,477 individuals not under BP lowering treatment, nested within 126 intersectional strata defined by combining gender, age, ethno-racial origin, and education.

Our models revealed substantial heterogeneity in SBP across strata (null model VPC=26.4%), ranging from 113.7 mmHg to 146.9 mmHg, and mainly driven by additive main effects (complete model VPC= 0.7%). Age and sex alone accounted for the most of the heterogeneity (PCV= 54.1% and 35.3%, respectively), and older age, male sex, lower education, and Sub-Saharan Africans (SSA) and Overseas France (DROM) origin were associated with increased SBP; while North African, Asian, and Other origin with decreased SBP. Lower-educated SSA and DROM individuals consistently exhibited the highest SBP values within each gender-age combination, while higher-educated North Africans, Asians, and Other held the lowest SBP values. Notably, although age had the higher SBP increasing effect, among both men and women, low-educated SSA and DROM individuals aged 18–39 years displayed higher SBP levels than some of their 40–59-year-old counterparts, who in turn had very close SBP levels to those aged 60–69.

Our results show that SBP, varies according to socially structured experiences, to the disadvantage of particularly marginalized subgroups -lower educated SSA and DROM individuals-, who also show early onset of SBP levels. These results underscore the importance for targeted public health interventions to address structural inequities in cardiovascular risk.

TALK 5: Parental Health After Child Birth: An Intersectional Reading Through the Prism of Class, Race and Sex/Gender

Presenter: Fé-e Santos, UMR1295 - Toulouse III University-Paul Sabatier

Co-authors: Ainhoa Ugarteche Pérez, Michelle Kelly-Irving, INSERM / UMR1295 - Toulouse III University-Paul Sabatier; Héliène Colineaux, Imperial College London

Understanding how interlocking social power dynamics shape the life course and the human body may allow us to better understand the production of health inequalities. In this study, we aim to describe how parents' psychological and physical health varies between the three systems of oppression commonly mobilized and described in social sciences - sex/gender, race and class.

We used data from the Étude Longitudinale Française depuis l'Enfance (Elfe) cohort. Parents of children who participated in waves “2 months” (exposure) and “1 year” (outcome) were included. Mental (MCS) and physical (PCS) component scores of health were constructed based on the Medical Outcome Study Short Form 12 (SF-12, ranging from 0-worse to 100-better health). Exposure categories were sex/gender (2 groups), race (6 groups), and class (3 groups from a classification based on degree level, income and socio-professional category), and were used as a reflection of current or historical differences in social power. Analyses were conducted using a statistical approach based on and guided by intersectionality theory (MAIHDA).

Our sample was composed of 24,324 parents in 36 intersectional strata (34 strata had N≥20). Mean SF-12 were 48.9 (sd=8.2) for MCS (stratum min=43.7; stratum max=51.1) and 53.9 (sd=7.6) for PCS (stratum min=49.5; stratum max=55.4). The proportion of total individual variance lying between-strata (VPC) was 5.6% for MCS and 2.8% for PCS, with observed variations in the power systems contributing to these variances. Race contributed to both health components, while sex/gender contributed only for MCS, and social class only for PCS. In addition, the link between mental and physical health varied greatly between strata, with gaps between component scores ranging from 1.8 to 9.6.

This work describes the different co-constructed contributions of sex/gender, race and class oppression systems to physical and mental health inequalities.

TALK 1: Inequalities in Transition to Higher Education: Results of a European Systematic Review

Presenter: Juliette Torabian, University of Lausanne

Co-authors: Laura Bernardi, University of Lausanne; Doris Hannapi, University of Zurich

This paper is based on the systematic review conducted as part of the EU-funded project LEARN (longitudinal Educational Achievements: Reducing Inequalities). It leverages data and insights derived from the ongoing LEARN (Longitudinal Educational Achievements: Reducing Inequalities) project, an EU-funded initiative, with the Swiss team including LIVES Center UNIL and Jacobs Centre UZH.

The transition to higher education represents a critical juncture in an individual's life course, shaping future opportunities and socioeconomic trajectories. A granular comprehension of the complex interplay of factors that shape an individual's pathway to higher education, coupled with a rigorous examination of the systemic inequalities that continue to impede equitable access and attainment, constitutes an indispensable foundation for the development and implementation of effective policy interventions aimed at promoting social mobility and fostering a more just and inclusive society.

The transition from secondary to tertiary education is influenced by a multitude of interconnected (multi-level and life course) factors that extend beyond academic merit (Carpenter and Western 1983). These multifaceted influences, encompassing socioeconomic background, geographical location, ethnicity, gender, and institutional characteristics, and educational policies, often operate in concert creating disparities in access to and success in higher education (Altbach, Reisberg, and Rumbley 2010). Consequently, students originating from disadvantaged socioeconomic backgrounds are often underrepresented in higher education, primarily due to preceding educational transitions that divert them away from university admission (Benz, Seiler, and Erzinger 2021). Such segregation can perpetuate educational advantage across generations, amplifying broader societal inequalities (Burger 2019).

This complex web of factors necessitates a comprehensive understanding of how educational inequalities emerge and accumulate across different stages of the educational trajectory, particularly during critical transition points (Sit 2024). The systematic review methodology employed within the LEARN project provides a rigorous framework for synthesizing existing empirical evidence on inequalities in higher education transitions across Europe (9 European countries including Switzerland). The evidence synthesis draws from a diverse range of sources, encompassing quantitative studies, qualitative research, and mixed methods designs, to provide a holistic perspective on the multifaceted nature of higher education inequalities.

The findings of the systematic review illuminate the persistent and pervasive nature of inequalities in higher education transitions across Europe, as these inequalities are not solely a reflection of individual differences in academic ability or motivation but rather are deeply rooted in structural barriers and systemic biases that disproportionately disadvantage certain groups of students. By identifying the key drivers of inequality in higher education transitions, this research aims to inform the development of targeted policy interventions aimed at promoting equitable access and outcomes.

TALK 2: Equity in Educational Transitions in Ghana: A Longitudinal Analysis of Socioeconomic, Gender, and Geographic Disparities, 1990 – 2017

Presenter: Samuel Agyapong, University of Cambridge

Educational transitions, from basic to secondary and from secondary to tertiary education, are critical for individual and societal development. However, in Ghana, students' ability to transition between these levels remains uneven due to persistent socioeconomic, gender, and geographic disparities. The Free Compulsory Universal Basic Education (FCUBE) policy, introduced in 1995, aimed to address these inequities, yet its effectiveness in promoting equitable transitions remains unclear. This study examines trends in educational transitions and inequalities in educational opportunities in Ghana from 1990 to 2017. Using data from multiple waves of the Ghana Living Standards Survey (GLSS) and employing various inequality measures, this study tracks student cohorts to analyse patterns of progression from basic to secondary and secondary to tertiary education.

Preliminary findings reveal that socioeconomic status, gender, and geographic location significantly influence transition rates, with rural students and those from low income households facing persistent barriers. While the FCUBE policy has improved access to primary education, disparities persist at secondary and tertiary levels, particularly for students from disadvantaged socioeconomic backgrounds and rural girls, who experience intersecting forms of marginalisation. Through longitudinal analysis, the study explains how these disparities have evolved over time and underscores the need to address overlapping inequalities.

These findings provide robust empirical evidence on the determinants of educational transitions and offer insights into the potential impact of Ghana's Free Secondary Education policy, introduced in 2017. Furthermore, the study highlights the

importance of investing in rural school infrastructure and addressing gender-specific barriers to education. By contributing to the literature on educational equity, this research informs policy interventions aimed at ensuring equitable access to education for all students in Ghana.

TALK 3: Reproduction of Inequality across Multiple Generations Through Financial Assistance

Presenter: Hiroshi Ishida, University of Tokyo

Co-author: Misaki Matano, University of Tokyo

Sociologists have long been intrigued by grandparents' potential influence on their grandchildren's life trajectories, recognizing significant implications for the reproduction of inequality across multiple generations. Two basic mechanisms facilitate the multi-generational transmission of inequality. First, contact-based socialization occurs when grandparents pass on attitudes, aspirations, and knowledge through face-to-face interactions, potentially boosting grandchildren's educational achievements. Second, non-contact-based material transmission involves financial support from grandparents to parents, which may fund extracurricular activities, tutoring, and private education for grandchildren. This study focuses on the second mechanism: how financial assistance from grandparents affects parental investment in grandchildren's education and their educational outcomes.

This study explores two research questions: (1) Does financial support from grandparents to parents increase parental investment in grandchildren's education and ultimately improve grandchildren's educational achievement? (2) Does the effect of grandparental financial assistance vary by the educational levels of both grandparents and parents? To address these questions, this study uses data from the Japanese Life Course Panel Surveys (JLPS), a nationally representative survey conducted in Japan.

Our results reveal a significant association between financial support from grandparents to parents and subsequent parental investment in grandchildren's education, as well as between grandparental financial support and grandchildren's educational achievement. Parents who received financial transfers from grandparents tended to invest more in their children's education. Similarly, grandchildren's educational achievement was higher when their grandparents provided financial assistance to their parents. Furthermore, we found the modifying effect of the education of grandparents and parents. Parents tended to invest more in their children's education following financial assistance from grandparents, especially when both grandparents and parents were highly educated. However, the association between grandparental assistance and grandchildren's college attendance was stronger when both grandparents and parents had lower levels of education, as grandchildren of highly educated parents and grandparents are likely to attend college regardless of grandparental support.

TALK 4: The Effects of Changes in Compulsory Education Policies on Opportunities for Adolescents in England

Presenter: Dominic Kelly, University College London

Co-authors: Lindsey Macmillan, Jake Anders, University College London

In 2015, the age at which compulsory participation in education and training ceases in England was raised from 16- to 18 years-old. The intention was to increase human capital and reduce inequalities by requiring more education before the key lifecourse transition of entering the labour market. Unlike other education systems, England does not have a defined academic 'track' but qualification and curricular choices perform comparable roles. One example concerns whether to study for A-Level qualifications, which are required for most undergraduate programmes, or opt for more vocational education. Another concerns, within A-Level qualifications, subject choices: specific some subjects are 'facilitating' for admission to the UK's highest ranked universities (Dilnot, 2018). Decisions made during this transition produce social inequalities and are also produced by inequalities (Dilnot, 2016). However, it is unclear whether changing the participation age affected inequalities in admission to these unofficial 'academic tracks'. In this paper, we use data from three cohort studies consisting of students who experienced different participation ages during their education to examine this issue: Next Steps (children born 1989-1990), whose members experienced a participation age of 16-years-old; the Millennium Cohort Study (children born 2000-2001) and the COVID Social Mobility and Opportunities Study (children born 2004-2005), the latter two of whose members experienced participation ages of 18-years-old. These rich datasets provide social origin and social context variables, especially socioeconomic background. By linking the cohort studies to national administrative data from the UK's National Pupil Database, our outcome of qualifications pursued between 16 and 18 years old can also be determined. This longitudinal data allows for insight into whether subjects chosen during this key education transition (i.e., for GCSEs) also affect decisions and how social origin and social context interact with this (Henderson et al., 2018). We then put these UK-specific results into an international context.

10D

STREAM: PARENTHOOD / FAMILY 2

INDIVIDUAL SOCIO-ECONOMIC FACTORS PAPERS

TALK 1: The Very Early Roots of Social Disparities: Early Child Outcomes and Parenting Behavior in a Social Risk Group

Presenter: Wei Huang, University of Bamberg

Co-authors: Sabine Weinert, Hans-Günther Roßbach, University of Bamberg; Manja Attig, Dave Möwisch, Leibniz Institute for Educational Trajectories

As social disparities emerge gradually in early childhood, research has predominantly shown that individual differences in the first year of children's lives were not yet significantly associated with family background but with early home learning environment (which is related to family background from early on). However, it is less known whether this also holds for socioeconomically risk groups where infants might be confronted with multiple risks including socioeconomic risks, risks from parent's health-related behavior (e.g., prenatal alcohol and/or nicotine consumptions) as well as from lower level of sensitive parenting behavior. Drawing on data at three time points from the Bremer Initiative to Foster Early Child Development, which focus on infants and their families in Bremen's socioeconomically disadvantaged neighborhoods, this study examined whether there are disparities according to various (prenatal and postnatal) risk factors in infant's outcomes in the first year. At 7 months, child's sensorimotor development as well as mother's (sensitive) and child's (socio-emotional, sustained attention, activity level) interactive behaviors were measured in the households of the families. Prenatal alcohol/nicotine histories, socioeconomic factors (educational level, income, single parenthood), and postnatal mother's stress level and child's characteristics (e.g., temperament) were reported by the mother. The analyses used structural equation modeling within stepwise linear regression analyses. Preliminarily, results showed social disparities both in child development as well as in maternal interactive behavior. Differences in mother's sensitivity were associated with her educational level (even when controlling for many child characteristics); child's sustained attention and activity level (but not their sensorimotor status) were predicted by educational level, whereas child's socioemotional behavior was related only to mother's sensitivity. The findings so far are largely in line with previous findings from national samples. In the subsequent analyses, the role of additional prenatal risk factors (e.g., low-to-moderate alcohol and/or nicotine consumptions) will be further investigated.

TALK 2: Withdrawn

TALK 3: Parental Availability, Working Lives and Emotional Support in Adolescence

Presenter: Bridget Lockyer, Bradford Institute for Health Research

Co-author: Ruth Webber, Manchester Metropolitan University

There is good evidence that confirms the importance of familial emotional support in adolescence on health across the life course and how it may protect from other disadvantages experienced during this period.

This paper reports on analysis of 39 in-depth interviews with parents and young people aged 12-16 (20 families) in the Born in Bradford (BiB) longitudinal birth cohort. We explore the ways in which parents' work impacts on the quantity and quality of emotional support they can offer young people. Our findings showed that parental availability was a key enabler of emotional support for young people. A major barrier to this availability was their working patterns, including shift work, inflexible hours, working multiple jobs and working away from the home. Better parental support was enabled by less work stress, flexible approaches, supportive management and working from home. If parents are less available, their relationships with their children can be more distant and less supportive, and this was a particular risk for father-child relationships. For young people growing up in low-income households, where parents' employment choices are more limited, this will be a factor in widening inequalities and influencing future health outcomes. We found some mitigations parental unavailability, including the support of nearby family members and making the most of unstructured, passive time together. However, we conclude that workplace policies and practices need to recognise the continued importance of flexible working for parents with adolescent children. We also wish to underline the importance of current workforce job quality (including pay, hours, stress) on the long-term mental and emotional health of future generations.

TALK 4: Withdrawn

10E STREAM: DISADVANTAGE / INEQUALITY 3

INDIVIDUAL CAREGIVING PAPERS

TALK 1: 25 Years of Family Caregiving: Gender, Demographics, and Social Shifts in Denmark

Presenter: Anna Amilon, The Danish National Center for Social Science Research

Co-author: Mads Lybech Christensen, The Danish National Center for Social Science Research

This study examines the evolving role of family caregivers in Denmark over the past 25 years, focusing on adult children aged 52–67 and their provision of care to parents and parents-in-law between 1997 and 2022. This period is marked by significant societal and institutional changes, including population aging, delayed childbearing, increased women's labor force participation, postponed retirement, and reductions in publicly funded care—all factors that may critically shape caregiving practices.

Using survey and registry data, the findings reveal a modest increase in the probability of adult children providing family care. While socio-economic and demographic factors initially appear to influence the probability of caregiving, their significance diminishes when accounting for whether parents or parents-in-law are alive. This suggests that individuals with surviving parents or parents-in-law are equally likely to provide care, regardless of socio-economic or demographic characteristics. Findings also highlight gendered patterns in caregiving tasks. For instance, men are more likely to assist with transportation and maintenance, while women are more involved in household chores. Given the differing intensity and frequency of these tasks, the findings indicate that caregiving responsibilities may remain more demanding for women, despite no significant gender differences in the overall probability of family caregiving.

TALK 2: How Does the Combination of Informal Care and Employment Impact the Socio-Economic Situation of Informal Carers in Germany? Evidence from the Life 2024 Study

Presenter: Markus King, University of Potsdam

In 2021 an estimated 2.55 million persons in need of care in Germany were solely being cared for by a relative or close acquaintance. These informal care responsibilities are often in conflict with pre-existing employment responsibilities and informal carers need to find a sufficient way to combine both responsibilities. The provision of care is often heavily gendered with women providing care more often and at a higher intensity. Qualitative research additionally indicates that caring women tend to reduce their working hours while caring men tend to arrange their care responsibilities around their employment trying to keep up their working hours. This can not only lead to disadvantages in the socio-economic position of the carers compared to non-carers, but also to gendered differences in the effects of care. Using data from the latest 2024 wave of the German 'Lebensverläufe von der späten Kindheit ins frühe Erwachsenenalter' cohort study, this presentation will first aim at investigating how informal carers are integrating their care work into their (pre-existing) employment history between the age of 45 (2012) to 57 (2024) using sequence and cluster analysis. Using these sequences for the regression analysis this presentation will then analyse how this integration impacts the carers employment situation and financial (household) resources in 2024 as well as analysing the gendered differences in the combination and subsequent impact of informal care. Based on previous research it is expected that the provision of care will lead to disruptions and reductions in work hours especially in women's employment histories and that it will negatively impact the informal carer's employment situation and financial resources in 2024 especially for women.

TALK 3: Exploring the Impact of Multiple Caregiving Transitions on Health Behaviours: Insights from the UK

Presenter: Enrico Pfeifer, University College London

Co-authors: Anne McMunn, Hynek Pikhart, Baowen Xue, University College London; Rebecca Lacey, City of St. Georges – University of London

Background: Unpaid caregiving is often characterised by dynamic transitions, with individuals repeatedly entering and exiting caregiving roles throughout the lifecourse. Despite its significance, the phenomenon of multiple caregiving transitions remains underexplored. Understanding how these transitions influence caregivers' health behaviours is crucial for informing policy and support systems.

Objectives: This study investigates the relationship between multiple caregiving transitions and health behaviours across the lifecourse.

Methods: Data from waves 2–13 of the UK Household Longitudinal Study (n=25,049) was used. To capture multiple transitions, two approaches were considered: (1) A variable was generated based on the frequency of observed transitions. (2) Latent Class Analysis (LCA) was performed to identify latent classes of caregiving trajectories. Based on these groups and classes, regression models were estimated for physical inactivity, fruit and vegetable consumption, smoking and problematic drinking. Models were stratified by sex and lifecourse stage of the caregiver at baseline.

Results: Fully observed transitions as well as LCA highlighted heterogeneity among caregivers. Multiple transitioned were observed frequently while LCA revealed eight distinct transition patterns, with recurrent caregiving emerging as the smallest group (2.4% of participants). Regression analyses indicated that multiple caregiving transitions were associated

with increased physical activity, decreased alcohol consumption and higher fruit and vegetable consumption but also with higher smoking likelihood.

Conclusion: While the fully observed variable provided a straightforward categorisation, LCA captured the patterns of caregiving trajectories. Both, fully observed and latent class approaches underscore the complexity of caregiving transitions and their varied effects on health behaviours. These findings highlight the need for targeted interventions to support caregivers navigating multiple transitions.

TALK 4: Inequalities in Young Adult Caregivers in Germany

Presenter: Christian Deindl, TU Dortmund University

Co-author: Markus King, University of Potsdam

The increased longevity gains in Western and Asian Societies will result in a growing percentage of older people that have care needs at some point in their life. This will not only be a major challenge for social policy but will also put strain on carers informal support network of family members and close friends. A huge amount of care is provided in the form of informal care. A higher life expectancy in combination with delayed childbearing makes it likely that caregiver become younger. Existing evidence suggests that caring leads to labour market exits; reduced working hours, salaries and pension entitlements; loss of training opportunities and career advancement. However, existing research has largely been based on cross-sectional samples of older-adults while younger carers are often overlooked in policy and research. Younger caregiving occurs at a time when young adults are seeking to complete education and establish themselves in the job market. Based on data from the German Socio-Economic Panel we analyse the impact of care of 16 till 29 year old on their educational success and their changes of employment after finishing their education. First results show that young adult carer are less likely to be in vocational training and more likely to be unemployed after they finished school. This shows the importance of care burden in young adulthood for life long inequality. We would argue that care obligations in young age have the potential to be an important but yet overlooked part of life long inequality.

10F **STREAM: HEALTH / WELLBEING 4**

INDIVIDUAL WELLBEING

PAPERS

TALK 1: Investigating the Bidirectionality Between Parents' and Children's Subjective Wellbeing in Switzerland

Presenter: Claire Mariano, University of Lausanne

Co-authors: Marieke Voorpostel, Laura Bernardi, University of Lausanne

Recent years have seen a concerning decline in youth wellbeing globally, and Switzerland is no exception. Despite a generally high level of wellbeing among young adults, teenagers, and children, some reports from the Swiss Health Observatory and the Swiss Federal Statistical Office are raising the alarm, showing an increase in mental health problems and hospitalizations among this population in the last years. Research on mental wellbeing including children and young adults is crucial to better target public health policies and strategies, both in Switzerland and worldwide.

Our paper addresses this problem through the lens of family relationships, aiming to investigate the influence of family, particularly parents, on children's wellbeing. While it is established that family plays a significant role in children's wellbeing, studies focusing specifically on the impact of parental wellbeing on their children's wellbeing are not numerous. Most research concentrates on the impact of parental practices on children's wellbeing or on the impact of parental mental health on children's development. Even fewer studies investigate the potential bidirectionality of such relationships. However, those that do examine the directionality of these relationships suggest that children also play a role in the wellbeing of their parents. Yet, the use of longitudinal methods to provide evidence of these interrelationships remains scarce.

We aim to contribute to the limited research on the subject by utilizing a longitudinal design spanning waves 1-23 (1999–2021) of the Swiss Household Panel. Using lagged fixed-effects models, we seek to examine whether there are interrelationships in the wellbeing of co-residing mothers, fathers, and their children, and to assess the directionality of these associations.

TALK 2: Disasters, Discontinuity, and Development: The Covid-19 Pandemic and Temporal Dynamics of Mental Health in the Transition to Adolescence

Presenter: Ross Macmillan, Ross Macmillan, University of Limerick

Co-author: Carmel Hannan, University of Limerick

Although there is considerable speculation that psychological well-being of children and adolescents was particularly vulnerable to the Covid-19 pandemic, there are few studies that account for longer-term, preexisting patterns of mental health that should influence the nature of pandemic exposures and their meaning for consequent psychological well-being. This study takes on this issue with high quality longitudinal data from a national cohort of Irish infants transitioning into adolescence (ages 3 to 13). Results indicate a) small associations between pre- and pandemic-period well-being, b) large influences of contemporaneous pandemic exposures, c) limited evidence of statistical mediation, and d) no

evidence of statistical moderation. In sum, the findings highlight developmental discontinuities with implications for theory, research and intervention discussed.

TALK 3: Do All Positive Health Behaviours Promote Wellbeing Equally? An Analysis of Experiential Wellbeing in the American Time Use Survey (ATUS)

Presenter: Jess Bone, University College London

Co-authors: Feifei Bu, Daisy Fancourt, University College London; Jill Sonke, University of Florida

Positive health behaviours can improve long-term subjective wellbeing, including life satisfaction and perceived meaning in life. However, less research has examined experiential wellbeing during engagement in health behaviours. Whilst experiential wellbeing may contribute to long-term wellbeing, it is independently associated with biological states, morbidity, and mortality. Moment-to-moment affective experiences are thus as important as our broad evaluative experiences, but it remains unclear whether all health behaviours lead to similar affective experiences.

We used American Time Use Survey (ATUS) wellbeing data from 2010, 2012, 2013, and 2021. ATUS measures all behaviours within a 24-hour window and, for three randomly selected activities, collects ratings of positive affect (happiness) and negative affect (sadness, tiredness, stress, pain) during activities. We focussed on eight positive behaviours: physical activity, socialising, arts, reading, sports events, religious activities, volunteering, and other leisure. Linear regression models tested whether affect varied across activities. Standard errors were clustered at the individual level and weights accounted for the duration of each activity. In this nationally representative sample (n=41,467), preliminary analyses indicated that participants were happiest when socialising, attending sports events, and doing religious activities. Patterns were similar for lower negative affect. In provisional regression models, compared to physical activity, participants were less happy when reading and doing other leisure activities. Negative affect was less consistent. Associations differed according to meaningfulness, location, and social context of activities.

Previous research has focussed on physical activity, but other health behaviours may have greater impacts on wellbeing in the moment. How meaningful activities are to individuals, where they do activities, and who they do them with is important for how enjoyable activities are. This could help to identify the most beneficial components of activities for health. Policies targeting health behaviours should consider how to maximise impacts on experiential wellbeing, alongside increasing long-term wellbeing.

TALK 4: The COVID Generation: The Role of Poverty and NEET Trajectories and Social Connection for Young People's Well-Being Pathways in Two Cohorts in Switzerland

Presenter: Leen Vandecasteele, University of Lausanne

Co-authors: Stephanie Steinmetz, Claire Janssen, University of Lausanne

The main objective of this paper is to shed light on the factors influencing and mitigating the wellbeing of young people aged 18-23 during the pandemic and beyond until 2022. Applying a causal inference design, we analyse the wellbeing change scores of a pandemic cohort (observed yearly between 2019 and 2022), in comparison to a pre-pandemic cohort (observed yearly 2013 – 2016). Applying causal inference to the Swiss Household Panel (SHP), initial results demonstrate that, compared to the pre-pandemic cohort, there was no specific pandemic well-being penalty early in the pandemic in 2020, but there was for 2021 and 2022. Young people belonging to the pandemic cohort experienced more significant decline in well-being and positive affect, as well as a more significant increase in negative emotions between 2019 and 2021 with effects lasting until 2022. In a next step, we examined moderating effects of trajectories of (1) not being in education, employment or training, (2) poverty trajectories and (3) social connectedness. Young people who entered and left NEET status during the pandemic suffered more than those who entered and left in the pre-pandemic cohort. Similarly, those in persistent poverty and those who entered poverty during the pandemic suffered more than those in the pre-pandemic cohort who experienced the same transitions. For social connection, the results show a protective effect of variables referring to support, but quantity of connections had the opposite effect.

11A **STREAM: PARENTHOOD / FAMILY 1**

INDIVIDUAL EMPLOYMENT

PAPERS

TALK 1: Gender Attitudes, Parenthood, and Leave-Taking: Do Social Norms and Policy Shape Family Work Dynamics?

Presenter: Mengxuan Li, The University of Queensland

Co-author: Janeen Baxter, The University of Queensland

The transition to parenthood is a critical life course stage that reshapes gender attitudes and the division of labour within couples. Women's increased labour force participation has led to changes in policy, including introduction of a government funded paid parental leave (PPL) scheme in Australia (2011) providing 18 weeks of leave at minimum wage rates. The scheme has since been expanded. But far fewer men than women take parental leave. Existing research highlights how parenthood reinforces traditional attitudes about gender divisions of labour, yet little is known about how gender attitudes evolve over time and how policy changes, such as paid parental leave, shape men's and women's attitudes to parenting and leave taking.

We examine these questions using data from the Household, Income, and Labour Dynamics in Australia Survey (2005–2023), analysing 4655 couples with a first-born child and employing a range of techniques. We assess the direct effects of gender attitudes on leave-taking; mediation effects through workplace constraints (e.g. job flexibility); and moderation by the 2011 PPL scheme.

Our results show that couples with egalitarian attitudes are more likely to share leave taking equally and mothers return to work earlier. Couples with traditional attitudes are more likely to have highly gendered leave patterns, with mothers taking the majority of leave. Workplace constraints mediate leave-taking behaviour, where men in egalitarian couples still take limited leave if job conditions are restrictive.

The 2011 PPL policy moderated the effect of gender attitudes, enabling more fathers, especially in traditional couples, to take leave. Pre-2011, traditional attitudes likely exerted a stronger influence on women's prolonged leave and men's minimal or no leave. Post-2011, the policy weakened this effect, fostering more equitable leave-sharing. Further analyses show that over time, as attitudes become more egalitarian, leave-taking patterns shift toward greater gender equality.

TALK 2: Gendered Earnings Changes Following Parenthood: The Role of Paid Parental Leave in Australia

Presenter: Janeen Baxter, The University of Queensland

Co-authors: Kai Feng, University of Pennsylvania; Suri Li, The University of Queensland

Extensive research has shown that transition to parenthood exacerbates gender inequality among heterosexual couples. Career interruptions related to parenthood increase women's care work while reducing their labor force participation, wages, and career opportunities, whereas father's careers remain largely unaffected. Paid parental leave is expected to mitigate these disparities, but empirical evidence remains mixed, varying by leave length, remuneration rates, country context, and outcome measures.

This study adopts a couple-level framework to examine how parenthood affects economic inequality within couples before and after Australia's 2011 government-funded parental leave program, which provided 18 weeks of leave at the minimum wage. Like the US, Australia has historically followed a liberal welfare model with limited publicly funded family benefits. Using longitudinal data from the Household, Income and Labour Dynamics in Australia (HILDA) survey, we analyze changes in mothers' earnings share within dual-earner households, stratified by education, across two cohorts: parents of first-born children from 2000-2010 (pre-policy) and 2011-2023 (post-policy).

Preliminary findings show a significant drop in mothers' earnings share following the birth of the first child, persisting for 4 years without returning to pre-birth levels. Among dual-earner couples, mothers with a degree experience a steeper and more prolonged decline in their earnings share than those without degrees. However, when including one-income households, low educated mothers face an even more persistent decline, failing to recover their pre-birth earnings share even 5 years after childbirth. We also find that post-policy mothers recover their pre-birth earnings share approximately one year earlier than pre-policy mothers.

These findings underscore the long-term impact of post-childbirth career breaks and limited uptake of parental leave among fathers (26.8%) in Australia. It highlights the introduction of paid parental leave in mitigating the economic disadvantages of motherhood, particularly among those from lower socioeconomic backgrounds.

TALK 3: Heterogeneous Effects of Parental Leave Reform on Partnership Stability in Finland: Examining the Role of Education

Presenter: Sumia Akter, University of Turku

Co-author: Satu Helske, University of Turku

The aim of this study is to explore how Finnish parental leave reform of 2013 affects couples' partnership stability and how the effect vary considering their educational differences. Earlier research found that fathers' leave uptake varied significantly based on their socio-economic status (SES) that linked with their involvement in home and childcare. Typically, fathers with high-SES utilize more leave benefits, and their increased involvement in early childcare is associated with greater relationship satisfaction. However, it remains unexplored whether similar outcomes are observed among lower-educated fathers who made significant use of leave benefits after the reform. This study utilized 2013's leave reform which introduced a true 'father's quota' or independent leave days for fathers in Finland. Following a natural experimental research design, pre- and post-reform groups were assigned based on the eligibility of receiving the reform benefits or not. We used full-population Finnish register data including 51,912 heterosexual couples who experienced the birth of their first child in six-months before and after the reform window. We applied discrete-time event history analysis to track partnership stability for a 7.5-year follow-up period from the year 2012–2020. The preliminary results showed that the risk of separation among couples generally increased after the transition to parenthood until the first two years and then started decreasing. The cumulative hazard rate revealed a sharp reduction in separation among the post-reform lower-educated groups (more than five percentage point). The overall effect of the leave reform was statistically significant and following the reform, lower-educated couples experiencing more stability in partnership in comparison to their higher-educated counterparts. While these findings suggested that the reform contributed to reducing partnership dissolution among lower-educated groups, further robustness checks are necessary before drawing definitive conclusions.

TALK 4: Intensive Parenting and Mother's Postnatal Work and Parental Leave Patterns

Presenter: Chen-Hao Hsu, University of Bamberg

Co-author: Wei Huang, University of Bamberg

Early research has shown that parenthood affects particularly mother's postnatal work integration. The diffusion of intensive parenting, which demands great parental time, financial, and emotional investments in child-centered childrearing, may even heighten the challenge of being a mother and an employee at the same time. Augmenting prior studies, this study considered not only the quantity (e.g., frequency of reading to child) but also the quality (e.g., parental sensitivity) of mothers' parenting behaviors, and examined their effects on mother's employment/parental leaves patterns in children's early lives.

Drawing on the German National Educational Panel Study – Newborn Cohort, this study used sequence analysis to identify four postnatal employment/leaves sequence clusters for 2,684 German women (across children's ages of 0–36 months): full-time employment after leaves (16.5%), part-time employment after leaves (27.8%), inactive after leaves (27.1%), and extended leaves for more than two years (28.7%). Next, we performed a multinomial logistic regression analysis to investigate how mothers' postnatal employment/leaves sequences were associated with the (latent) quantity and quality of parenting, while controlling for mother's education and age, coparenting, parity, and extrafamilial childcare.

Regression results showed that higher parenting quality may decrease the odds of being inactive after leaves against being full-time employed after leaves. Contrarily, higher parenting quantity might increase, although insignificantly, mothers' odds of being inactive or taking extended parental leaves against being full-time employed after leaves. Finally, higher parenting quality might increase, although insignificantly, mothers' odds of part-time employment against full-time employment after leaves, indicating that postnatal part-time employment could be a strategic arrangement for some German women to combine high quality parenting with labor market participation. In summary, this study provides a holistic profile of mothers' employment/leaves patterns in Germany and highlights the heterogeneous influences of two distinguished dimensions of parenting—quantity and quality—on women's postnatal labor market integration.

11B

STREAM: GENDER

INDIVIDUAL PAPERS

THE GENDER GAP

TALK 1: Gender Inequality in Pensions: Does Marriage Matter?

Presenter: Alisa Lewin, University of Haifa

Co-authors: Haya Stier, Tel Aviv University; Noa Achouche, University of Haifa

Over their working lives, women typically accumulate fewer economic resources than men, because they often allocate fewer hours to paid work, have intermittent work patterns and limited access to lucrative jobs due to their caregiving roles and gendered household division of labor. These lifelong differences in paid labor result in women accumulating lower pension benefits than men upon retirement. This study asks whether gender inequality in pensions is also affected by marital status, and especially by marital dissolution due to divorce and widowhood. This study combines census and administrative data from various sources to create a longitudinal study spanning twenty years (1995-2015). Individuals aged 45-60 in paid employment in the 1995 census were selected and matched to 2015 income tax records. The study focuses on the Jewish population because divorce rates were substantially lower in the Arab population in this period. The findings show that men who were employed in 1995 have slightly better access to pension income than women who were employed in 1995, and that married men and women have better access to pensions than their divorced and widowed counterparts. Among those receiving pensions, women's pension income is substantially lower than that of men, in all marital status groups. The divorced have lower pension income than the married, and this divorce gap is slightly larger for men than women. These findings demonstrate women's ever-married penalty in pension income, which is probably the outcome of interrupted work histories and part-time work due to a career of caregiving.

TALK 2: Psychological and Economic Determinants of the Gender Gap in Career Earnings Expectations During the Adolescent Transition to the Labour Market

Presenter: Dominic Kelly, University College London

Co-author: Emla Fitzsimons, University College London

It is well-established that career aspirations and expectations begin early in life and have been shown to be directly related to career outcomes (Ashby & Schoon, 2010). Although in many countries girls have been shown to have higher education expectations than boys (Watts et al., 2015), girls consistently report expecting to earn less money than boys (Boneva & Rauh, 2021; Reuben et al., 2017). Given the persistence of the gender pay gap, understanding the factors relating to this gender difference in income expectations is vital. This is especially true during adolescence – an essential lifecourse transition which represents the final developmental stage before entering higher education or the job market – but there is a lack of well-powered longitudinal studies to test hypotheses.

This paper leverages the unique longitudinal data of the UK Millennium Cohort Study to examine whether gender and other key factors over two decades (e.g., academic achievement, parental working status, indicators of socioeconomic status) predict adolescents' (n = ~4100) expectations of future earnings. At age 17, following precedent (Dominitz & Manski, 1996), participants were asked 1) their expected chances of attending university (0-100%), 2) their expected earnings at age 30 if they attend university and 3) their expected earnings at age 30 if they do not attend university. Using this information, adolescents' expected earnings were calculated as an outcome variable.

All analyses were imputed and weighted. Preliminary results indicate that adolescent boys expect to earn more than girls, despite lower average expectations of university attendance. As expected, being a first-born child, higher prior academic attainment and participation in science and mathematics subjects predicted higher expected earnings for both genders – but especially for girls. Boys' expected earnings were disproportionately affected by socioeconomic status – especially paternal education. Policy implications and the importance of adolescence as a transition for careers are discussed.

TALK 3: Has the Reversal of the Educational Gender Gap Reached the Labour Market? Evidence from Successive Birth Cohorts of Young Men and Women in Europe, 1992 – 2024

Presenter: Daniel Oesch, LIVES - University of Lausanne

Co-author: Oliver Lipps, FORS - University of Lausanne

In the last decades, women have overtaken men in educational attainment across large parts of the world. The gender gap in tertiary education has also completely reversed in Europe. In 2023, among the 25- 34 age cohort, women's tertiary attainment exceeded men's by 4 percentage points in Germany and Switzerland, 8 points in France, 12 points in Italy and Spain, and as much as 20 points in Denmark (OECD 2024). As women are pulling ahead of men in education, the question is whether their higher educational attainment also translates into more favourable labour market outcomes. In other words, is the reversal of the educational gender gap also beginning to show in employment, occupations and earnings of young men and women? We address this question by analysing the labour market outcomes of successive birth cohorts of young men and women in Europe between the early 1990s and the early 2020s. Our analysis focuses on three labour market outcomes: employment participation, occupational attainment and earnings. It is based on annual individual-level data from the European Labour Force Survey, 1992-2024, which have the advantage of large national samples. This allows us to use a comparative design and examine whether labour market outcomes have changed more rapidly in countries

where women's educational catch-up occurred earlier, such as the Scandinavian countries, compared to latecomers such as the German-speaking countries. By providing novel evidence on the labour market outcomes of successive birth cohorts of young men and women in Europe over three decades, our paper contributes to the debates on both the stalled gender revolution and the crisis of young working-class men.

TALK 4: Paternity Leave and the Partner Earnings Gap in Germany

Presenter: Martina Dieckhoff, University of Rostock

Co-authors: Antje Mertens, Berlin School of Economics and Law; Laura Romeu-Gordo, DZA - German Centre of Gerontology

In the past years, the interest in the relative earnings of partnered women in different-sex cohabiting couples and also the role parenthood takes in these dynamics has been growing quickly. This strengthened focus on empirical assessments of the micro and macro-level mechanisms affecting spousal relative income (e.g. Angelov, Johansson and Lindahl 2016; Dieckhoff et al. 2019; Musick et al. 2020; Nylin et al. 2021) is important for understanding inequality dynamics within families.

Our paper wants to contribute to this literature by studying trajectories of German couples' earnings inequalities and how they evolve after child birth dependent on the duration of paternity leave. Germany's family policy has experienced a paradigm shift (Seeleib-Kaiser and Toivonen 2011; Gülzau 2020) moving from a traditional male breadwinner model to a dual-earner/dual-care-taking model. One central policy change was the parental leave reform in 2007 and the implementation of two "daddy months" (i.e. two months exclusively reserved to one parent) in an effort to encourage equal dual earning and caring. While now more than 40 percent of all fathers take up the two months exclusively reserved for them, only one third of all paternal leave-taking goes beyond those two months. We examine how long-term trajectories of couple earnings inequalities differ depending on the male partner's leave, differentiating couples where he took no leave, up to two months of leave or more than two months of leave.

The paper draws on longitudinal data from the German Socio-Economic Panel Study (SOEP) offering us microlevel panel data at the household level from 2007 to 2022. We use fixed-effects panel models with robust standard errors clustered within couples to analyze specifically the effect of the event of child birth on the earnings gap its evolution within cohabiting couples. Preliminary results suggest that father's paternity leave-taking and its duration have long-term implications for the trajectories of within-couple earnings inequalities.

11C STREAM: EDUCATION

INDIVIDUAL SOCIO-ECONOMIC FACTORS

PAPERS

TALK 1: Life Course Effects of Social Background: Heterogeneous Social Origin Effects on Offspring's Educational and Occupational in Australia and Germany

Presenter: Hans Dietrich, Institute for Employment Research (IAB)

The current research literature indicates intergenerational transmission of disadvantaged social positions is still a key contributor for the maintenance of social inequality in western societies. Recent empirical findings indicate a rather severe inelasticity regarding the intergenerational transmission. These findings suggest, especially individuals at the bottom of the social distribution participated less at the educational expansion or the absolute and relative upward mobility typically observed for most of the Western societies (Bernardo & Ballarino 2016), beyond the specification of identification, applied.

Despite that bottom-specific perspective Bernardi and Balarino (2016) argue, most of the recent studies have documented a general trend of decline in inequality in educational opportunities by social background (Shavit et al. 2007; Breen et al. 2009; Ballarino et al. 2009). Educational returns and their trend over time show more variation across countries, so that they have increased in some countries, while they have declined or remained stable in others. Mastekaasa & Birkelund (2022) favor parental education instead of paternal status, occupation or income for Sweden. However, modern states might also differ with respect to the appropriateness of indicators applied identifying social origin.

Most of the empirical work quoted refers to analysis based on cross-sectional population survey data, and are missing appropriate age and cohort specific analyses. This paper aims towards analyses of the intergenerational transmission of socioeconomic position (class, status and income) with respect to educational and occupational attainment, based on longitudinal data and employing alternative measurements of socioeconomic origin and destination. We employ longitudinal household panel-data (Hilda for Australia and GSOEP for Germany) and follow up individuals from age 16 to age 30. Empirical result indicates, offspring's status- and wage-positions seem to be less correlated in Australia compared to Germany and as models of status attainment in general assume. Compared to Germany the findings for Australia indicate a more pronounced age-dynamic for both social origin and offspring's socioeconomic status, whilst in Germany

a severe school tracking does not only reduce intergenerational mobility, but it contributed also to more class or status-stable life courses. Further on, especially for Australia, we observe indications for a parental division regarding their impact on offspring's socioeconomic status reproduction: Primarily fathers' income and mothers' education and status contribute to intergenerational transmission.

TALK 2: Understanding the Coastal Effect in England: Are Young People in Coastal Communities Less Likely to Get Degree-Level Qualifications?

Presenter: Zongpu Yue, University College London

Co-authors: Avril Keating, Stephen Jivraj, University College London; Emily Murray, University of Essex

Following decades of attention on the individual-level factors shaping educational outcomes, researchers are increasingly shifting their attention to the role of geography and spatial inequalities. In the English context, coastal communities have attracted particular concern, however, the question thus remains: from the perspective of life course, is there a specific coastal educational disadvantage for young people? And if so, how much is explained by the local educational environment? Using linked longitudinal data from a birth cohort study (Next Steps) of children born in 1989- 1990 and the National Pupils Database ($n=13,375$), whether and why young people who grow up in coastal communities are less likely to have a degree-level qualification by age 32 are examined by logistic modelling. The initial findings indicate that there is a clear coastal effect: young people in coastal towns at age 32 are 20% less likely (95% CI: 0.767, 0.946) to have obtained a degree, even after controlling for area level deprivation, as well as individual-level sociodemographic characteristics. Further analysis fitting educational environment to models attenuated the direct coastal effect in obtaining a degree by age 32 years (OR=1.081, CI: 0.768, 1.520). Consequently, the findings suggest national government should prioritise funding for schools in coastal areas with poor educational environments.

TALK 3: Parent-Teacher Informant Resemblance on the Strengths and Difficulties Questionnaire from 5 to 10 in the French Elfe and Epiage Cohorts Studies

Presenter: Mélissa Arneton, ELFE / INED-INSERM

Co-authors: Thierry Siméon, ELFE / INED-INSERM; Laetitia Marchand, EPIPAGE 2/ INSERM

Use a multi-informant approach to measure children behavior and adjustment in several contexts (family and school) contributes to better estimate the stability of their well-being. Teachers often report fewer negative outcomes than parents. The literature indicates less resemblance when the respondent thinks the child has a problem (impairment, special needs, social disadvantage...). In other words, social inequalities may moderate perceptions and resemblance between informants. There is a lack of studies on French data on this topic, although schooling in France has specificities. We will use data from the French national birth cohorts Elfe and Epiage 2, initiated in 2011. Elfe concerns live births while Epiage 2 is devoted to very preterm births. Subscales of teacher- and parent-reported Strengths and Difficulties Questionnaire (SDQ) will be used to measure child's behaviors. We focus on conduct and hyperactivity subscales. We include all children with information completed by teacher (age 9) and by parents (ages 5 and 10). Our sample concerns 1333 children (869 from Elfe and 464 from Epiage 2), sex balanced, migration background concerns less than 2% and special needs a maximum of 22%. We will take into account for the stratified design of the cohorts and adjust for key covariates. First, we will examine the degree of agreement by parent and teacher. Second, we will investigate if the child's sex, ethnicity, special needs or family socioeconomic status moderate the strength of the associations found. According to past research, we hypothesize better correlations between teacher and parents for ordinary children with favored background. We expect to find differences between children with special needs: agreement between parent and teacher would be more congruent for children whom benefit of administrative accommodations than for children without diagnosis. Findings from this study can contribute to a better understanding of pathways in an intersectional perspective.

TALK 4: Withdrawn

11D STREAM: PARENTHOOD / FAMILY 2

**INDIVIDUAL EMPLOYMENT
PAPERS**

TALK 1: Gender Attitudes, Parenthood, and Leave-Taking: Do Social Norms and Policy Shape Family Work Dynamics?

Presenter: Mengxuan Li, The University of Queensland

Co-author: Janeen Baxter, The University of Queensland

The transition to parenthood is a critical life course stage that reshapes gender attitudes and the division of labour within couples. Women's increased labour force participation has led to changes in policy, including introduction of a government funded paid parental leave (PPL) scheme in Australia (2011) providing 18 weeks of leave at minimum wage rates. The scheme has since been expanded. But far fewer men than women take parental leave. Existing research highlights how parenthood reinforces traditional attitudes about gender divisions of labour, yet little is known about how gender attitudes evolve over time and how policy changes, such as paid parental leave, shape men's and women's attitudes to parenting and leave taking. We examine these questions using data from the Household, Income, and Labour

Dynamics in Australia Survey (2005–2023), analysing 4655 couples with a first-born child and employing a range of techniques. We assess the direct effects of gender attitudes on leave-taking; mediation effects through workplace constraints (e.g. job flexibility); and moderation by the 2011 PPL scheme.

Our results show that couples with egalitarian attitudes are more likely to share leave taking equally and mothers return to work earlier. Couples with traditional attitudes are more likely to have highly gendered leave patterns, with mothers taking the majority of leave. Workplace constraints mediate leave-taking behaviour, where men in egalitarian couples still take limited leave if job conditions are restrictive.

The 2011 PPL policy moderated the effect of gender attitudes, enabling more fathers, especially in traditional couples, to take leave. Pre-2011, traditional attitudes likely exerted a stronger influence on women's prolonged leave and men's minimal or no leave. Post-2011, the policy weakened this effect, fostering more equitable leave-sharing. Further analyses show that over time, as attitudes become more egalitarian, leave-taking patterns shift toward greater gender equality.

TALK 2: Gendered Earnings Changes Following Parenthood: The Role of Paid Parental Leave in Australia

Presenter: Janeen Baxter, The University of Queensland

Co-authors: Kai Feng, University of Pennsylvania; Suri Li, The University of Queensland

Extensive research has shown that transition to parenthood exacerbates gender inequality among heterosexual couples. Career interruptions related to parenthood increase women's care work while reducing their labor force participation, wages, and career opportunities, whereas father's careers remain largely unaffected. Paid parental leave is expected to mitigate these disparities, but empirical evidence remains mixed, varying by leave length, remuneration rates, country context, and outcome measures.

This study adopts a couple-level framework to examine how parenthood affects economic inequality within couples before and after Australia's 2011 government-funded parental leave program, which provided 18 weeks of leave at the minimum wage. Like the US, Australia has historically followed a liberal welfare model with limited publicly funded family benefits. Using longitudinal data from the Household, Income and Labour Dynamics in Australia (HILDA) survey, we analyze changes in mothers' earnings share within dual-earner households, stratified by education, across two cohorts: parents of first-born children from 2000–2010 (pre-policy) and 2011–2023 (post-policy). Preliminary findings show a significant drop in mothers' earnings share following the birth of the first child, persisting for 4 years without returning to pre-birth levels. Among dual-earner couples, mothers with a degree experience a steeper and more prolonged decline in their earnings share than those without degrees. However, when including one-income households, low educated mothers face an even more persistent decline, failing to recover their pre-birth earnings share even 5 years after childbirth. We also find that post-policy mothers recover their pre-birth earnings share approximately one year earlier than pre-policy mothers.

These findings underscore the long-term impact of post-childbirth career breaks and limited uptake of parental leave among fathers (26.8%) in Australia. It highlights the introduction of paid parental leave in mitigating the economic disadvantages of motherhood, particularly among those from lower socioeconomic backgrounds.

TALK 3: Heterogeneous Effects of Parental Leave Reform on Partnership Stability in Finland: Examining the Role of Education

Presenter: Sumia Akter, University of Turku

Co-author: Satu Helske, University of Turku

The aim of this study is to explore how Finnish parental leave reform of 2013 affects couples' partnership stability and how the effect vary considering their educational differences. Earlier research found that fathers' leave uptake varied significantly based on their socio-economic status (SES) that linked with their involvement in home and childcare. Typically, fathers with high-SES utilize more leave benefits, and their increased involvement in early childcare is associated with greater relationship satisfaction. However, it remains unexplored whether similar outcomes are observed among lower-educated fathers who made significant use of leave benefits after the reform. This study utilized 2013's leave reform which introduced a true 'father's quota' or independent leave days for fathers in Finland. Following a natural experimental research design, pre- and post-reform groups were assigned based on the eligibility of receiving the reform benefits or not. We used full-population Finnish register data including 51,912 heterosexual couples who experienced the birth of their first child in six-months before and after the reform window. We applied discrete-time event history analysis to track partnership stability for a 7.5-year follow-up period from the year 2012–2020. The preliminary results showed that the risk of separation among couples generally increased after the transition to parenthood until the first two years and then started decreasing. The cumulative hazard rate revealed a sharp reduction in separation among the post-reform lower-educated groups (more than five percentage point). The overall effect of the leave reform was statistically significant and following the reform, lower-educated couples experiencing more stability in partnership in comparison to their higher educated counterparts. While these findings suggested that the reform contributed to reducing partnership dissolution among lower-educated groups, further robustness checks are necessary before drawing definitive conclusions.

TALK 4: Intensive Parenting and Mother's Postnatal Work and Parental Leave Patterns

Presenter: Chen-Hao Hsu, University of Bamberg

Co-author: Wei Huang, University of Bamberg

Early research has shown that parenthood affects particularly mother's postnatal work integration. The diffusion of intensive parenting, which demands great parental time, financial, and emotional investments in child-centered childrearing, may even heighten the challenge of being a mother and an employee at the same time. Augmenting prior studies, this study considered not only the quantity (e.g., frequency of reading to child) but also the quality (e.g., parental sensitivity) of mothers' parenting behaviors, and examined their effects on mother's employment/parental leaves patterns in children's early lives.

Drawing on the German National Educational Panel Study – Newborn Cohort, this study used sequence analysis to identify four postnatal employment/leaves sequence clusters for 2,684 German women (across children's ages of 0–36 months): full-time employment after leaves (16.5%), part-time employment after leaves (27.8%), inactive after leaves (27.1%), and extended leaves for more than two years (28.7%). Next, we performed a multinomial logistic regression analysis to investigate how mothers' postnatal employment/leaves sequences were associated with the (latent) quantity and quality of parenting, while controlling for mother's education and age, coparenting, parity, and extrafamilial childcare. Regression results showed that higher parenting quality may decrease the odds of being inactive after leaves against being full-time employed after leaves. Contrarily, higher parenting quantity might increase, although insignificantly, mothers' odds of being inactive or taking extended parental leaves against being fulltime employed after leaves. Finally, higher parenting quality might increase, although insignificantly, mothers' odds of part-time employment against fulltime employment after leaves, indicating that postnatal part-time employment could be a strategic arrangement for some German women to combine high quality parenting with labor market participation. In summary, this study provides a holistic profile of mothers' employment/leaves patterns in Germany and highlights the heterogeneous influences of two distinguished dimensions of parenting—quantity and quality—on women's postnatal labor market integration.

11E STREAM: DISADVANTAGE / INEQUALITY 3

INDIVIDUAL HEALTH / WELLBEING PAPERS

TALK 1: Life-Course Disadvantage and Primary Healthcare Trajectories in 13 European Countries: A Sequence Analysis of the SHARE Cohort

Presenter: Cornelia Wagner, University of Fribourg

Co-authors: Vladimir Jolidon, Bernadette van der Linden, Stéphane Cullati, University of Fribourg; Katrijn Delaruelle, Piet Bracke, University of Ghent; Sorana Toma, Ghent University; Claudine Burton-Jeangros, University of Geneva

Regular participation in primary healthcare is important to identify health issues early and receive appropriate treatment when necessary. Especially in later life, international guidelines recommend periodic check-ups including blood tests, vision tests, or mammography, to prevent chronic diseases. However, it is well established that not all populations access general care equally, with socioeconomically disadvantaged populations less likely to participate regularly. What is not yet known is what primary healthcare participation looks like in the form of life-course sequences and whether these trajectories differ between birth cohorts, gender, or countries. Additionally, it is unclear how disadvantages across multiple dimensions and the life course (including childhood deprivation, mid-life education, and later-life financial hardships) predict different trajectories of primary healthcare uptake.

Therefore, we use sequence analysis to (1) illustrate primary healthcare sequences for blood pressure, blood test, vision, mammography, and gynaecological visits, both jointly and separately, and (2) explore their association with a life-course disadvantage score. We included 24'8999 participants from the Survey of Health, Ageing, and Retirement in Europe (SHARE) with a mean age of 66 years (± 9.7 SD). Preliminary results show that a higher life course disadvantage score was associated with a reduced likelihood of consistent primary healthcare uptake across the life course (ages 16 to 65) for all above-mentioned healthcare services. Further analyses are ongoing. This, to our knowledge, is the first study to use sequence analysis to explore differences in primary healthcare trajectories using the SHARE cohort.

TALK 2: Exploring Changes in Reproductive Healthcare Deserts at the U.S. County Level, 2010-2021

Presenter: Christie Sennott, Purdue University

Co-authors: Sara Yeatman, University of Colorado Denver; Matt Gunther, NORC at the University of Chicago; Piritmwa Shemu, Purdue University

Access to reproductive healthcare in the U.S. has become increasingly constrained. Although a growing body of research has focused on identifying state-level policies that affect women's access to care, less attention has been paid to documenting access to reproductive healthcare at the *local level*. Local access to reproductive healthcare, including contraception, maternity care, and abortion, is a key structural factor that can hinder or facilitate women's reproductive autonomy and maternal and infant health. Therefore, we have developed the first comprehensive longitudinal (2010-2021) dataset that will allow us to identify spatial variation in access to contraceptive, maternity, and abortion care at the U.S. county-level. We will use the new dataset to identify "reproductive healthcare deserts" (RHD), or counties where access

to contraceptive, maternity, and abortion care is severely limited or nonexistent, document how access has changed over time, identify disparities in access, and examine how such disparities shape health outcomes. We have also created a new interactive dashboard that maps the RHD dataset and includes time-varying county-level sociodemographic characteristics obtained from supplementary datasets (e.g., American Community Survey, CDC WONDER). The dashboard guides our descriptive research into the spatial patterns and scale of changes to reproductive healthcare access over the study period and highlight disparities in access and their overlap with sociodemographic traits. Taken together, this project will provide a new comprehensive measure of reproductive healthcare, a novel dataset and interactive dashboard that will track changes over a 12-year period, and robust evidence of how reproductive healthcare deserts are related to reproductive autonomy and maternal and infant health.

TALK 3: The Long-Term Effects of Family Income Trajectories on Health and Well-Being for Children at Age 12

Presenter: Wan-Lin Chiang, University of Taipei

Co-author: Tung-liang Chiang, National Taiwan University

Background: The effect of income on child well-being has been well documented, yet less is known about how changes in family income over a child's life can influence them. This study aims to examine the impact of family income trajectories on various aspects of developmental outcomes in children at age 12.

Methods: Data were obtained from the Taiwan Birth Cohort Study, a nationally representative sample of 16,290 children born in 2005. We used group-based trajectory modeling to identify the different patterns of income trajectories by measuring monthly parental income from birth to 12 years of age. The primary outcome variables were self-reported general health status, obesity, smoking, depression, and hospitalization of children at age 12. Multivariate logistic regression was conducted for data analysis.

Results: A four-class income trajectory model was developed: stable-low (10.3%), stable-middle (72.9%), upward (7.8%), and stable-high (8.9%). Our findings showed that income trajectories possessed strong gradient effects on the outcomes of children at 12 years of age. Children from the stable low-income trajectories were more likely to have fair/poor health (OR: 1.58, 95% CI: 1.35-1.85), obesity (OR: 2.04, 95% CI: 1.61-2.59), ever-smoked (OR: 13.60, 95% CI: 3.19- 57.99), and depression symptoms (OR: 2.14, 95% CI: 1.42-3.22) than children in the stable-high-income trajectory. Moreover, children from the stable low income trajectories had higher odds of using hospitalization services in the past 12 months although not statistically significant (OR: 1.39, 95% CI: 0.84- 2.31). Importantly, children in the upward-income trajectory had similar outcomes relative to the stable high- income trajectory.

Conclusion: This study suggested that promoting upward income mobility among disadvantaged families may have a positive impact on several aspects of a child's health and well-being.

TALK 4: Distributive Justice, Health Equity, and Domestic Terrorism

Presenter: Anina Schwarzenbach, University of Bern

Health equity has emerged as a critical dimension of social justice and state legitimacy, yet its implications for political violence, particularly domestic terrorism, remain understudied. As a core component of distributive justice, health equity measures equality of access to high-quality health care. This article examines the relationship between disparities in access to quality health care and patterns of domestic terrorism, arguing that persistent health inequities represent significant structural grievances that can fuel radicalisation and domestic terrorism.

Using 50 years of longitudinal data from 134 countries and controlling for key confounding factors, the analysis shows that pronounced health inequities contribute significantly to domestic terrorism. The study also shows that the relationship between health inequity and domestic terrorism is stronger in democratic countries. Integrating insights from political sociology, state legitimacy theory, and relative deprivation theory the study challenges the dominant focus on procedural justice by highlighting the importance of distributive justice in shaping domestic terrorism. The findings underscore the deeply personal and visible nature of health inequities, highlighting their potential to shape perceptions of state illegitimacy and fuel tensions and violence.

By expanding the discourse beyond economic indicators traditionally used to measure distributive justice, the article offers a novel perspective that positions disparities in access to high-quality healthcare as critical determinants of state stability and security. Ultimately, the study argues for the recognition of health equity as a central component of effective counter-terrorism policies in democratic societies.

11F STREAM: HEALTH / WELLBEING 4

INDIVIDUAL IMPACTS OF COVID PAPERS

TALK 1: Growing Social and Gender Gaps in Externalizing Behavior Among Primary School Children During COVID-19? Evidence from a Combined Cohort and Trend Study Comparison in Germany

Presenter: Markus Vogelbacher, Leibniz Institute for Educational Trajectories

Co-author: Christoph Homuth, Leibniz Institute for Educational Trajectories

The COVID-19 pandemic posed challenges to child development, potentially deepening social and gender disparities in cognitive and socioemotional trajectories (Betthäuser et al., 2023; Wolf & Schmitz, 2024). While cognitive development and internalizing problems have been widely studied, externalizing behavior remains underexplored (Orban et al., 2024).

In Germany, results from large-scale longitudinal studies tracking externalizing behavior in primary school students before and during the pandemic are lacking (Schlack et al., 2023).

This study examines whether externalizing behavior increased during the pandemic and whether social, gender, and intersectional disparities widened, drawing on life course theory (Benner & Mistry, 2020; Elder, 1998). We analyzed data from the German National Educational Panel Study (NEPS; N= 1,812), which assessed externalizing behavior (SDQ; subdimensions hyperactivity and conduct problems) and sociodemographic background via parent interviews in 2018, 2020, and 2022—when children were 6, 8, and 10 years of age. To contextualize findings, we compared them with a pre-pandemic cohort of children from a family panel (pairfam; NHYP/COND = 555/1,409) and triangulated with representative pre-pandemic cross-sectional data (KiGGS; Nmin = 4,986), leveraging both cohort and trend study comparison approaches. We applied entropy balancing and mixed-effects panel regressions for the cohort comparison and weighted OLS regressions for the trend study comparison. The cohort comparison indicated that boys from academic backgrounds were at increased risk for hyperactivity early in the pandemic. The trend study comparison, however, revealed a temporary hyperactivity surge among girls from academic background, followed by a sharper decline for all children with academic background. Surprisingly, girls from low-educated families exhibited reductions in hyperactivity and conduct problems at the pandemic's onset. These findings, interpreted through a life course lens, provide new insights into developmental impacts of the COVID-19 pandemic.

TALK 2: Transitions to Post-Compulsory Education of Foreign and Immigrant Pupils in Switzerland in Time of the COVID-19 Crisis

Presenter: Jil Zanolin, University of Geneva

Co-authors: Matthias Studer, Andrés Gomensoro, University of Geneva

This paper explores the impact of the COVID-19 crisis on students' pathways after compulsory education, a key step in the Swiss schooling system. As in most European countries, foreign and/or migrant students in Switzerland are more likely to experience non-linear school trajectories which can negatively affect their educational access and professional opportunities. The effect of immigration backgrounds on the transition from lower to upper secondary school is thus thoroughly assessed. We further explore whether the inequalities faced by pupils with a migrant background were heightened by the COVID-19 crisis as they were with previous societal, systemic, or cyclical crisis.

Using administrative data, we study three cohorts who completed their compulsory schooling in the spring of 2017, 2019 and 2020, tracking their educational pathways over two years. Sequence analysis as well as regression analysis are mobilized to analyse these trajectories. First, individual sequences are constructed using seven different states. The CLARA algorithm is then employed to cluster these sequences. Finally, several regressions are estimated to measure the discrepancies in educational trajectories.

Results show that pupils favour institutional options in times of the COVID-19 crisis over the uncertainty of leaving the system. Moreover, we find evidence of this crisis facilitating the transition from first to second year of general education. Corroborating previous research, migration background effects are shown to be strong predictors of educational trajectories. Pupils from southern Europe, former Yugoslavia and Africa are overly associated with non-linear pathways and have a lower probability to access general education than Swiss nationals. Additionally, differences in the stability of residence permits were found to affect pupils' opportunities. This study contributes to understanding the diversity of migration backgrounds and offers insight into the persistent disadvantages that afflict certain minorities.

TALK 3: The COVID-19 Pandemic Changed the Parental Socioeconomic Composition of Birth Cohorts Conceived During the COVID-19 Pandemic: A Register-Based Study of 77.9 Million Live Births in 15 Countries

Presenter: Moritz Oberndorfer, University of Helsinki

Co-authors: Juha Luukkonen, Hanna Remes, Pekka T. Martikainen, University of Helsinki

The COVID-19 pandemic continues to offer opportunities to study how in-utero and early life exposure to environmental changes can affect health and socioeconomic outcomes throughout the life course. However, inferences from such studies and resulting policies may be flawed if the pandemic changed the socioeconomic composition of parents. Using register data covering over 77.9 million live births from January 2015 to December 2021 from 15 countries (Americas: Brazil, Ecuador, Colombia, Mexico, the United States; and Europe: Austria, England, Denmark, Finland, the Netherlands, Scotland, Spain, Sweden, Wales; and from the state South Australia) we compared the observed socioeconomic composition (regarding parental income, education, and area deprivation) of babies born between December 2020 and December 2021 with their estimated counterfactual composition had the pandemic not occurred.

In the United States and all included European countries (except for Denmark and Sweden), the December 2020–December 2021 birth cohort had a 0.6% [95%CI: 0.2; 0.6] (Netherlands) to 2.5% [95%CI: 2.2; 2.9] (Spain) higher proportion of babies born to socioeconomically advantaged parents compared with their counterfactual compositions. In included Latin American countries, the proportion of babies born to advantaged parents was -0.3% [95%CI: -0.4; -0.2] (Mexico) to -3% [95%CI: -3.3; -2.7] (Ecuador) lower than their counterfactual proportions. For Denmark, Sweden, and South Australia, we found little to no evidence for changes in socioeconomic composition. The compositional changes found for 12/15 countries may cause between-cohort differences in life course outcomes that are affected by the socioeconomic position of parents. Little to no effects on socioeconomic composition in Denmark, South Australia, and Sweden may be explained by less stringent lockdown measures and generous economic support. Cross-country differences in our results suggest that changes in a birth cohort's socioeconomic composition in response to macro-level shocks depend on policy responses and how socioeconomic position relates to agency in fertility decisions.

TALK 4: Stuck, Stayed or Remigrated: Spatial (Im)mobility and Emotional Wellbeing Among Returned Overseas Filipino Workers During COVID-19

Presenter: Kristel May Gomez-Magdaraog, University of Geneva

Co-authors: Sorana Toma, University of Ghent; Claudine Burton-Jeangros, Yves Jackson, University of Geneva

Overseas Filipino Workers (OFWs) were among the migrant populations forced into large-scale returns due to COVID-19 related restrictions and economic lockdowns. The pandemic disrupted the conventional dichotomy between voluntary and involuntary return, producing diverse mobility patterns that shaped reintegration and remigration processes. While extensive literature examines return migration and reintegration, less attention has been given to the decision-making processes of returned migrants and their emotional consequences, particularly in the context of a global crisis. Additionally, dominant Western frameworks of wellbeing often emphasized the determinants of subjective wellbeing, but often overlook the culturally specific dimensions of Filipino experiences, such as relational and collective aspects of wellbeing.

This exploratory study investigates the relationship between spatial (im)mobility and emotional wellbeing among returned OFWs during the COVID-19 pandemic. A thematic analysis was conducted using semi-structured interviews with 23 OFWs who returned between 2020 and 2022. The findings illustrate three post-return trajectories: being stuck, choosing to stay, or pursuing remigration. Family obligations, health concerns, social capital, and institutional barriers played central roles in shaping mobility decisions, with each form of spatial (im)mobility evoking varied emotional responses. For example, those who remained by choice often found comfort in family reunification, while some evoked negative emotions due to trauma from their experiences abroad.

This study uncovers a three-way nexus between return migration, spatial (im)mobility, and emotional wellbeing, drawing on culturally relevant frameworks, particularly *kaginhawaan*—a Filipino concept of wellbeing that emphasized the family, psychological wellbeing and spirituality. By integrating this perspective, the study highlights the emotional dimensions of post-return mobility decisions, offering insights for future research and policy discussions on migrant reintegration and support.

KEYNOTE 4

A Midlife Disrupted: Work Disability and Illness Spells in Life Course Perspective

Presenter: Jessica A. Kelley, Case Western Reserve University

Midlife is a critically important time in the life course, for individuals and for society. Adults in midlife are the intergenerational linkage between their (grand)parents and their (grand)children. Many midlife adults are engaged in paid work, making them key drivers of the economy. They may be providing care upward to older relatives and simultaneously raising or supporting their children. Fundamentally, a successful midlife balancing these many demands depends on having reliably good health. Spells of ill health or degenerating conditions can place pressures on the time, money, and energy that midlife individuals need to give to their myriad roles, potentially setting off a cascade of adverse circumstances that degrade later-life well-being.

This talk has two aims. First, to situate midlife health disruptions in the life course perspective, exploring the roles of selection, linked lives, and age-graded institutions. Second, to present some preliminary findings on the prevalence, timing, order, and duration of midlife health disruptions using the Life History Survey of the *Health and Retirement Study*. I will then discuss, based on the life course principles outlined above, potential impacts of midlife disruptions on later-life social, economic, and health circumstances.