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**SOCIETY FOR LONGITUDINAL AND LIFE COURSE STUDIES
INTERNATIONAL CONFERENCE**

**Growing Up and Growing Old: Health Transitions
Throughout the Lifecourse
Hotel Casa 400, Eerste Ringdijkstraat 4, 1097 BC,
Amsterdam, The Netherlands
23rd – 25th September 2013**

ABSTRACT BOOK

Day 1 – Monday 23rd September 2013

Keynote

09:30 – 10:30

Age-related changes in the determinants in exercise behaviour

Eco de Geus - Professor of Biological Psychology, Co-Director of the Netherlands Twin

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Despite its well-known benefits, regular leisure-time exercise behavior drops from childhood to adolescence and reaches unacceptable low proportions in adulthood, with the majority of people in the United States and Europe not engaging in regular exercise at the recommended level for the past two decades. Data from different age cohorts of genetically informative individuals, like twin family members, allow a systematic study of the changes in the determinants of exercise behavior across the life span. This will be illustrated by survey data on leisure time exercise behavior in over 40.000 subjects from the Netherlands Twin Registry with an age range of 7 to 50 years. In this dataset major shifts were seen from common (family) environmental influences towards genetic influences from childhood to late adolescence, whereas person-specific environmental influences increasingly influence adult leisure time exercise behavior.

When longitudinal data are available in genetically informative individuals, preferably including MZ twins, robust tests of causal hypotheses can be performed in purely observational data. As an example we show that the well-known association between regular exercise and psychological wellbeing does *not* reflect causal effects of exercise. In contrast, the association between exercise attitudes (perceived benefits and barriers) and exercise behavior is fully compatible with a causal effect of attitude on behavior, although reverse causality cannot be ruled out. These various results will be discussed in the light of our theoretical model on the determinants of this important lifestyle behavior.

PARALLEL SESSION 1

1A: Substance Use

11:00 – 12:30

Understanding alcohol consumption in a family context

Cara Booker, University of Essex, UK

Recent government policies have been proposed with the aim of curbing binge and heavy drinking, particularly among young people, and changing the drinking culture in the United Kingdom (UK). Alcohol consumption norms can be transmitted through peer and familial networks. The aim of this paper is to investigate the association between parental and youth alcohol consumption behaviours and the associated contextual factors.

The paper uses the adult and youth (10-15 year olds) surveys from Wave 2 of *Understanding Society*. Both youth and adult alcohol consumption were assessed by two questions, one focusing on frequency and on bingeing behaviours.

The findings showed that youth past month alcohol consumption was low but varied greatly with age. Overall, an increase in the frequency or amount drunk by the parent was associated with an increased likelihood in the frequency of past month drinking or binge drinking of the youth. The strength of the association between parental past 12-month drinking and youth binge drinking increased with the addition of covariates.

The increased odds of binge drinking in young people with increased frequency of parental alcohol consumption suggest that family focused policies and interventions should be considered in conjunction with individual focused policies.

Educational attainment and trajectories of alcohol use from adolescence through adulthood

Robert Crosnoe, Sarah Kendig, Aprile Benner, University of Texas at Austin, USA

Grounded in life course theory, this study unpacks the link between experiences in higher education and drinking behaviors as young people age into adulthood in the U.S. Using the National Longitudinal Study of Adolescent Health, it identifies multi-dimensional pathways of educational attainment based on level, timing, and sequence. Next, we examine how these pathways are associated with latent growth curves of drinking from early adolescence into adulthood, and explore how background factors (e.g., socioeconomic status, school contexts, academic history) selecting youth into higher education moderate these associations between educational attainment and alcohol use across the life course. Results reveal that young people who enter and then graduate from four-year colleges before turning 25 without later re-entering higher education have the highest peaks in drinking after adolescence and the shallowest plateaus of drinking into their 30s. Deviations from this increasingly normative educational pathway—e.g., attending two-year colleges, enrolling later in the 20s, dropping out, transitioning across schools—flatten out drinking trajectories over time. Some evidence suggests that youth whose family background and early schooling indicate that they are headed for a certain educational pathway resemble the average drinking trajectory of that pathway even if they do not ultimately follow that pathway.

Veteran status and smoking over the life course: an age-period-cohort analysis

Andrew London, Richard Miech, Janet Wilmoth, Syracuse University, USA

The military is an institution with a culture and institutional norms that encourage and support tobacco use. While the distribution of free cigarettes in rations stopped in 1975 and smoking during basic training was banned in 1987, base stores continued to sell reduced-price or tax-free cigarettes for decades. Generally, policy changes aimed at reducing smoking among active-duty personnel have been weaker and less systematic than the random drug screening program that was introduced in the mid-1980s to reduce other forms of substance use. In this paper, we use data from the 1985-2011 National Survey on Drug Use and Health to conduct an age-period-cohort analysis of long-term trends in current smoking and smoking intensity. Our analysis includes birth cohorts from the 1930s through the 1990s. Preliminary results indicate substantial effects by veteran status. We compare our findings for cigarette smoking to those for other substances, such as hallucinogens and marijuana, which we have already conducted. Demonstrating the long-term consequences of military service on smoking behaviour over the life course may contribute to efforts to reduce smoking, and smoking-related health problems, among current military personnel.

Influence of conduct problems and depressive symptoms on adolescent substance use: proximal versus distal effects

Julie Maslowsky, University of Wisconsin, USA

Identification of developmental windows when key predictors of adolescent substance use are most influential is a crucial task for informing appropriately targeted prevention and intervention programs. In a US national, longitudinal sample (N=3,014), structural equation modeling was used to examine effects of 8th and 10th grade conduct problems and depressive symptoms on increases in alcohol, cigarette, and marijuana use from 8th through 12th grades. Analyses were structured to test whether early-emerging or proximal mental health problems were stronger predictors of substance use and indicated that early-emerging mental health problems were stronger predictors than proximal mental health problems. 8th grade mental health was positively associated with substance use in 10th and 12th grades; conduct problems were most strongly associated with alcohol and marijuana use, and depressive symptoms were most strongly associated with cigarette use. 10th grade mental health was not associated with 12th grade substance use. Overall, effects of early mental health problems were stronger than those of proximal mental health problems, despite factors such as measurement artifact that often lead to larger effects for proximal variables. Results indicate that interventions targeting mental health problems in order to reduce substance use should be implemented by 8th grade or earlier.

1B: Racism, Discrimination and Perceived Barriers

11:00 – 12:30

A longitudinal examination of experienced racism and discrimination on maternal health, parenting practices and child health

Laia Becares, James Nazroo, University of Manchester, UK; Yvonne Kelly, University College London, UK

The association between experienced racism and poor health is well documented, and experiences of racism and discrimination have been identified as a crucial distal determinant of ethnic health inequalities. However, this literature is mainly based on cross-sectional examinations focused on adult health. Longitudinal examinations of the association between racism and health, as well as studies examining the relationship between racism and child health, are limited. In addition, evidence on how mothers' experiences of racism and discrimination impact on child health and development, and the mechanisms by which this occurs, is scarce.

In this study we employ a life course approach to examine: 1) the longitudinal association between maternal reports of experienced discrimination and maternal mental health; 2) the impact of maternal experiences of racism and discrimination on the child's socio-emotional development, and 3) the mechanisms by which maternal experiences of racism and discrimination impact on children's health and development, with a focus on the possible mediating role of parenting practices.

We use data from the Millennium Cohort Study (MCS3 and MCS4), which include measures on individual-and-area-level experiences of racism and discrimination, indicators of maternal mental health (Kessler 6), children's socio-emotional development (SDQ), and information on parental practices and socioeconomic circumstances.

The cumulative effects of discrimination on substance use disorders from early adolescence to emerging adulthood among North American indigenous adolescents

Les Whitbeck, University of Nebraska-Lincoln, USA; Kelley Sittner Hartshorn, Oklahoma State University, USA

Perceived discrimination has been identified as a risk factor for poor psychosocial (e.g., suicide ideation, depression) and behavioural (delinquency, gang affiliation, substance use) outcomes among indigenous adolescents. To date, this research has been largely cross-sectional and little is known about the cumulative effects of perceived discrimination on the development of adolescent substance use disorder (SUD), or the mechanisms through which discrimination operates. This study uses autoregressive, cross-lagged path analysis to examine the effects of perceived discrimination on anger, depressive symptoms, and SUD over four waves of data from a sample of 726 North American (Northern Midwest United States, Ontario, Canada) indigenous adolescents as they progress from early adolescence through emerging adulthood (Mean age = 11.3 years, Wave 1; 14.3 years, Wave 2; 16.2 years, Wave 3; and 18.3 years, Wave 4). Perceived discrimination, depressive symptoms, and anger at Wave 3 each had positive associations with meeting diagnostic criteria for SUD at Wave 4. We also found evidence that the effect of perceived discrimination at Wave 1 on Wave 4 SUD was cumulative and that it was partially mediated by subsequent depressive symptoms and anger. These findings highlight the importance of substance use prevention and treatment efforts that address perceived discrimination and its accompanying anger and psychological distress among minority adolescents.

Coping with structural disadvantage: overcoming negative effects of perceived barriers through collective self-definitions

Mouna Bakouri, Christian Staerklé, Véronique Eicher, Marlène Carvalhosa Barbosa, Alain Clémence, University of Lausanne, Switzerland

Members of socially disadvantaged groups (e.g., immigrants, low socio-economic status) are more likely to face systemic stressors such as devaluation and discrimination. The social identity approach of coping highlights the role of group identification on buffering the negative effects of stressors on health and wellbeing. When concerned specifically with stressors based on group membership, this approach mainly focused on the psychological effects of group devaluation. However, membership in socially disadvantaged groups can also have direct and lasting effects on life trajectories. During critical life transitions for example, choices and opportunities can be restricted because of the group's status.

This paper aims to combine a group-based approach of coping with the life course perspective. Using developmental researchers' concept of personal projects (Little, Salmela-Aro, & Phillips, 2007) and perceived barriers (McWhirter, 1997), we tested the hypothesis that collective self-definitions moderate the negative effect of perceived barriers on self-esteem. Using data of young apprentices and employees from two institutions, we found perceiving barriers to one's life project to be harmful for self-esteem. However, for participants who relied on collective or relational self-definitions, higher perceived barriers did not decrease their sense of coping efficacy and hence were less harmful for their self-esteem.

1C: Emotional Health

11:00 – 12:30

The vulnerability-stress-adaptation model over 25 years: a developmental systems perspective

Matthew Johnson, Nancy Galambos, Harvey Krahn, University of Alberta, Canada

Guided by the vulnerability-stress adaptation (VSA) model of marriage and a developmental systems perspective, the current study examined the association of three mental health trajectories (depressive symptoms, self-esteem, expressed anger) across the transition to adulthood (ages 18 to 25) with perceived life stress in young adulthood (age 32) and adaptive interaction with a romantic partner and relationship risk at midlife (age 43). Data were from a 25-year prospective, longitudinal study of 920 Canadians. Results indicated that initial levels at age 18 of each mental health variable predicted perceived life stress and intimate relationship outcomes, and the slopes for expressed anger and self-esteem were associated with perceived life stress and relationship risk. Specifically, a more gradual (rather than faster) decline in anger symptoms through age 25 predicted higher perceived life stress at age 32 and higher relationship risk at age 43 for women and for men, while a faster increase in self-esteem in the transition to adulthood was associated with lower perceived life stress and relationship risk. Higher perceived life stress at age 32 predicted less adaptive interaction at age 43 for men and women and increased relationship risk for women. Implications for theory development and future research will be discussed.

The emotional health of boomerang kids

Sarah Sandberg-Thoma, Anastasia Snyder, Bohyun Joy Jang, The Ohio State University, USA

Emerging adulthood represents a time period of exploration and instability (Arnett, 2000). Emerging adults commonly leave their parental home (Goldscheider & Goldscheider, 1994), yet approximately 40% of these emerging adults eventually return at least once (Goldscheider & Goldscheider, 1994). Further, the recent Great Recession has impacted the rates of co-residence as emerging adults face increased economic difficulties to independent living (Qian, 2012). The emotional health implications for boomerang kids remain unclear and economic factors that lead to parent-child co-residence may influence emotional health differently. Using public and geocode data from the National Longitudinal Survey of Youth 1997 (NLSY97), we examine the emotional health implications of returning to the parental home. Preliminary results indicate that those returning to the parental home report greater depressive symptoms than those who never return to the parental home. Overall, greater economic resources were linked to a decreased likelihood of returning to the parental home. Full time employment and higher wages were associated with decreased depressive symptoms for both those that returned and those that did not; receipt of public assistance was associated with increased depressive symptoms for both groups. Net worth was negatively associated with depressive symptoms for those returning to the parental home.

Working conditions in mid-life and mental health in older ages – results from SHARELIFE

Morten Wahrendorf, David Blane, Mel Bartley, University College London, UK; Nico Dragano, Johannes Siegrist, University of Dusseldorf, Germany

This presentation illustrates the importance of previous working conditions during mid-life (between 40 and 55) for mental health among older retired men and women (60 or older) across 13 European countries. We link information on health from the second wave (2006-07) of the Survey of Health, Ageing and Retirement in Europe (SHARE) with information on respondents' working life collected retrospectively in the SHARELIFE interview

(2008-09). To measure working conditions, we rely on core assumptions of existing theoretical models of work stress (the demand-control-support and the effort-reward imbalance model) and distinguish four types of unhealthy working conditions: (1) a stressful psychosocial work environment (as assessed by the two work stress models) (2) a disadvantaged occupational position throughout the whole period of mid-life, (3) experience of involuntary job loss, and (4) exposure to job instability. Health after labour market exit is measured using depressive symptoms, as measured by the EURO-D depression scale. Main results show that men and women who experienced psychosocial stress at work or had low occupational positions during mid-life had significantly higher probabilities of high depressive symptoms during retirement. Additionally, men with unstable working careers and an involuntary job loss were at higher risks to report high depressive symptoms in later life. These associations remain significant after controlling for workers' health and social position prior mid-life. These findings support the assumption that mental health of retirees who experienced poor working conditions during mid-life is impaired.

Adult life course transitions, social ties, and mental health

Kristi Williams, Cynthia Colen, The Ohio State University, USA; Patricia Thomas, Debra Umberson, The University of Texas at Austin, USA

Social ties exert powerful influences on mental health and mental health, in turn, shapes the nature and quantity of social ties. Although it is generally recognized that social ties change over the life course, how their association with mental health changes across adult life course transitions has not been considered. We use panel data from the Americans' Changing Lives Survey (ACL) and parallel process linear growth models to investigate how social integration and mental health, as well as their reciprocal relationship, are influenced by the transition to parenthood, retirement, and the empty nest. The ACL includes 4 waves of data spanning a period of 16 years on a representative sample of U.S. adults aged 24 and older in 1986. Results indicate that the transition to parenthood is the most salient life course transition for women's social ties and mental health, whereas for men the transition to retirement is most important. For men, mental health more strongly affects social ties than vice versa and retirement increases men's social integration while undermining their mental health. For women experiencing the transition to parenthood, formal social integration precipitates declines in mental health whereas poor mental health is linked to declines in informal social integration.

1D: Findings from the UK Millennium Cohort Study

11:00 – 12:30

Parental involvement, values and wellbeing and behavioural problems in childhood: the mediating role of young children's occupational aspirations

Vanessa Moulton, Eirini Flouri, Heather Joshi, Alice Sullivan, Institute of Education, UK

Previous studies have focused on the role of adolescent aspirations and educational and occupational outcomes rather than other outcomes, such as emotional and behavioural adjustment. The importance of life-stage in the development of adolescent aspirations has been highlighted. However, the aspirations of younger children, compared with those of adolescents, may be a more accurate reflection of children's hopes for the future. Structural factors such as parental education, occupation and social class have been found to influence children's aspirations, as well as parent's expectations of and involvement with their children. Parents can also influence children's attitudes towards levels of future optimism. These factors are also strongly associated with children's emotional and behavioural problems. We used data from each sweep of the UK's Millennium Cohort Study to investigate the mediating role of aspirations in the relationship between parental influence and emotional and behavioural problems. Using structural equation modelling we examined a number of parental influences, both mother and partner including resources, well-being, involvement and values, while controlling for children's ability and other child and family factors. The results of this study will provide further insight into the importance of exploring the role of young children's occupational aspirations in emotional and behavioural adjustment.

Asthma trajectories in early childhood: results from a national longitudinal study

Lidia Panico, INED, France; Mel Bartley, Yvonne Kelly, University College London, UK; Beth Stuart, University of Southampton, UK

Context: There are conflicting views as to whether wheezing in childhood represent several discreet entities or a single but variable disease. Currently, for lack of a definitive biological basis, classification has been based on so-called phenotypes. Phenotypes have become popular as a basis for asthma research and are increasingly used for clinical decisions. However, phenotypes are often based on subjective classifications, use small samples, and do not have data for young children when most trajectories appear to emerge and entrench. Phenotypes research focuses on clinical features, we know less how classifications vary according to potentially intervenables such as parental smoking, damp etc.

Data and Methods: The Millennium Cohort Study is a large, representative birth cohort of 19,244 UK children born in 2000-2002. We employ longitudinal Latent Class Analysis, a clustering methodology which identifies subsets (classes) underlying the observed population heterogeneity in a data-driven manner.

Results and Discussion: Four trajectories of wheeze in early childhood emerged: Healthy children, Atopic healthy children, Atopic wheezers, and Non-atopic wheezers. We identified potentially intervenable pathways in infancy, notably for the non-atopic wheezers, which included exposure to parental smoke, breastfeeding initiation, and exposure to damp. For both atopic groups (wheezers and non-wheezers) exposure to damp appeared to be important.

Socio-economic disadvantage and disabled children's outcomes. Evidence from the Millennium Cohort Study

Lucinda Platt, Samantha Parsons, Institute of Education, UK

This paper employs analysis of a longitudinal sample of children living in England from the Millennium Cohort Study who were first surveyed in 2000/2001 at age 9 months to enhance our understanding of disabled children's early development and the influence of family background.

Within our sample of over 7,000 children, we utilise alternative and complementary measures of child 'disability': developmental delay (DD) measured at age 9 months, and Special Educational Needs (SEN), identified at age 7. Our prospective measure of disability (DD) enables us to show that disability is not associated with attrition, and thus promotes confidence in the ability of the study to reflect the experience of disabled children across early childhood. We draw on the rich outcome and contextual variables collected within the MCS to describe key differences between disabled and non-disabled children, and how these emerge and develop over time. Specifically, we explore family socio-economic circumstances (e.g. poverty, economic activity, family structure) of disabled children, whether these circumstances change over time and how they differ from those of non-disabled children. We identify whether differences in socio-economic circumstances, which are evident cross-sectionally at different ages for disabled compared to non-disabled children, widen over time for the same children.

Changes in bedtime schedules and changes in behavioural difficulties in 7-year old children

Amanda Sacker, Yvonne Kelly, John Kelly, University College London, UK

Children develop in multi-layered environments with proximal influences including family routines and nurturing activities located within broader social contexts. Sleep schedules in childhood are part of family life and lack of sleep and/or erratic schedules have been proposed as potential stressors with functional consequences. Using data from the UK Millennium Cohort Study we examine whether and how bedtimes through early childhood relate to markers of child behaviour at age 7. Data on bedtimes were collected at three time points, ages 3, 5 and 7 years. Non-regular bedtimes were associated with worse behaviour scores. *Do effects of non-regular bedtimes build up?* There was a clear dose-response pattern: compared with children who always had regular bedtimes throughout early childhood, an increase in the number of data sweeps children had non-regular bedtimes corresponded to a stepwise worsening in behavioural scores: mother rated; non-regular once, $B=0.53$; non-regular twice, $B=1.04$; always non-regular $B=2.10$, p for trend <0.001 . *When bedtimes change, does behaviour change too?* In children who went from having non-regular bedtimes at age 3 to having regular bedtimes by age 7, there was an improvement in behaviour scores ($B=-0.63$), and changing from non-regular bedtime at age 5 to regular by age 7 ($B=-1.02$).

Poster session**13:30 – 14:30****Growing Up in New Zealand***Susan Morton, University of Auckland, New Zealand**Abstract unavailable***West of Scotland Twenty-07 Study (tbc)***Abstract unavailable***Understanding Society***Michaela Benzeval**Abstract unavailable***Longitudinal Effects of Daily Stressors and Diurnal Cortisol: Taking a More Dynamic View of Allostatic Load***David Almeida, Pennsylvania State University, USA; Robert Stawski, University of Michigan, USA*

Current stress theories suggest that chronic exposure to hormones elicited by stressors leads to accumulated wear and tear on the body, referred to as allostatic load. In this presentation we use diary methods that obtain repeated measurements from individuals during their daily lives to assess associations between real-life stressors and salivary cortisol in the National Study of Daily Experiences. Many studies document elevated cortisol levels in response to laboratory-controlled acute psychological stressors (Dickerson & Kemeny, 2004). Unfortunately, much less is known about the relationship between naturally-occurring stressors and cortisol. This study will examine diurnal patterns in salivary cortisol, which typically peak shortly after waking in the morning then gradually decline throughout the rest of the day. Studies suggest that, in comparison to their younger counterparts, older adults may have a more difficult time returning to baseline after experiencing a stressor (Sapolsky, 1992) and may have flatter diurnal slopes (Ice, Katz-Stein, Himes, & Kane, 2004), but few researchers have examined the association between these two phenomena. One of the strengths of the current methodology is that we will not only have the ability to examine age differences in diurnal patterns of cortisol, but we will also be able to investigate how stressors affect this process.

Respondents (N = 796, age 24-75) completed 8 consecutive nightly telephone interviews about daily stressors at two time points across a 10 year period. At the second wave of data collection respondents also provided saliva samples that were assayed for cortisol for four of those days at four times a day: waking, 30 minutes after waking, before lunch, and bedtime. Daily Stress was measured using the Daily Inventory of Stressful Experiences (Almeida, Wethington & Kessler, 2004) that provides information about stressor exposure (i.e. the number and severity of daily stressor) as well as stressor reactivity (i.e., the within-person slopes between stressors and psychological distress).

The analyses differentiated between individuals who were high at both occasions versus low at both occasions in stressor exposure and reactivity. The results showed that individuals who were high in their exposure and reactivity to stressful events at both time points had dysregulated cortisol rhythms. Compared to their younger counterparts, chronically stressed older adults showed the greatest amount of cortisol dysregulation evidenced by flatter slopes. Discussion will focus on how daily stress processes may contribute to an increased risk of illness and mortality.

Eating disorders throughout the lifecourse. Results of a qualitative study with 50-70 year old women in Austria

Mahdi Akhbardeh, Tehran Medical University, Iran

Since years ago the relationship between chronic stress and premature aging has been distinguished, though without identifying its action mechanism. Increase in blood cortisol level which can be observed in chronic stresses can lead in telomere (which is effective in our young staying condition) length reduce in different ways. Its first influence is that of increase in inflammations resulted from cortisol which can by itself result in destructing white corpuscle physical and chemical mechanism, and this, at last will result in disorders in their function. Other case is that inflammation resulting from cortisol through directly influencing related enzymes to telomere results in telomere destruction. Both these factors along with each other result in reducing telomere length. So telomere length shortens earlier. On the other hand, inflammations themselves, as free radicals, are destructing lipids, proteins and carbohydrate layers of cells mechanism without influencing telomeres length and will result in cell death or at least reduce in professional function of cells. In spite of progress in molecules medicine, above mentioned factors were unknown for more than 50 years. On the other hand reduce in endorphin levels, especially serotonin dopamine, neuro-adrenalin in brain which can be seen in chronic depressions. Perhaps in addition to cortisol factor, through reducing excretion during chronic stresses, they themselves can result in immunity system function reduce during normal life time. Through increase in hopefulness, spiritual beliefs, and receiving awards, we achieve to an increase higher, than normal extreme of these materials, at last we observe immunity system function increase of body. But in chronic stresses where amount of these materials decrease, influencing way of these materials on reducing immunity system function is controversial. Dose this influence is resulted from cortisol function influenced by reduce in endorphin level or not this reduce in function appears directly? These factors are sufficient to premature aging appeared by chronic depression. On one hand depressed people can reduce effects of this mechanism, through daily use of advised amount of anti-inflammation foodstuffs including: ginger, olive, fishes living in cold waters, nuts, turmeric, cinnamon and mushroom. On the other hand they can compensate reduce in body immunity power function resulted from chronic stresses in a way through regular and completely professional use of vitamin A, C, D found in green tea, zinc sulphate, onion, pro biotic yogurts, aerobic exercises.

Variations in practice among physicians providing clinical care to individuals with dementia: a systematic review

Saskia Sivanathan, Joseph Puyat, Kimberlyn McGrail, UBC Centre for Health Services and Policy Research, Canada

Despite best practice guidelines established in the medical community, studies indicate variations in dementia care. Our objective was to determine to what extent actual practice is consistent with clinical guidelines for dementia care.

We conducted a systematic review of empirical studies of clinical services provided by physicians to seniors 60 years or older with a primary or secondary diagnosis of dementia. Databases were searched for articles in English published prior to March 1st, 2012. We assessed seven dementia care processes recommended by guidelines: formal memory testing, imaging, laboratory-testing, interventions, counselling, community service and specialist referrals. One-thousand-two-hundred-and-sixty-four studies were identified of which twelve studies met the final inclusion criteria. Only 40% of the studies that identified dementia care as a primary research objective included measures of the full scope of dementia care processes as identified by guidelines. There was a broad variation in the proportion of physicians who reported conducting each dementia care process. This was particularly in the formal memory testing (4-96%) and specialist referral processes (12-81%). Recently published studies reflected a shift in scope of care, reporting higher proportions, of physicians who provided interventions, counselling and referrals to specialist. Better information on practice patterns and their relationship to outcomes for patients is needed to address the needs of the increasing number of individuals who will require dementia care.

Is active commuting good for your health?*Lidia Panico, INED, France**Abstract unavailable***The health, work and retirement study: overview of a longitudinal New Zealand study***Fiona Alpass, Christine Stephens, Brendan Stevenson Massey University*

The Health, Work and Retirement Study (HWR), first funded in 2005, was the first longitudinal study to investigate the factors that underpin the health and wellbeing of New Zealanders in their transition from work to retirement. The original sample comprised two specific representative sub-samples: (1) the general population age 55-70 years, and (2) Māori (indigenous New Zealanders) aged 55 to 70 years. Participants provided information on seven key determinants of successful ageing in the transition from work to retirement: physical and mental health, physical activity, social integration, work status and work attitudes, attitudes to retirement and retirement planning, demographic characteristics, and cultural identity.

Over 3,300 New Zealanders aged 55-70 took part in the first longitudinal HWR postal survey in March 2006. A further three waves have been undertaken in 2008, 2010 and 2012. A specifically funded study on independence, contributions and connections and will be undertaken with these participants in 2013 and biannual surveys will continue from 2014. This presentation will provide an introduction and overview of the study and highlight key findings from the first four waves of data. Methodological challenges encountered will be discussed and plans for future waves, including possible collection of life-course histories, will be presented.

Transitions into higher vocational healthcare education in Switzerland: The role of subjective task values*Ines Trede, Swiss Federal Institute for Vocational Education and Training, Switzerland, Irene Kriesi*

Vocational education plays an important role in Switzerland. Two thirds of all adolescents enter upper-secondary-level vocational training after completing compulsory schooling. Given the shortage of skilled personnel, particularly in healthcare, an increase in the number of young people continuing their education on the vocational tertiary level is highly desirable.

Previous research on transitions into tertiary education has focused on the choice of a university education. The findings show that SES, school achievement, values and expectations play an important role (Super & Sverko, 1995; Eccles 2005; Schumann 2011). Little is known about the factors influencing the transition into vocational tertiary education.

Against this background, and based on Eccles (2005) model of achievement related choices, this paper examines the transition from upper-secondary healthcare training into tertiary healthcare education. In particular, we ask how the subjective task value (attainment, interest, utility, costs) differs between social groups and how it affects young people's decisions to enter vocational tertiary healthcare education.

The analyses are based on a full sample of third-year nursing apprentices (N=2089). The data was collected during upper-secondary training (2011) and one year after completion (2012). Results are based on logistic regressions. They show that the transition into tertiary vocational healthcare education is affected by components of the subjective task value as well as by social background.

Health promotion and vulnerabilities during life course: the development of a population approach to the prevention of early childhood to old age*Stephanie Pin, C. Méheust, National Institute for Prevention and Health Education, France*

The life course perspective is increasingly integrated into social policies. In a context of budget cuts, targeting populations seems an efficient option, but can lead to a significant risk of stigmatizing public. This paper is based on the experience of a public institute for prevention and will explore issues related to life cycles and different

vulnerabilities. In conjunction with stakeholders, population-prevention programs have been developed. Their construction is based on an evidence-based diagnosis. Then the Swiss Model for Outcome Classification in Health Promotion and Prevention (SMOC) was used in a collaborative way for performing logical models. Three priority programs were identified: “pregnancy and early childhood”, “youth health”, and “healthy aging”. A general objective of reducing health inequalities has been fixed which resulted in the choice of working on social and environmental determinants. A complementary approach is developed to facilitate the accessibility of prevention to populations with multiple vulnerabilities related to health, disability, socio-cultural and socio-economic level, understanding of written or oral French, and migration. This nationwide experience questioned the methodology adopted as the underlying paradigms in the social sciences which support them. A discussion of the difficulties encountered in the implementation will be done.

Adverse life events and socio-emotional outcomes among 9 year olds in Ireland - evidence from the Growing up in Ireland study

James Williams, Economic and Social Research Institute, Ireland; Mark Morgan, Cathal McCrory, Trinity College Dublin, Ireland

Children’s lives are filled with various challenges. These range from normal daily problems (such as squabbles between siblings) to substantial chronic stressors (such as abuse, illness or loss of a parent). A consistent theme in the literature is the lasting consequences of some of these traumatic childhood stressors. Research suggests that those who experience adverse events in childhood are more likely to experience serious adjustment problems and to be involved in risky behaviours in later life (e.g. Woolfolk & Perry, 2012; Luthar et al., 2003; Lansford et al, 2006; Barrett & Turner, 2006).

Using data on 9-year-olds from the *Growing Up in Ireland* child cohort study, this paper focuses on events which have the potential to be traumatic and/or to exert a major change in the life-experiences of those involved. The impact of a range of adverse events on the child’s socio-emotional well-being is considered, as well as potentially moderating influences such as the child’s family circumstances and background characteristics. The adverse events include the death of a parent, divorce/separation of parents, conflict between parents, serious illness or injury, stay in a foster home, experience of a parent in prison, and drug taking or alcoholism in the family.

The health effects of later-life employment - a meta-analysis

Katey Matthews, Tarani Chandola, James Nazroo, Neil Pendleton, University of Manchester, UK

Objective: Previous research into effects of later-life employment on health provides conflicting results, due to heterogeneous samples and varying definitions of key concepts such as later-life and retirement.

Methods: A meta-analysis of observational studies, identified through a systematic review, is undertaken to determine whether an overall effect of later-life employment on health can be established. Cohen’s *d* is calculated using data from 19 comparable studies to generate pooled effects. The *I*² statistic is used to examine levels of between-study heterogeneity, and subgroup analysis assesses whether creating more specific samples may lead to less biased results.

Results: The findings show later-life employment is associated with less depression and better self-rated health. However, the *I*² statistic shows very high levels of between-study heterogeneity, suggesting unreliability of the findings. Subsequent subgroup analyses (by gender, retirement age, analysis type and country of study) show this heterogeneity can be significantly lowered by removing sample bias.

Discussion: In order to establish a causal effect of later-life employment on wellbeing, methodology needs to focus on removing effects of potential bias arising from use of overly-heterogeneous populations. The better results provided by the subgroup analyses demonstrate the importance of understanding that experiences differ for different populations.

The lost generation: Factors influencing young people's career development in Taiwan

Fei-Yun Tsui, Institute of Education, UK

The paper attempts to explore the factors and experiences that potentially influence the early stage of young people's career development and their school-to-work transition in Taiwan. There are three foci of this paper. First, it focuses on young people's transition from school to work by studying the educational attainment and employment situations of Taiwanese individuals between the ages of 15 and 19. Second, the links between socio-demographic background, parental support for education, teenager's school experiences, work orientation, psychological adjustment, and career outcomes at age 19 are investigated. Third, it aims to seek the predictors of the early stage of individuals' career development and to create a model to decipher youth career development situation in Taiwan. "Taiwan Youth Project", a longitudinal data set led by the Institute of Sociology at Academia Sinica (Taiwan, R.O.C.) is adopted as the main data source in this paper. It is hoped that the findings of this paper will not only bring greater understanding of the career development process among young people in Taiwan, but also encourage concern about young people's hope and expectation during the transition from school to work, which may have implications for areas such as career education, occupational guidance, and psychological well-being.

The role of smoking for social class inequalities in psychiatric distress across the youth-to-adult transition: A cross-cohort comparison

Michael Green, Alastair Leyland, Helen Sweeting, Michaela Benzeval, MRC/CSO Social and Public Health Sciences Unit, UK

Socioeconomic inequalities in psychiatric distress widen as adolescents move into adulthood, but it is unclear how much smoking contributes, being associated with both increased distress and socioeconomic position. Data were from the British 1958 and 1970 birth cohort studies (N=15,595 and 11,812), and the youth cohort of the Scottish Twenty-07 Study (T07; N=1,515). Information on household social class (manual vs. non-manual), smoking (daily), and distress (measures varied between cohorts) was obtained in adolescence (approximately age 16) and on distress in young adulthood (ages 22-26, depending on study). Path analyses tested direct associations between social class and distress in adolescence and adulthood, adjusting for an indirect path via smoking. In all three cohorts, a manual social class background was associated with a higher likelihood of smoking, and smoking was associated with a higher likelihood of distress in adolescence (except T07) and adulthood. Across the three cohorts, this indirect pathway from socioeconomic disadvantage into psychiatric distress via smoking was more consistently observed than a direct association. Social class was only directly associated with adolescent distress in the 1958 cohort, and with adult distress in the 1958 and 1970 cohorts. Smoking is an important correlate for inequalities in psychiatric distress.

Individual-level socioeconomic position, neighbourhood disadvantage, and 5-year change in active transport among a 'baby boomer' cohort: longitudinal, multilevel findings from the HABITAT study

Gavin Turrell, Belinda Hewitt, Michele Haynes, Billie Giles-Corti, Queensland University, Australia

We examine if participation in active transport (walking and cycling) changes as people age, and if the direction and magnitude of change is associated with individual socioeconomic position (SEP) and neighbourhood-level disadvantage. The data come from the HABITAT study of physical activity, a bi-annual multilevel longitudinal mail survey among 10,740 mid-aged residents (40-65 years) of 200 neighbourhoods in Brisbane, Australia. At each wave (2007, 2009 and 2011) respondents were asked to estimate how much time in the previous 7 days they spent walking and cycling for transport.

Using multilevel regression in MLwiN, there was no evidence that minutes walking changed significantly over the study period for the sample overall, for socioeconomic groups (education, occupation, income), or for residents of advantaged and disadvantaged neighbourhoods. Minutes of walking were significantly higher for the tertiary educated (13.7mins 95%CI 10.6, 16.8), and for managers and professionals (8.7mins, 95%CI 4.7, 12.7). There was no significant association between household income and walking. After adjustment for age, sex, and individual-

level SEP, residents of disadvantaged neighbourhoods walked significantly more (12.8mins, 95%CI 8.7, 16.9) than their counterparts from advantaged neighbourhoods. A near-identical pattern of longitudinal results was found for cycling for transport. Whilst individual- and neighbourhood-level socioeconomic inequalities in active transport were evident, the inequalities neither widened nor narrowed over the study period.

A multilevel study on ethnic and socio-economic school stratification and risk behaviors among students in Stockholm

Gabriella Olsson, Centre for Health Equity Studies (CHES), Johan Fritzell

The aim of this study is to examine the extent to which students' alcohol consumption, drug use and criminal behaviour vary among schools in Stockholm and how this variation is associated with the school's socio-demographic characteristics. The analyses are based on data from the Stockholm School Survey and consist of 5 484 ninth-grade students distributed over 93 schools in the Stockholm area in 2010. Results indicate significant school-to-school differences in relation to alcohol consumption (8.7%), drug use (4.8%) and serious crimes (3.0%). Moreover, the odds ratio for having high alcohol consumption (OR 3.34 (95% CI=2.31-4.82)) and drug use (1.94 (95% CI=1.30-2.91)) is higher if attending an advantaged school compared to a disadvantaged one. The opposite is true in relation to engaging in criminal behaviour (OR 0.60 (95% CI=0.041-0.87)). The school's level of collective efficacy also seems to play an important, although not mediating, role.

Gender, adverse childhood experiences and inadequate sleep in adulthood

Andrew London, Sarah Burgard, Syracuse University, USA

Adequate sleep is critical for health and wellbeing. A growing body of research documents "the long arm" of childhood conditions on adult health, and a subset of such studies focuses on retrospectively reported adverse childhood experiences (ACEs). However, to date, there has been limited research that aims to theorize and empirically examine the association between childhood circumstances and adequate sleep even though there are good reasons to hypothesize that disrupted sleep patterns in adulthood may be rooted in early-life experiences. Similarly, no study of which we are aware has examined gender differences in the associations between ACEs and inadequate sleep. In this paper, we use pooled data from the 2009-2011 Behavioral Risk Factor Surveillance System for nine states to examine the associations between eleven ACEs (e.g., parental divorce, living with a problem drinker, physical abuse, sexual abuse) and the number of days of inadequate sleep in the past 30 days. Net of demographic controls, each ACE is associated significantly with an increased number of days of inadequate sleep and some observed associations vary by gender. We discuss these findings in relation to the extant literature and directions for future research.

Catalyzing social protection initiatives for the elderly in Kenya

Joseph Akuma, Universite de Pau des Pays de l'Adour, France

Although Population ageing in Africa currently remains relatively small in comparison with other parts of the world, the currently estimated 42 Million old people in the continent are projected to increase to 212 Million by the year 2050. The highest increases are expected to occur in Kenya, where there will be a 470% increase in the number of older persons presently comprising only 10% of the country's population. The scenario presents insurmountable challenges to both individuals and government spending on social security and health care system. The major objective of the paper was to review current knowledge on the models and practice of policies aimed at addressing issues of old age in Kenya with a view to bringing out discontinuities in order to inform the future initiatives, especially those emerging from the newly promulgated constitution. Data was obtained mainly from secondary sources and key informant interviews. The main findings were that the country has made progressive investments in social protection for the aged; Notably, Kenya Old Persons Cash Transfer Programme and the long established National Hospital Insurance Fund (NHIF) and the National Social Security Fund (NSSF)

have provided coverage to formal sector employees only, who constitute 8% of the labour force. It is recommended that: Government formulate specific poverty reduction programmes targeting the needs of elderly, Adopt the draft policy on Ageing and implement a sustained campaign targeting young people on the importance of saving and investing for old age.

Results from the Venetian Longitudinal Study

Lorenzo Simonato, Cristina Canova, Laura Cestari, Valentina Zabeo, Barbara Palazzi, Vittorio Selle, University of Padua, Italy

The municipality of Venice (population 269,00) is formed of two rather distinct entities, an inland metropolitan area, next to large industrial facilities, where the majority of the population resides (approx. 178,000), and the islander part, existing since the ninth century, where 91,000 inhabitants live mostly in the historical city and in the islands.

Since 2001 a Longitudinal Study based on the 2001 Census data and on the administrative data from the NHS has been activated with the main goal of monitoring the population health status. The territory has been subdivided into 17 units representing the districts of inland metropolitan area plus the original historical "Sestieri" of the historical town and the islands. For each of these territorial units Standardised Incidence Ratios have been computed using the general population rates as standard. The results so far available indicate that for most of the diseases examined the SIRs were higher in the islander population. In particular the districts of Pellestrina, Castello, and Giudecca presented the highest values of SIR, while only the district of Marghera in the inland presented excesses. The excesses were largely reduced or eliminated, particularly in the islander population, after adjusting for socioeconomic factors. While the health profile of the inland population appears rather homogeneous, strong health inequalities were detected within the small population living in the islands.

Predictors over a span of 35 years for adverse health conditions or death in midlife

Achim Hattich, Kurt Hafeli, Claudia Schellenberg, Nicholas Schmaeh, University of Applied Sciences of Special Needs Education, Switzerland

We live in a rapidly changing world with high job demands, an economic crisis, deteriorating family relationships and environmental risks. This has consequences on health conditions. Only few studies exist which followed 1706 participants over several decades as our "Zurich Longitudinal Study From School to Middle Adulthood" (ZLSE): The current ZLSE includes a sample of 485 persons representative of Switzerland (German-speaking regions) and encompasses ten surveys so far. The data collection started in 1978 (participants were then 15 years old) and had its latest wave in summer 2012 (49 years), with a participation rate of 72%. Defined were the following risk groups: people who have died over the entire span of the survey and people who are sick or disabled at the latest wave. To discover which predictors could tell if one is dying or getting seriously sick we applied several measures from our various waves: subjective health condition, satisfaction in diverse life areas, social background, intelligence, job conditions, personality (big Five, locus of control). Important predictors for risk of dying were education, extraversion and intelligence; for having an impairment of health predictors were personality, subjective health conditions, health behaviour in youth and life satisfaction.

Long-term health outcomes in formerly institutionalized youth

Janna Verbruggen, VU Medical Center, Netherlands

Little is known about the long-term health outcomes of formerly institutionalized youths, who due to problematic (childhood) backgrounds and risky lifestyles in adolescence and young adulthood (characterized by among other things, criminal behavior and alcohol and substance abuse) are at risk of experiencing serious physical and mental health problems in adulthood. This study therefore examines health outcomes in previously institutionalized adults.

The sample consists of 251 boys and girls who were treated for serious problem behavior in a Dutch juvenile justice institution in the 1990s. Information on childhood risk factors were extracted from treatment files that were constructed during their stay in the institution. Conducting face-to-face interviews with these youths when they were on average 35 years old, we collected retrospective data on physical and mental health problems, alcohol and substance (ab)use, and treatment for health problems. We will investigate childhood risk factors for health problems in adulthood, as well as examine to what extent these are associated with subjects' level of criminal behavior over the life course.

Caregivers' communication with terminal cancer patients about illness and death: the role of gender

Yaakov Bachner, Aner Sela, Sara Carmel, Ben-Gurion University, Israel

Abstract unavailable

Job mobility, family, and health - a critical overview of the international literature

Lisa Hoffmann Dr. P.H. Friederike zu Sayn-Wittgenstein, Jun.-Prof. Dr. Sabine Metzging, Dr. Charlotte Ullrich

In the last years Job Mobility is increasing: A study by Lück and Schneider (2010) showed that five percent of European employees between 25 and 54 years are away over night on a regular basis. Job Mobility is caused by the transition to flexible work conditions as well as dual career couples and high unemployment rates which makes work far away from family and household necessary (Limmer 2005, Ruppenthal/Rüger 2011). Job Mobility is a situation families also have to deal with. International studies showed that parents who are mobile in their jobs have more stress and strains than parents with local jobs and that this way of life could have an influence on family health (Ruppenthal/Rüger 2011; Ducki 2010; Joyce et al. 2010). Taking into account the results of the conducted studies, the key question arises how job mobility affects the family life, especially in respects to health and illness. The aim of the poster is to present the international literature and to reflect how health is been measured in this context.

Do conflicts between different life domains make you sick? The impact of life domain conflict and facilitation on subjective health in middle adulthood

Michaela Knecht, Alexandra Freund, University of Zurich, Switzerland

In midlife, the simultaneous demands of work, family, and leisure are at a peak. Are these demands too taxing and negatively impact on the subjective health of middle- aged adults? Or do the positive relations between these life domains (i.e., facilitation) contribute positively to feeling healthy? The focus of this presentation is the impact of conflict and facilitation between the life domains of work, family, and leisure on subjective health (general self-rated health, specific psychosomatic complaints) in middle adulthood. More specifically, we investigate differences between younger middle-aged participants who are in the phase of establishing their careers and families and late middle-aged adults who are in the phase of stabilization. We present data from the first two waves of a longitudinal online study with $N=279$ middle-aged employed adults (30 - 55 years, $M = 42$), living with family or a partner and working. First analyses show that conflict between life domains is negatively related to subjective health, whereas facilitation contributes positively to health. Structural equation models comparing young and later middle-aged adults will be presented.

Gender differences of disengagement among elderly Japanese people using latent transition analysis

Tomoo Nakata

The purpose of this study is to examine the gender differences of process for disengagement using the panel data among elderly Japanese people. There are said to be some differences between gender, because of the social relationship, working environments and life expectancy. Therefore, the process of disengagement was tested using latent transition analysis.

This study employed the National Survey of the Japanese Elderly (n=3990), from wave I (1987) to wave IV (1996), which was conducted by Michigan University and Tokyo Metropolitan Institute of Gerontology. The independent variables were latent variables constructed from three variables, number of friends, number of organizations respondents belongs and feelings of loneliness. The transition of the aspect of latent variables between genders was compared using latent transition analysis.

Three latent classes were extracted using from the goodness of fit test. The characteristic of the first latent variable was number of the organization is few; the second one was poor friends; and the third one was number of friends and organizations were moderate, but a feeling of loneliness was strong. And ratio of the first variable is increased at the end of the life for only female, although a down slope for male is slow.

Trends in complex health problems in the oldest child in Sweden 1992-2011 - no signs of a compression of morbidity

Bettina Meinow, Parker, M.G., Thorslund, M. Karolinska Institute & Stockholm University

Studies addressing health trends in elderly populations usually focus on single health indicators. Few studies include multiple medical and functional indicators, which together indicate the need for integrated care from several providers of medical and long-term care (home-help, institutional care).

This study identified severe problems in three health domains (diseases/symptoms, mobility, cognition/communication) in three nationally representative samples of the Swedish population aged 77+ in 1992, 2002 and 2011 (n≈1900). People with severe problems in two/three domains were considered having complex health problems (chp). Changes in the proportion of people with chp between 1992, 2002 and 2011 were analysed with logistic regressions.

Looking at the whole period, results showed a significant increase of elderly people with chp from 19% in 1992 to 26% in 2011. The increase occurred predominantly between 1992 and 2002 and levelled out thereafter. Gender, age and education had significant independent effects on the odds of having chp. Patterns were similar for men and women.

Although prevalence rates of chp remained rather stable during the past decade there are few signs of a compression of morbidity among the oldest old. An increase in absolute numbers emphasizes the need for improved collaboration between medical and social services.

Biolink NL

Gerard van Grootheest Adelaide Ariel, Willem de Bruijn, Olaf Klungel, Jan Smit, Bep Verkerk, VU Medical Center, Netherlands

Many longitudinal cohort studies collect biological specimens that are stored in biobanks. Although usually a large body of sociodemographic and health data is collected in such cohorts, they can only focus on a limited number of topics.

In the Netherlands, many high-quality medical and socioeconomic registries are available, and biobanks could be greatly enriched if they used data from these external registries. Record linkage may give information about exposure to health predictors, but also provide a long-term follow-up of health outcomes.

Several academic institutes in the Netherlands have successfully published their research using linked data. The goal of Biolink NL is to facilitate record linkage between biobanks and registries nationwide.

This poster will present the different aims of Biolink NL:

- to provide a searchable and harmonized biobank catalogue.
- to review technical and legal best practices in different situations.
- to compare deterministic and probabilistic linkage methods, both in simulations and in real-life data.
- to validate linkage results in example projects.

Biolink NL is one of the Rainbow projects funded by BBMRI-NL, and will be finalized in December 2014.

Changing self-perceptions of aging enhances effectiveness of exercise interventions for older adults

Julia Wolff, Lisa M. Warner, Jochen P. Ziegelmann, Ralf Schwarzer, Clemens Tesch Römer, Susanne Wurm, German Centre of Gerontology, Germany

Recently, several longitudinal studies have pointed to the importance of positive self-perceptions of aging (SPA) for health and health behavior in older adults. However, promotion of health behavior in older adults does not consider such factors. Our randomized-controlled trial with adults aged 65 and older aimed at increasing exercise by including a technique to change SPA. An intervention group with SPA-component (IGSPA; $n=101$), an intervention group without SPA-component (IG; $n=31$), and a control group (CG; $n=76$) were compared at baseline, and at two and six weeks after the intervention. Using this longitudinal data, multilevel modeling indicates significant time*group effects: After the intervention, IGSPA had better outcome expectancies for exercise and more positive SPA than CG and IG. Further analyses will include mediation processes of SPA on exercise eight months after the intervention. Results underline the importance of SPA for health and health behavior in research and practice. Changing SPA seem to be a promising pathway to improve health behavior and thereby health in older adults. Conclusions will be drawn about factors that are especially relevant for the development of health behavior interventions for older adults. Mechanisms that underlie the SPA-health link will be discussed.

Psoriasis and life course impairment

Dennis Linder, Dermatology University Clinic, Padua, Italy

Psoriasis is a chronically relapsing inflammatory skin disease, characterized by a large amount of comorbidities – such as involvement of the joints, cardiovascular disease, depression, arterial hypertension a.s.o. The disfiguring effect of psoriasis may originate experiences of stigmatisation, social impairment and consequent exogenous depression, social withdrawal and even suicidal thoughts. It therefore puts a heavy burden on all facets of a patient's life – compromising relationships, perpetuating social disconnections and endangering psychological and physical wellbeing. It is reasonable to assume that physical, psychosocial and economic impacts may accumulate over time, resulting in “damage to life course” that has been named *cumulative life course impairment (CLCI)*. CLCI aims therefore to indicate that, because of the disease, life could not be lived “at its full potential” and that the patients' life course turned out to be “worse” than it would have been, had the disease not been present. Some key aspects of the CLCI concept are reviewed and data supporting the usefulness of the concept are presented. Finally, the related concept of “Major Life Changing Decisions” (MLCD) as well as the connection between the concept of CLCI and the concept of MLCD are discussed.

The Gateway to Global Aging Data (G2G)

Drystan Phillips, Lee Jinkook, RAND Corporation, USA

The Gateway to Global Aging Data (G2G) is a platform for population survey data on aging around the world. It includes the Health and Retirement Study (HRS), the Mexican Health and Ageing Study (MHAS), the English Longitudinal Study on Ageing (ELSA), Survey of Health, Ageing, and Retirement in Europe (SHARE), Korean Longitudinal Study on Aging (KLoSA), Japanese Study on Aging and Retirement (JSTAR), Indonesian Family Life Survey (IFLS), China Health, Aging, and Retirement Longitudinal Study (CHARLS), Irish Longitudinal Study on Ageing (TILDA), Study on Global Ageing and Adult Health (SAGE), and Longitudinal Aging Study in India (LASI). G2G provides the digital library of detailed metadata and illustrative flow-charts with information about survey questions, response scales, interviewer instructions, survey skip patterns, and concordance over time. G2G helps users quickly find relevant survey questions through an intelligent search engine, cross-survey concordances, and detailed documentation. G2G facilitates cross-country analyses by providing a set of identically defined (HARMONIZED) variables on demographic, health, health behaviour, financial and housing wealth, income, family structure, and employment history. Interactive graphs and tables offer a quick way to examine selected variables and compare the characteristics of older populations in more than 25 countries. G2G is located at g2gaging.org

The type to train? Impacts of personality characteristics on participation in further training

Judith Offerhaus, Bremen International Graduate School of Social Sciences, Germany

Personality traits drive behaviors and attitudes, and determine socioeconomic life outcomes for individuals. In this paper, I investigate the relationship of six personality traits, the Big Five and Locus of Control, to individual participation in employment-related further education and training in a longitudinal perspective. Initial research suggests that further training is a crucial determinant of life chances. Taking this a step further, I ask what sorts of individual personality traits characterize the type to train. I attempt to answer this question with data from the German Socio-Economic Panel using the time period from 2000-2008. Applying random-effects logistic regression models to 39,833 observations of 4,981 individuals over a period of nine years, reveals that those who are open to new experiences and have high internal control beliefs are more likely to participate in further training, and this holds true for different model specifications. Individuals scoring high on Agreeableness, Extraversion and Neuroticism are less likely to train, whereas the training effect of Conscientiousness is more complex. Overall, it shows that not only the classical determinants of further training, namely initial level of education and occupational status, matter in the context of training but also the individual's personality, their type to train.

SYMPOSIUM SESSION 1

S1A Chair: Lisbeth Trille Loft, The Danish National Centre for Social Research, Denmark

14:30 – 15:45

Family resources and health: Perspectives from the Danish Longitudinal Study of Children (DALSC)

Socio-economic inequality and ADHD diagnosis

Helene Oldrup, The Danish National Centre For Social Research (SFI), Denmark

Arising number of children are being diagnosed with ADHD globally, and it is well-established in health research that families with high levels of socio-economic resources have better access to services and provision. Yet, research also shows that children with ADHD more often come from families with low levels of socio-economic resources. Using data from The Danish Longitudinal Survey of Children, this study examine the role of socio-economic resources children's diagnosis, access to special schooling and council support. Preliminary results suggest that hyperactive children with no ADHD diagnosis grow up with fewer socio-economic resources than hyperactive children with a diagnosis.

Adolescents and depressive symptoms

Mai Heide Ottesen, The Danish National Centre For Social Research (SFI), Denmark

Based on the Danish Longitudinal Study of children, this study investigates the prevalence of depressive symptoms among 15-years old adolescents and attempts to identify factors during early childhood that could possibly explain why adolescents are depressive. Results suggest that young girls are twice as exposed to depressive symptoms as boys. Compared to their peers, 15-years old Danes with depressive symptoms are more frequently exposed to stressors that could provoke depressions. Symptoms of depression at age 15 are also associated with a range of factors during early childhood such as early maturing (girls) or having been exposed to bullying or sexual abuse.

Childhood inequality and transition to adulthood

Rikke Fuglsang Olsen, Lisbeth Trille G. Loft, The Danish National Centre For Social Research (SFI), Denmark

A key objective of public schooling in the Danish social democratic welfare is to generate equal opportunities for all children regardless of family background and resources. But *is* public schooling in Denmark a "social equalizer" and to what extent are the initial differences between children reduced when they are facing the transition into adulthood? Using data from the Danish Longitudinal Survey of Children, this study investigates the role of the cognitive, social and emotional development throughout the preschool years (age 7 to 15) with regard to four central markers important for a successful transition to adulthood: health outcomes, continued education, labour force participation, and non-involvement in criminal behaviour.

Risk behaviour among adolescents placed in out-of-home care

Alva Alboek Nielsen, Mette Lausten, The Danish National Centre for Social Research (SFI), Denmark

Adolescents placed in out-of-home care are at an elevated risk of experiencing a number of negative outcomes during the transition to adulthood. The problems associated with these negative outcomes are most often initiated already in early adolescence. In order to identify risk factors associated with the transition from childhood to adolescence this study examines circumstances associated with depressive symptoms, eating disorder, self-harming behavior, sexual behavior, alcohol and drug use, and criminal conduct at age 15. Using data from the Danish Longitudinal Survey of Children, this study investigates different aspects of risk behavior among adolescents placed in out-of-home care and vulnerable adolescents who have never been placed in care.

S1B Chair: Afshin Zilanawala, University College London, UK

14:30 – 15:45

Race/ethnic disparities in children's health and behaviour: comparative analyses in the UK and US**Understanding ethnic differences in BMI in the UK**

Afshin Zilanawala, Amanda Sacker, Yvonne Kelly, University College London, UK; James Nazroo, University of Manchester, UK; Pamela Davis-Kean, Sharon Simonton, University of Michigan, USA

Health disparities are an important indicator of inequality in society. In the UK, ethnic health disparities have been documented. Research has focused on adults and less is known about disparities among children. Early childhood health is an important predictor of adult health and wellbeing. Previous work suggests observed disparities are explained by socioeconomic, cultural, and behavioral factors.

We investigate ethnic inequalities in adiposity, as measured by BMI and obesity/overweight. We examine socioeconomic position, markers of cultural tradition, and family routine characteristics to understand ethnic inequalities in adiposity. Analyses use the UK Millennium Cohort Study, allowing for a detailed ethnic classification and a rich set of explanatory factors. Firstly, we consider ethnic inequalities in adiposity among 5 year olds, with contemporaneous explanatory factors. Secondly, we will examine markers of adiposity at 7 years of age to assess the longitudinal impact of explanatory factors.

We find Indian and Pakistani children have lower BMI and Black Caribbean children higher BMI compared to White children. Bangladeshi and Black African children were more likely to be obese (compared to normal weight), but these disadvantages were mostly due to cultural and socioeconomic factors. Unexplained ethnic differences were seen among Black Caribbeans.

Ethnic differences in maternal and teacher completed strengths and difficulties questionnaires: findings from the UK Millennium Cohort Study

Amanda Sacker, Yvonne Kelly, University College London, UK; James Nazroo, University of Manchester, UK

We evaluate potential biases affecting the factor structure of mother and teacher versions of the Strengths and Difficulties Questionnaire (SDQ) and their effects on ethnic variation in problem behaviors. We use data from the UK Millennium Cohort Study on 8293 children from different ethnic backgrounds up to age 7. Mother figures and class teachers completed the SDQ. Using the published scoring system, mothers and teachers of Black Caribbean children report more problem behaviors than White children. Teachers also reported more problems for Pakistani children. We use exploratory structural equation models (ESEM) to test for different forms of measurement invariance by ethnicity and gender. Mean differences on the SDQ subscales are estimated after taking account of measurement bias and earlier socio-economic factors. Latent variable models that remove measurement error and systematic bias reveal ethnic variability in SDQ scores that the original scoring does not.

Teacher and parent ratings of pre-school child externalizing problems: ethnicity and early temperament

Pamela E. Davis-Kean, Sharon Simonton, University of Michigan, USA

There is a long history in the study of child externalizing behavior of differences between how parents and teachers rate aggressive behavior. There are multiple hypotheses about why the correlation between these ratings are low including ethnic bias in teacher ratings and bias in parental reports due to earlier reports of child temperament/regulation. We examine ethnic and parental biases by examining the extent of disagreement

between teacher and parent ratings of child problem behaviors across race. We then examine temperament, to see if parents may be basing their reports on stable characteristics of the child.

Data are from the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), a nationally representative sample of children born in the US in 2001. Overall externalizing behaviors were measured by: Antisocial/Aggressive Behaviors, Attention Problems/Overactive, and Lack of Impulse Inhibition. OLS regression was used to assess bias due to race or early child temperament/regulation.

Parent ratings of child problem behaviors were significantly higher than teacher ratings. Early reports of temperament explained all or most of the parent ratings of externalizing behavior. Findings suggest that parent's ratings are informed from earlier reports of child behavior and that teacher and parents report of children's behavior is similar across race.

Unpacking ethnic disparities in early cognitive skills for Hispanic children in the US

Sharon Simonton, Pamela E. Davis-Kean, University of Michigan, USA

In the United States, children of Hispanic descent are typically aggregated within a single category for "Hispanic" children, potentially obscuring important differences in early childhood development across Hispanic subgroups and by maternal immigration status and cultural heritage. Data from the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B) were used to examine the ethnic composition of a nationally representative subsample of "Hispanic" children born in the US in 2001 and the extent to which child mental skills (BSF-R) at age 2 are patterned by maternal ethnicity and immigration status.

Hispanic children comprised 23% of the sample with children having mothers who were Mexican (66%), Puerto Rican (6%), other Hispanic subgroups (19%), Cuban (2%) and Hispanic backgrounds combined with black (2%), American Indian (2%), and Asian (1%) ethnicities. Over 62% had a mother born outside the US.

There was significant variation in age 2 cognitive skills ranging from 44.3 (Mexican US born) to 50 (Hispanic-Asian). Scores differed by maternal nativity status for Mexican American children; children of non-US born mothers have significantly higher scores. Scores did not differ by maternal nativity status for other Hispanic subgroups. These findings underscore the importance of disaggregating for understanding disparities in well-being for Hispanic children.

S1C Chair: Hannie Comjjs, VU Medical Center, Netherlands

14:30 – 15:45

Long-term changes in cognitive functioning in older adults. The Longitudinal Aging Study, Amsterdam

A solid infrastructure for the study of human ageing: The Longitudinal Aging Study Amsterdam

Martijn Huisman, VU Medical Center, Netherlands

Crucial for the study of human ageing and longterm trajectories of aging-related outcomes is the availability of data from long-running observational studies among hundreds of aged respondents. The Longitudinal Aging Study Amsterdam (LASA) is such an observational study. Results that will be presented in the symposium are obtained with data from LASA. The purpose of this presentation is to introduce LASA; to describe its goals and characteristics and highlight some of its findings. LASA data collection started in 1992 among N=3, 107 respondents aged 55-84 years. Roughly every three years since then, respondents are visited by interviewers who collect data from a broad range of indicators and predictors of key aspects of functioning: emotional, social, cognitive, and physical functioning. The sample of respondents is representative of the Dutch older population of these generations. Every ten years, in 2002 and 2012, the LASA sample is expanded with new respondents aged 55-64 years, from the same sampling frame as the baseline sample. Due to its multidimensional focus LASA is primed to investigate how various domains of functioning are intertwined in later life.

Latent class trajectories of cognitive aging

Marja Aartsen, VU Medical Center, Netherlands

There is substantial heterogeneity in cognitive decline with ageing. Predictors of decline that have been identified are among others physical and mental health, age, gender, and the social network. There is some evidence that predictors of cognitive decline may have differential impact across different subgroups. The central question in this presentation is whether there is a differential effect of known risk factors for cognitive decline across different subgroups? Data (N=3, 107 at baseline) are from the Longitudinal Aging Study Amsterdam and comprises older adults aged 55-85 at baseline (1992), with follow-up measures every three years until 2008. Based on Latent Class Growth Models, four trajectories of cognitive decline can be distinguished: no decline (69%), normal cognitive decline (25%), pathological decline (5%) and severe pathological decline, with starting levels <24 on the MMSE (1%). Predictors of trajectories of normal decline are age, gender, education, and depressive symptoms but not loneliness and functional limitations. Severe decline can not be predicted by any of the selected factors except age and depression. This suggests that the aetiology of pathological decline differs from the aetiology of normal cognitive decline.

Depression and cognition: how do they interrelate in old age?

Tessa van den Kommer, VU Medical Center, Netherlands

It is generally acknowledged that depression and cognitive impairment are closely associated in old age. We aimed to further disentangle the reciprocal effects between depressive symptoms and cognitive functioning over time and to study the association between changes in their trajectories using 13 years of follow-up from LASA. Subjects were included if data was present on depressive symptoms and cognitive performance on at least two occasions, which resulted in a sample of N = 2,299. Cross-domain latent change analyses showed that depression at baseline predicted both decline of general cognition and information processing speed, independent relevant covariates. Conversely, information processing speed at baseline, but not general cognition was related to the course of depressive symptoms. The course of cognitive functioning was not significantly associated with the course of depressive symptoms. In conclusion, depressive symptoms in older patients flag an increased likelihood of cognitive decline. This effect is considerable and may be due to several underlying mechanisms. The likelihood of the relationship reflecting either a causal effect of depression on cognitive decline, or a common cause, or both, should be estimated. Likewise, older persons with more limitations in information processing speed specifically are more vulnerable to increases in depression.

Adverse childhood and recent negative life events: contrasting associations with cognitive decline in older persons

Nicole Korten, VU Medical Center, Netherlands

Inconsistent results have been found regarding the relationship between adverse life events and cognitive decline in older persons. In addition, the role of depression and genetic factors such as Apoe-4 in this relationship remains unclear. The aims for the present study were to examine whether persons who experienced adverse childhood events or recent negative life events have a worse cognitive performance and faster cognitive decline. 10-year follow up data of 1312 participants of the Longitudinal Aging Study Amsterdam (age range 65-85 years) were used. Data were analyzed using linear mixed models. The results showed that persons who experienced adverse childhood events showed slower speed of information processing at baseline. Additionally, a faster 10-year decline in speed information processing was observed, but only in persons with depressive symptoms. Persons with more recent negative life events also showed slower information processing speed at baseline, which was independent of depressive symptoms. They showed no faster decline. No differences were found between persons with and without Apoe-4.

S1D Chair: Jeremy Staff, Pennsylvania State University, USA

14:30 – 15:45

Identifying selection influences in long-term studies of health and adjustment**The association between cumulative child and adolescent difficulties and adult functioning: replication across studies from Finland, Sweden, UK, and the US**

John Schulenberg, Sharon Simonton, University of Michigan, USA; Greg Duncan, University of California, Irvine, USA; Justin Jager, Arizona State University, USA; Katja Kokko, Anna-Liisa Lyyra, University of Jyväskylä, Finland; Molly Metzger, Washington University, USA

Objective: Using similar measures and measurement periods across four longitudinal studies, we examined how cognitive and psychosocial difficulties in childhood and adolescence related to functioning in adulthood.

Method: Data covering childhood (ages 7-10), adolescence (13-16), and adulthood (27-42) from four studies in Finland (JYLS), Sweden (IDA), UK (NCDS), and US (BSS) were used to examine life-course connections. Similar measures were included as childhood and adolescent predictors in cognitive (math, reading) and psychosocial (attention problems, aggression, prosocial behavior, anxiety) domains; adulthood outcomes included educational attainment, depressive affect, and self-efficacy. Socio-demographic controls (e.g., parent education, gender) were included. We estimated two sets of models: a) individual construct predictors; b) cumulative risk factors (individual constructs dichotomized to isolate worst 25%, then summed within age and domain).

Results: Whereas the individual construct models showed few significant effects, the cumulative risk factor models showed significant prediction across the four studies of adult educational attainment (cognitive and psychosocial domains at both age periods typically significant) and depressive affect (psychosocial domain at both age periods typically significant), but not self-efficacy.

Conclusions: Consistent with a developmental psychopathology perspective, findings indicate that cumulative difficulties, not construct-specific difficulties, relate to adulthood functioning especially educational attainment and depression.

Substance use and the transition to adulthood in the UK

Ingrid Schoon, Institute of Education, UK; Jeremy Staff, Jennifer Maggs, Pennsylvania State University, USA

This paper examines the role of teenage alcohol use in shaping adult social role combinations and associated levels of adult drinking. The study is based on two British cohorts, born in 1958 and 1970, comprising nearly 20,000 individuals. Alcohol use was measured at age 16 and age 33/34. Work and family related roles at age 33/34 are indicated through markers of highest education, employment status, partnership, and parenthood. Using a latent class approach we could identify a typology of distinct role configurations in both cohorts (differentiating traditional families, fragile families, slow starters, and career orientation without children), their antecedents and associated outcomes. There are cohort differences in the prevalence of these four types, and heavy drinking has increased for the later born cohort, especially among women. There are significant associations between alcohol use at 16 and subsequent role combinations, which in turn are associated with variations in heavy drinking. Heavy drinking is most prevalent among those who have not started their families by age 34. The findings provide evidence for both the selection and current social role hypothesis, suggesting that heavy drinking is influenced by both early experiences and role transitions in adulthood. The findings are discussed within a lifecourse view of health behaviours.

Alcohol, health, and J-shaped curves in the National Child Development Study

Jeremy Staff, Jennifer Maggs, Rebecca Evans-Polce, Pennsylvania State University, USA; Megan Patrick, University of Michigan, USA; Ingrid Schoon, Institute of Education, UK; John Schulenberg, University of Michigan, USA

An inverted “J-shaped” curve linking alcohol use with health concurrently and prospectively has been replicated across numerous studies. That is, light-to-moderate drinkers evidence lower morbidity and mortality across numerous health indicators (e.g. psychological distress, chronic illness, cardiovascular health, accident/injury rates) in comparison to heavy drinkers, and, to a lesser extent, to abstainers. The mechanisms underlying these J-shaped relations for health remain unclear and controversial; that is, the question of why abstainers fare worse than light-to-moderate drinkers remains. Using longitudinal data from the National Child Development Study (NCDS), and fixed-effects models to more fully control for a host of pre-existing selection factors, we examine

how changes in units of alcohol consumed in the past week relate to mental health from ages 23 to 50. Results show that when women and men drank moderately (Department of Health in Britain has issued recommendations for sensible drinking as 22 or fewer units of alcohol per week for men and 14 or fewer for women), they showed significantly lower levels of malaise (i.e., depression, anxiety) compared to occasions when they abstained or drank more heavily, even after controlling for time-stable sources of spuriousness and changing social role attainments in adulthood.

Drinking patterns predict alcohol problem symptoms and early mortality up to 27 years later in the National Child Development Study

Jennifer Maggs, Rebecca Evans-Polce, Jeremy Staff, Nicole Morgan, Pennsylvania State University, USA, Megan Patrick, John Schulenberg, University of Michigan, USA

Objective: To predict alcohol problem symptoms in midlife, premature mortality, and cause of death as a function of alcohol use consumed in three prior adult decades.

Method: Prospective survey data from the nationally representative longitudinal National Child Development Study (born 1958) predicted midlife alcohol problems and mortality. At ages 23, 33, 46 and 50, cohort members were classified as abstainers (0 drinks in prior week), light-to-moderate drinkers (1-14 drinks/women, 1-21 drinks/men), or heavy drinkers (15+ drinks/women, 22+ drinks/men), following UK health recommendations. Additional variables were problem drinking (CAGE at age 33, 42; AUDIT at age 50), death prior to age 50, and causes of death (based on ICD-9, ICD-10).

Results: Drinking category predicted substantially higher likelihood of elevated (8+) AUDIT scores. For example, based on age 23 drinking, 6% of abstainers, 14% of light-to-moderate, and 29% of heavy drinkers had elevated AUDIT scores at age 50. Number of CAGE symptoms at 33 and 42 predicted death by age 50. Results were replicated across gender despite more heavy drinking by men, particularly early in adulthood. Additional analyses will examine alcohol-related mortality using information on causes of death.

Conclusions: Drinking patterns many years prior predict alcohol symptoms and mortality.

PARALLEL SESSION 2

2A: Retirement and the Third Age

16:15 – 17:45

Life satisfaction across the retirement transition: an analysis investigating different latent subgroups of retirees

Lachlan Heybroek, Janeen Baxter, Michele Haynes, University of Queensland, Australia

This research investigates changes in life satisfaction across the retirement transition and examines both pre-and post retirement phases. Retirement is an important life course event, potentially involving major changes to an individual's economic and social circumstances. This research contributes to a better understanding of the retirement experience Australian society by identifying groups of people with different trends in life satisfaction following retirement and by examining variations in the characteristics and resources of those groups. Latent

Growth Mixture Modeling (LGMM) was used to analyse data from the first 11 waves of the Household, Income and Labour Dynamics in Australia (HILDA) survey and included 724 people who made a single transition into retirement. Overall the results show that while most people experience very little retirement related change in life satisfaction, there are latent groups who experience significant change. The influence from health and a range of social and economic resources was investigated. Those people who experience significant change in life satisfaction tend to have worse health and less access to a range of social and economic resources. These findings indicate the benefit of identifying different groups with varying levels of life satisfaction as opposed to simply examining overall trends.

The health effects of later-life employment: the importance of employment quality post retirement age

Katey Matthews, Tarani Chandola, James Nazroo, Neil Pendleton, University of Manchester, UK

Objective: With an ageing workforce and changes to normal retirement age, there is great importance in understanding how employment, and employment quality, affects wellbeing in later-life. This paper uses propensity score matching to remove selection bias in order to seek a causal effect.

Methods: Caliper matching examines (i) the effects of working post-retirement age and (ii) the effects of the quality of this employment, on depression, self-rated health and cognitive functioning. Robustness of results is further tested by sensitivity analysis using Rosenbaum bounds.

Results: No significant differences in wellbeing remain between retirees and workers in general after accounting for selection bias. However, results show those working in high quality employment have significantly lower levels of depression and poor self-rated health than those in poor quality employment (mean difference in scores of -0.52 (s.e. 0.24) and -0.26 (s.e. 0.12), respectively).

Discussion: Significant differences in wellbeing between retirees and workers disappear when selection bias is accounted for, but findings also suggest that wellbeing after retirement age depends on employment characteristics beyond activity alone. The significant difference in wellbeing between those in high and poor quality employment demonstrates the importance of good workplace characteristics in later-life.

Learning motivation of the elderly in China: a study at three universities for the third age

Xinyi Zhao, University of Hong Kong, Hong Kong

Objectives: This study explored the learning motivation of Chinese old adults at the Universities of Third Age (U3As) and its structure, and investigated how the motivation correlated with old learners' socio-demographic characteristics.

Methods: Questionnaire surveys were conducted in three U3As in Changsha City, China in September 2012. Of 500 self-administered questionnaires sent to the older learners aged 50 and above, 395 valid ones were received. The elderly's learning motivation was measured by the Reasons for Participation Scale (Steele, 1984) Chinese version. Factor analysis and ANOVA were applied in data analysis.

Findings: Factor analysis yielded five domains of motivation, which could be described as themes of social engagement abilities improvement, intellectual improvement, personal welfare and improvement, fulfilment and achievement, as well as sharing and affiliation. Among them, intellectual improvement was the strongest reason while fulfilment and achievement was the weakest. ANOVA showed that the elders' socio-demographic characteristics such as age, gender, education, marriage status, work status, income, etc. were positively related to different construct of learning motivation ($p < 0.05$).

Conclusion: The motivation construct of old learners in U3As reflected Chinese culture. The findings could provide insight for providing appropriate courses and promoting life-long learning in China.

Learning and wellbeing trajectories among older adults in England

Andrew Jenkins, Tarek Mostafa, Institute of Education, UK

Our research provides new quantitative evidence on the effects of participation in learning on the wellbeing of older adults. Data were from the English Longitudinal Study of Ageing (ELSA), a continuing, longitudinal survey of older adults which is representative of people aged 50 years and above living in private households in England. Wellbeing was measured by the CASP-19 instrument, a subjective wellbeing measure which was designed specifically for older adults and which is available at all waves of the ELSA survey. ELSA respondents were asked about various types of learning activity, both formal and informal. Regression analyses were used to analyse the relationship between learning and wellbeing. At first multiple regression models were applied to data from a single ELSA wave. To take account of unobservable factors which might influence wellbeing we also fitted fixed effects panel regression models to four waves of ELSA data. We found strong evidence that learning was associated with higher wellbeing after controlling for a range of other factors. It was the more informal types of learning which were associated with higher wellbeing. There was no evidence that formal education/training courses were associated with higher wellbeing.

2B: Health: From Childhood to Old Age

16:15 – 17:45

Childhood conditions, education, and health in old age

Hanna Berndt, Stefan Fors, Karolinska Institutet, Sweden

In this study two questions were addressed: is there an association between childhood disadvantage and morbidity in old age and, if so, is the association mediated by education?

The study is based on a dataset linking data from the 2011 SWEOLD survey with data from the 1968 LNU survey (n=599). The dataset encompasses nationally representative data on the Swedish population aged 76 years and older and includes indicators of health during old age, education and retrospective self-reports of childhood conditions gathered in mid-life.

The results show that childhood disadvantage is associated with late life morbidity through education. Individuals who experienced childhood disadvantage were less likely have an education beyond grade school, and longer education was associated with better health in old age. Thus, there was no direct association between childhood conditions and late life morbidity independent of education. The results also showed that those reporting childhood disadvantage in 1968 were less likely to survive and participate in the SWEOLD survey compared to those, of the same birth cohorts, who did not report childhood disadvantage. This association was only partly mediated through education. Hence, the results underscore the pivotal role of childhood conditions in shaping health and survival throughout the life-course.

Do adverse childhood experiences lead to psychological wear-and-tear over the lifecourse? Preliminary findings in the 1958 birth cohort

Michelle Kelly-Irving, Cristina Barbosa Solis, Benoit Lepage, Pascale Grosclaude, Thierry Lang, Cyrille Delpierre INSERM, France

Background: Allostatic load (AL) is a measure of overall physiological wear-and-tear over the lifecourse which could be the consequence of early life exposures. Aim: To test whether adverse childhood experiences (ACE) are associated with elevated AL in mid-life.

Methods: AL was constructed using data from the National Child Development Study, including individuals born during one week in March 1958 in Britain followed-up seven times between ages 7-50. Biomedical data were collected at age 44. ACE was measured using prospective data collected on cohort members aged 7, 11 & 16. Results: AL was measured for 3782 women and 3753 men using thirteen parameters representing four biological systems. ACE was associated with a higher AL for both men and women, in a bivariate linear regression and after adjustment for early life factors and childhood pathologies. The association may be different among men, where a threshold effect appears likely, versus women where the association appears graded. Whether these findings are mediated by later life factors like education level or health behaviours remains to be examined.

Conclusions: These preliminary analyses indicate that early psychosocial stress may have a lasting impact on physiological wear-and-tear, which in turn may lead to poorer wellbeing and premature mortality.

Social and economic conditions in childhood, smoking, and the development of mobility impairment from midlife into old age

Neda Agahi, Stefan Fors, Karolinska Institutet, Sweden; Benjamin Shaw, University at Albany, New York, USA

This study examines whether childhood living conditions are associated with trajectories of mobility impairment from midlife into old age, and if so, whether the associations are mediated by educational attainment and smoking.

Data from the Level of Living Survey and the SWEOLD study were merged to create a longitudinal dataset with repeated measures from 1968 to 2002 (n=2041, aged 30-50 at baseline). Multilevel regression models were used to analyze retrospective reports of social and economic conditions in childhood (e.g., conflicts or economic problems in the family) in relation to the progression of mobility problems over the 34-year period.

Results showed that childhood conditions, particularly those involving economic disadvantage, were associated with higher levels of mobility impairment as well as a faster progression of problems from midlife into old age.

Subsequent models investigated the mediating roles of educational attainment and smoking. The results suggested that educational attainment, but not smoking, explained much of the association between childhood conditions and trajectories of mobility impairment. Thus, the results stress the important role of educational attainment in mediating the association between childhood conditions and the development of functional impairment in later life.

Childhood disadvantage, military service, and later life health: variation among white, black and Hispanic men

Andrew London, Janet Wilmoth, Syracuse University, USA

Data from the 1992-2006 HRS are used to examine whether the effects of childhood disadvantage on later-life health are mediated or moderated by military service, and whether the observed relationships vary by race / ethnicity. Comparisons are made between nonveterans, veterans with no wartime service, and veterans with wartime service. Growth curve models predicting ADL limitations and self-rated health are estimated. Logistic models are estimated that predict mortality over the fourteen-year study period. Results indicate that military service does not mediate the observed relationship between childhood disadvantage and later-life health trajectories or mortality. Military service does moderate the effect of childhood disadvantage on ADL limitations, self-rated health, and mortality for Whites and Hispanics, but not Blacks. Among Whites in particular, men from disadvantaged backgrounds who served in the military tend to have better later-life health outcomes than comparable men who did not serve in the military. Military service also has independent effects on later-life health for all three racial / ethnic groups, some of which are mediated by mid- to late-life characteristics.

2C: Childhood Risk and Resilience

16:15 – 17:45

Family poverty and trajectories of children's emotional and behavioural problems: the modelling roles of self control and cognitive ability

Emily Midouhas, Eirini Flouri, Heather Joshi, Institute of Education, UK

Family poverty is strongly associated with children's emotional and behavioural problems. Cognitive ability and self-control have been related to emotional/behavioural resilience to poverty. Despite their interrelatedness, these factors have not been examined jointly as promoting emotional/behavioural resilience in children. In this study, we analysed data from the Millennium Cohort Study to investigate the role of two aspects of self-control (self-regulation and low emotional dysregulation) along with verbal cognitive ability in children's emotional/behavioural resilience to family poverty from early to middle childhood.

Longitudinal assessment of both emotional and behavioural problems at ages 3, 5, and 7 allowed us to fit multivariate response growth curve models. We estimated children's individual trajectories of problems, the average level of their problems at the beginning of primary school, and the average growth rate in problems over time. The relationship between socio-economic disadvantages and emotional and behavioural problems was stronger for children with higher levels of emotional dysregulation. In addition, children with high levels of self-regulation showed a similar progression of both emotional and behavioural problems, whether or not they were poor. Verbal cognitive ability moderated the association between poverty and emotional problems only. Self-control seems an important protective factor for children growing-up in poor families.

Socio-economic status, economic strain and child externalising behaviour

Richard Layte, Maeve Thornton, Economic and Social Research Institute, Ireland; Sharon Cruise, Queen's University Belfast, UK; Cathal McCrory, Trinity College Dublin, Ireland

The positive relationship between parental socio-economic status (SES) and child social and emotional competency is long established in psychiatric epidemiology. Three theories and accompanying models have been put forward to explain this association: the family investments model, the family stress model and the parental values model. In this paper we test the value of the three models for explaining SES differentials in child externalising behaviours at 3 years of age using two waves of data from the Growing Up in Ireland Study, a child cohort study from Ireland.

Analyses show significant income, social class and maternal educational gradients in child externalising problems. Levels of economic strain vary systematically across SES groups. Hierarchical and path analytic models show both direct and indirect effects of SES. Around half the total effect of low income on externalising behaviours occurs indirectly through its effect on parenting behaviours and maternal depression. A quarter of the effect of low education on externalising problems is explained through parental behaviours. All the effect of social class appears to be direct. Results give qualified support to all three models and suggest that parental resources, mental health and practices all play a role in shaping child social and emotional competence.

Multiple risk exposure in early life and children's emotional and behavioural resilience: the role of parenting behaviours

Eirini Flouri, Emily Midouhas, Heather Joshi, Nikos Tzavidis, Alice Sullivan, Jack Wiggins, Institute of Education, UK

Early exposure to powerful risk factors such as poverty and stress in childhood can have deleterious consequences for children's behavioural adjustment. Risk factors have normally been explored in isolation, but increasing attention is being given to multiple and cumulative risk effects over time. Some children exposed to specific risk have demonstrated better than expected outcomes due to favourable parenting. To date, no study has explored longitudinally behavioural resilience due to parenting of young children when considering multiple risk factors jointly. We analysed Millennium Cohort Study data on children and their families in England to investigate the impacts of early exposure to family poverty, stressful life events, and neighbourhood deprivation on children's trajectories of internalising and externalising problems at ages 3, 5 and 7. We explored the roles of parental involvement, warmth and discipline style, in fostering resilience to risk. Multilevel growth curve models were utilised. Maternal warmth was associated with resilience to the effects of stressful life events for internalising and externalising problems, and to those of neighbourhood deprivation for internalising problems. Maternal involvement and discipline style were not associated with resilience. Warmth may be an important protective factor for multiple forms of risk experienced by young children.

2D: Attrition and Weighting in Longitudinal Surveys

16:15 – 17:45

Weighting in multilevel, longitudinal surveys: An application to investigating physical activity of mid-aged Australians using the HABITAT survey

Bernard Baffour, Michele Haynes, University of Queensland, Australia; Gavin Turrell, Queensland University of Technology, Australia

The HABITAT study is a longitudinal multilevel study of physical activity from 2007-2011 in adults aged 40-65 years. It collects data on health, socio-economic, demographic, environmental and psychological measures from 11,200 individuals residing in 200 census collection districts (CCD) in Brisbane, Australia. The survey provides unique data to inform strategies to promote increased physical activity and reduce the associated health problems that develop in mid to late adulthood.

It is becoming widespread to use complex longitudinal and spatially designed surveys to collect information about target populations. Missing data due to non-response and attrition is typical of large social surveys and patterns of missingness may vary across areas of diverse socio-economic disadvantage. Across the 3 waves of the survey HABITAT experienced an attrition of approximately 25 percent which varies by CCD. It is important that the data is weighted correctly cross-sectionally and longitudinally for each of the CCDs to ensure accurate estimates for the target population. This paper evaluates weighting procedures to ensure that estimates of physical activity from the sample survey and associated trends are representative of the population, and will demonstrate the benefits of accounting for non-response and attrition using appropriate weights.

Weight computation for the French national birth cohort Elfe: the challenge of multidisciplinary

Hélène Juillard, Nicolas Razafindratsima, Marie-Aline Charles, Jean-Louis Lanoë, Xavier Thierry, Ined-Inserm joint unit ELFE, France

In 2011, around 18,300 newborns were included in the French national birth cohort ELFE. The probability sampling design had 3 degrees: 'maternity' (349 maternities among 544), 'days of survey' (25 days divided into 4 time-period for each maternity) and 'infants' (comprehensive inclusion). Non-response was associated to each degree: 7,741 days of investigation have been carried out in 320 participating maternities to include 51% of the surveyed infants.

Families were re-interviewed when infants reached the age of 2 months. Then, the sample consisted of 16,600 respondents with a new stage of non-uniform non-response. Because of the unequal probability sampling and non-uniform response, it may be necessary to use weights to infer to the whole targeted population (estimated size 764,000 infants) with our sample. Weights are adjusted to different degrees and phases depending on common variables between respondents and non-respondents (collected from the administrative infant's "8th day certificate").

A calibration ensures the final weighted sample to be consistent with overall characteristics of the targeted population. However, depending of the choice of the calibration variables, weights will be more useful to correct biases either in socio-demographic or health or environmental variables. We will present the methodology of weights computation and its difficulties.

New technologies in longitudinal surveys: tricks or treats?

Delphine Provencal, Nancy Illick, Institut de la Statistique du Quebec, Canada

The Quěbec Longitudinal Study of Child Development (QLSCD) was designed to further our knowledge of child development. As part of this study, a cohort of 2,120 children and their parents has been followed annually or every two years since their infancy in 1998.

Like every longitudinal study, QLSCD has to face the problem of attrition. In order to prevent this phenomenon, we adapt our collect protocol over time in order to reduce the respondent's burden and maximize their participation to the study. This presentation will concentrate on the evolution of the child's questionnaire.

To do so, the questionnaire to the child has been upgraded twice to 1) reduce the duration of the interview, 2) make the questionnaire more attractive, 3) facilitate his completion. In 2010, we computerized the paper questionnaire and then, in our last data collection round (spring 2013), we introduced a web-based questionnaire for the young participants.

The current study has 3 main goals:

1. Review the effect of reducing the invasiveness of the interview on attrition rate.
2. Compare the costs of developing new technologies (computerized questionnaire and web questionnaire).
3. Examine the tricks and treats of web-based questionnaire in a longitudinal study with teenager participants.

Trajectories of cognition and attrition in the English Longitudinal Study of Ageing (ELSA) 1-5

Gindo Tampubolon, University of Manchester, UK

Cognitive impairment may be a feature of later life in public mind. But in fact its acute forms such as Alzheimer's and dementias is ranked fourth in the list of burden of disease in high income countries (WHO) after heart disease, cerebrovascular disease and lung cancers. Yet no picture of population trajectories of cognitive function in later life in England is available.

Studies on trajectories of health outcomes in later life rarely confront the inevitable problem of attrition in longitudinal ageing study. The crux of the issues demanding joint model is older adults with lower levels of cognition tend to drop out, and as a result those staying are hardly representative of the original population,

making attrition a serious threat to inference. For instance in ELSA there is a significant difference in cognitive levels at baseline between completers and attriters.

This work presents trajectories of cognition of older adults in England from 2002 to 2010, the most recent data reduced by attrition to 55%. The trajectories are drawn using growth curve models with random intercepts and random rates of cognitive change. These are then refined in joint models of cognition and attrition by simultaneously estimating frailty survival model. The results show for the first time social inequalities in trajectories of cognitive change among older adults in England. Also the analysis highlights the positive roles of networks of friends in maintaining cognitive function. Lastly, the data show behavioural risk factors that are amenable to intervention (such as smoking, drinking, and exercising) to have substantial contribution to cognitive performance. Importantly, pictures of trajectories of health outcomes such as cognitive function are systematically altered if attrition is ignored.

Day 2 – Tuesday 24th September 2013

PARALLEL SESSION 3

3A: Contextual Influences on Child Development

9:00 – 10:30

The contribution of neighbourhoods and schools to cognitive test performance at age 7 – findings from the UK Millennium Cohort Study

Anja Heilmann, Yvonne Kelly, Mai Stafford, Richard Watt, University College London, UK

Aim: This research aimed to partition the variability in children's cognitive test performance at age 7 between neighbourhoods, schools and families. Further, we examined whether maternal psychological distress and parenting practices were on the pathway between neighbourhood characteristics and the cognitive outcomes.

Methods: We analysed data from the UK Millennium Cohort Study using cross-classified multilevel models to simultaneously estimate the variability in cognitive test outcomes between neighbourhoods (defined as Lower Layer Super Output Areas) and schools. Participants were 9,412 residentially stable children who had not changed school since age 5.

Results: After adjusting for family background characteristics, about 7% of the variance in reading scores was between schools. For maths, the variance attributable to neighbourhoods and schools was 7% and 10% respectively, while for spatial ability, this was about 3% at both levels.

Our data did not support the hypothesis of a mediating effect via maternal psychological distress and parenting practices.

Conclusion: Our findings highlight the importance of including both neighbourhoods and schools when aiming to determine the contribution of contextual factors to children's cognitive test performance. Differences between neighbourhoods and schools appear to contribute to inequalities in children's cognitive development already at this early age.

Causation between maternal employment in the first year after childbirth and early childhood development

Youngjo Im, University of Chicago, USA

Drawing on relevant theories from the fields of economics and developmental psychology, this study examines the impact of maternal employment in the first year after childbirth on subsequent behavioral and cognitive development in young children. This study analyzes a sample from the Infant Assessment Unit of the Project on Human Development in Chicago Neighborhoods (PHDCN) ($N = 411$), a multidimensional longitudinal study of children residing in Chicago, Illinois. Analysis using marginal mean weighting through stratification (MMW-S) approach suggests evidence of causation that, despite the accompanying income gains, maternal employment in the first year after childbirth adversely affects caregiver-reported internalizing and externalizing problems of Hispanic, black, and white children at ages 3 and 5, respectively. The reported problems were in the form of anxiety/depression, withdrawal, sleeplessness, and delinquent behavior. Children's internalizing problems were highly manifest at age 3 and diminished slightly onwards but remained at age 5, whereas the externalizing problems were apparent at age 3 and escalated to age 5. These findings suggest that when social policies and early intervention programs are designed to assist low-income working families, enhancing supports for mothers in their child's first year may be valuable for young children's positive development.

Changes in the prevalence and social distribution of socio-emotional behaviour before and after children start primary school: findings from the UK Millennium Cohort Study (MCS)

Anna Pearce, Nadia Micali, University College London, UK

There is limited research documenting inequalities in socio-emotional behaviour in early childhood including when children start primary school. The ability of children to adapt to, and benefit from, primary school life may vary by socio-economic circumstances (SECs).

We analysed total strengths and difficulties questionnaire (SDQ) scores for 10,808 MCS children at ages 3, 5 and 7 years (yrs). Using random effects to account for repeated measures, we estimated risk ratios for borderline-

abnormal behaviour for several SECs measures, and tested for interactions with age. In addition, we explored whether SDQ trajectories varied by SECs.

Prevalence of borderline-abnormal behaviour fell from 21% to 11% between 3 and 5yrs, and by 7yrs was 13%. Inequalities were observed for all ages and measures of SECs. However inequalities significantly increased between 3 and 5yrs; by 7yrs they were no longer significantly different from 3yrs. When looking at SDQ trajectories in children starting off with borderline-abnormal scores, those from less advantaged SECs were more likely to still have borderline-abnormal scores by 5 and 7yrs than those from more advantaged SECs.

Changes in socio-emotional behaviour were observed between 3 and 5yrs. Future research should explore the contribution of the primary school transition to these associations.

The effect of residential mobility and school change on the educational achievement of US elementary school students

Anthony Buttaro, City University of New York, USA

In this study, using data from the Early Childhood Longitudinal Study – Kindergarten Cohort 1998 (ECLS-K), I investigate the longitudinal effect that residential mobility and/or non-normative school change has on the educational achievement of U.S. elementary school students from kindergarten through 5th-grade. To examine the combined influence of residential moves and school changes I devised a typology that classifies students into *stayers* (no residential move and no school change), *movers* (just residential move), *changers* (just school change), and *leavers* (both move and change). Preliminary results show higher math achievement at the end of kindergarten for leavers. In third grade movers show a lower math achievement than stayers but changers improve their math score. In fifth grade all three mobile groups show lower math achievement with leavers being the lowest. In addition, the number of residential moves and school changes are consistently associated with lower achievement in both reading and math.

3B: Gender

9:00 – 10:30

And yet they move: shifts in gender attitudes across the transition into parenthood

Janeen Baxter, Francisco Perales, University of Queensland, Australia

Research shows that the transition into parenthood is a critical life-course stage, and that it is related to changes in men's and women's employment status, work hours, and time spent on housework. We add to this literature by investigating whether and how experiencing a first birth influences men's and women's gender-role attitudes. We address this in an international comparative perspective using data from two major panel surveys: the Household Income and Labour Dynamics in Australia (HILDA) survey and the British Household Panel Survey (BHPS), and fixed-effects regression models. Descriptive findings indicate that in both Britain and Australia responses to gender-role attitude questions change over the life course, and that these changes are associated with becoming a parent. Results from regression models confirm that these relationships are robust to controlling for observable and unobservable factors: men and women in Britain and Australia prioritise motherhood as women's main role after the birth of their first child, but only women believe that motherhood can be pursued in conjunction with paid employment. These results challenge theories arguing that attitudes change mostly as a result of cohort replacement processes and call for further research on the factors that produce attitudinal change over the life course.

The education, labour force and family nexus: How do women and men fare over the life course

Lesley Andres, Janine Jongbloed, University of British Columbia, Canada

It has been acknowledged by researchers of sociology of the life course that the life paths of today's young adults are complex, non-linear, and fluid. Esping-Andersen refers to recent changes in life course dynamics as nothing short of revolutionary. This is especially so for women; however, the revolution is incomplete in that competing goals and preferences around work and family have resulted in a potentially contradictory state of affairs and, hence, instability. Although extensive research has been conducted on the relationship between post-secondary attainment and labour market outcomes, much remains unanswered about the education/work/family nexus. In Canada, over half of all university graduates are women, and although higher levels of levels of university

participation and completion by women should have led to considerably improved labour market outcomes, progress has been sluggish. In this paper, we begin by criticizing the vast body of literature on gender inequalities that do indeed dwell on educational attainment patterns, labour market participation, and earnings. Following this, we employ a sociology of the life course approach to examine the “multi-faceted puzzle” of women’s life course educational and labour market experiences in relation to those of men. We utilize 22 years of longitudinal data from the British Columbia, Canada, Paths on Life’s Way project. This analysis is unique in that we can follow the same individuals over time. Through a mixed method design employing quantitative sequence analyses of questionnaire data and qualitative analyses of interview data, we provide a detailed account of the interrelationships among educational participation and completion; labour market participation and stability; and relationships and family formation over time. As previous research has demonstrated, each of these facets is dynamic in that there is considerable movement in and out of both education and the labour force. Also, relationships and family formation patterns change dramatically over the course of 22 years.

The Paula Principle: how far are women’s increasing competences rewarded at work

Tom Schuller, Longview, UK

Rising levels of female educational achievement, and an increasing female/male competence gap, do not appear to be matched by equivalent changes in relative career/earnings profiles. The Paula Principle suggests that women generally work below their level of competence (Schuller, forthcoming, see www.paulaprinciple.com). It is the mirror image of the 1960s Peter Principle, that people rise to their level of incompetence.

I shall outline the PP, and present some simple headline findings on earnings profiles. Cohort studies show that the gender pay gap has closed for younger women and men; but it widens again as they get older. This points to the crucial need to take a lifecourse perspective on the key issues raised by the Paula Principle, of fairness and efficiency. I shall use these broad findings to raise policy questions, focussing especially on issues of working time patterns.

Understanding the unfinished gender revolution in Australia through a longitudinal analysis of the lives of two generations of women

Hernan Cuervo, Jessica Crofts, University of Melbourne, Australia

In the last four decades in Australia, there has been a dramatic increase in women’s participation in education and work. Currently, young women, aged 25 to 35 years, enjoy similar or greater levels of education participation as young men. They are the most educated generation of women in Australia. Despite this education parity, women continue to be disadvantaged in many aspects of the workforce (e.g. wages, leadership positions and job security). This has prompted the discussion of an “incomplete” or “unfinished” gender revolution. This paper draws on a two-decade longitudinal study, which investigates the lives of two generations of Australians (popularly known as Gen X and Gen Y). Using quantitative and qualitative data from our female participants we examine some of the causes and consequences of inequality in the family and workplace, discussing how work and family roles continue to be highly gendered including the persistence of traditional discourses and practices that exist within institutions (e.g. workplaces and families) as well as individuals. We argue that workplace arrangements need to be altered to redress the impact of parenthood on women’s careers, but just as importantly cultural beliefs about parenting and gender roles also need to be examined and revised.

3C: Obesity

9:00 – 10:30

Life-course body mass index and adult blood pressure in two British birth cohorts: estimating associations using joint multivariate response modelling

Leah Li, Diana Kuh, Rebecca Hardy, Chris Power, University College London, UK

The impact of the recent increasing trends in BMI on adult BP is unclear. We investigated whether BP levels and their associations with BMI trajectories have changed between two cohorts. We fitted joint multivariate response models to repeated BMI measures and adult systolic (SBP) and diastolic BP (DBP) for the 1946 (N~5,300) and 1958 British birth cohorts (N~17,000). Mean SBP at 45y decreased from the older to younger cohort by 2.8mmHg

in females but not males; mean DBP decreased by 3.2-3.3mmHg. Slopes of BMI trajectory were steeper from early adulthood in the younger cohort and associations with BP strengthened. For SBP, there was an association with BMI from 10y in the younger cohort, from late 20s (males) and late teens (females) in the older cohort. The adult BMI/SBP association was stronger in the 1958 than the 1946 cohort: $r=0.27(0.24,0.29)$ versus $0.09(0.04,0.13)$ for males; $0.29(0.26,0.32)$ versus $0.08(0.03,0.12)$ for females. For males, childhood BMI slope was associated with adult BP only in the 1958 cohort ($r=0.21(0.17,0.24)$) and adult BMI slope was more strongly associated with SBP in the younger ($r=0.28(0.25,0.33)$) than the older cohort ($r=0.13(0.06,0.20)$). For females, childhood slope was associated with SBP ($r=0.11(0.02,0.21)$ and $0.19(0.12,0.26)$ for the 1946 and 1958 cohort respectively) and adult slope was associated with raised SBP only in the 1958 cohort ($r=0.34(0.31,0.37)$). Associations were similar for DBP. Adult BP did not increase despite increases in obesity between two cohorts. The association between BMI trajectory and BP was stronger in the younger cohort.

The conditions of early childhood: the importance of maternal nurturing as a buffer against the effects of poverty on adolescent obesity

Pamela Salsberry, The Ohio State University, USA

Resilience is increasingly of interest because understanding what may protect children from deleterious effects of social risks may offer new pathways for improving health. Little is known about the pathways associated with resilience to health problems in children from low-SES backgrounds. Miller, et al (2011) hypothesized and tested two pathways through which good health may be attained by children from low-income backgrounds: the first pathway posited that good health in adulthood was a function of an upward mobility and that improved adult SES offsets the influence of childhood disadvantage. The second pathway was through a buffering effect of parental nurturance against the negative consequences associated with poverty. In this paper we test the second pathway with the following research question: Does parental warmth/nurturing during early childhood (period from ages 3 to 5 years) provide protection against the negative influence that poverty has on obesity development in adolescent girls? Using the NLSY79 child and youth files ($n=1411$ girls) we find a protective effect of parental warmth at 3 to 5 years on the development of young adult (17 to 24 years) obesity. Underlying mechanisms associated with the development of stress regulation is discussed as a possible explanatory path for this finding.

The influence of the environment on childhood obesity

Lucinda Platt, Institute of Education, UK; Annemarie Schalkwijk, Petra Elders, Giel Nijpels, VU Medical Center, Netherlands

The prevalence of overweight (and obesity) in children has increased dramatically over the last two decades and is regarded as a major public health challenge. Public health attention to tackle childhood obesity has been directed largely towards interventions relating to individual health behaviours (exercise and diet) and to family-based interventions. However, it is also recognised that context, in the form of obesogenic environments, may support or influence patterns of overweight. In this paper, using the UK Millennium Cohort Study, a survey of over 19,000 children born in 2000/2001 and followed up over time, we exploit direct measures of children's BMI at several time points to analyse factors influencing overweight and obesity among children in England. We argue that context and behaviour are intimately linked, and need to be considered together. Therefore, alongside detailed survey measures of parenting and family context, we introduce contextual measures based not only on interviewers' evaluation of local neighbourhood but also geocoded measures of environment. In particular, we consider the association of neighbourhood green space with childhood overweight, and assess the extent to which this is moderated or mediated by parenting and by perceptions of the receptiveness for children of the local area.

Development and relationship between self-esteem and body mass index from adolescence to middle age. A prospective cohort study from 16 to 42 years of age

Olli Kiviruusu, Hanna Konttinen, Taina Huurre, Hillevi Aro, Ari Haukkala, National Institute for Health and Welfare, Finland

This study investigated the relationships between self esteem and BMI and their developmental trajectories over a period of 26 years. Participants of a Finnish cohort studying 1983 at age 16 years (N=2194) were followed up at ages 22 (N=1656), 32 (N=1471) and 42 (N=1334) using postal questionnaires. Measures included self esteem (7 items) and BMI (self-reported). Analyses were done using latent growth curves, difference scores and correlations. Among females both the initial levels (-.13, $p<.01$) and the slopes (-.26, $p<.001$) correlated significantly between the self esteem and BMI growth trajectories, whereas among males there were no significant correlations between the self esteem and BMI growth factors. Difference scores indicated that the association between increasing BMI and decreasing self esteem among females was strongest between ages 22 and 32 ($r=-.18$, $p<.001$). Among females correlations between self esteem and BMI showed an increasing trend ($p<.001$) during the study period. The results suggest that among females higher and increasing BMI associates with lower and decreasing self esteem. Among males, self esteem and BMI seem mainly unrelated to each other, which may be related to normative pressures being less strict towards the male body as well as to greater problems in using BMI to measure excess body weight and size in males.

3D: Health Among the Elderly

9:00 – 10:30

In sickness and in health? Comorbidity in older couples

Cara Booker, Steven Pudney, University of Essex, UK

We investigate the extent and origins of comorbidity in older couples, where comorbidity refers to a positive association between the health outcomes of marital partners. The two major sources of comorbidity are shared lifestyle factors and alignment of early environmental influences through assortative mating. We aim to describe the extent of comorbidity and investigate the antecedent factors, using the third wave of Survey of Health, Ageing and Retirement in Europe (SHARE). SHARE is a large, longitudinal, multi-country survey of people aged 50 and over and their spouses/partners. The third wave (known as SHARELife) collected life histories on several dimensions. We used data from cohabiting or married individuals at wave 3. We split the life histories into three phases: childhood, pre-marital and post-marital. For each phase we observe a number of indicators of underlying latent health state and estimate a dynamic structural model of latent health, controlling for a variety of socio-economic covariates.

Our findings suggest that one half to two-thirds of the variation in post-marital health can be accounted for by pre-marital circumstances and events, and that pre-marital factors brought together by assortative mating display almost as large a between-partner correlation as do post-marital (“shared lifestyle”) factors.

Inequalities in trajectories of frailty at the older ages: findings from a growth modelling approach

Alan Marshall, James Nazroo, Gindo Tampubolon, University of Manchester, UK

This paper considers how trajectories of frailty at the older ages (50+) differ according to wealth, gender and living arrangements. Growth curve models are used to capture trajectories of frailty (Rockwood frailty index) by single year of age over 5 waves (8 year period) of the English Longitudinal Study of Ageing. Levels of frailty are considerably higher for the poorest compared to the richest older people. The inequalities in trajectories of frailty are stark; a poor 70 year old has a very similar frailty trajectory compared to a rich 80 year old. Stratification by gender reveals that women become increasingly frail compared to men with age especially for those who are single. There are very different patterns of wealth inequality in frailty trajectories by gender. Wealth inequalities in frailty persist across the older ages among females whilst trajectories of frailty for the poorest and richest males converge at the oldest ages. This paper considers the drivers of these inequalities and the implications for policymakers and social researchers.

Falls in the elderly as life events: the differential impact of falls on subjective health trajectories

Stephanie Pin, National Institute for Prevention and Health Education, France; Dario Spini, Pierre Arwidson, University of Lausanne, Switzerland

Our work is based on the model of vulnerability (Schröder-Butterfill & Marianti, 2006) and the theory of stress proliferation (Pearlin et al, 2005). It aims to identify the impact of the fall on subjective health trajectories of older people. The sample consisted of 13 328 people aged 50 and over from 11 European countries who responded to three waves of the Survey of Health Ageing and Retirement in Europe. A series of MANOVAs, followed up by univariate tests, were performed for measuring the evolution of subjective health across time and for analyzing the effect of fall. The average of subjective health decreased across time. The MANOVAs conducted taking into account the initial level of subjective health in three groups indicated significant differences between groups ($F = 145.47, p < 0.001$): those in excellent health reported in waves 2 and 3 a decrease in health perception; this effect was more pronounced among fallers. People in poor health at wave 1 remained stable. This result is in contrast with the hypothesis of a protective pool of resources to deal with health events. We can hypothesize that people viewing themselves in excellent health perceive fall as a major threat of their identity.

Mediating role of self-rated health in the prediction of mortality in older ages by objective measures of health: a longitudinal mediation analysis of the English Longitudinal Study of Ageing (ELSA)

Gopal Netuveli, University of East London, UK; Mel Bartley, University College London, UK

Both objective measures like lung function and subjective measures like self-rated health can independently predict mortality in the older ages. In this context, the interrelationships between the two classes of health measures have not been studied. We hypothesises that the self-rated health has a mediating role in the prediction of mortality by the objective measures. Aim of this paper is to test this hypothesis. For this purpose, we use data from Wave 2 to Wave 5 of ELSA. In the initial wave (Wave 2), data were collected by nurse visits on the objective health measures like lung function. In all waves of ELSA, there was a question on general health. Mortality information was collected and ascertained. We used discrete time survival analysis to study the relationship between objective measures and mortality. We assumed the hazards to be proportional in all our models. Then we introduced the trajectory of self-rated health as a parallel process and tested for mediation. The SRH was allowed to have different effects at different waves. With FEV1 as the objective measure, we found it to predict mortality significantly and also that there was a strong evidence of mediation by SRH. Other objective measures are being tested.

PARALLEL SESSION 4

4A: Intergenerational Transmission and Cultural Capital

11:00 – 12:30

Intergenerational transmission of achievement orientations: new evidence from the children of the YDS

Jeylan Mortimer, Lei Zhang, Chen-Yu Wu, University of Minnesota, USA; Jeanette Hussemann, Urban Institute, Washington, USA

We examine three complementary hypothetical models of parental influence on children. According to the first two, children are responsive to (1) parents' adult socioeconomic accomplishments and (2) parents' pathways through the transition to adulthood, which provide contexts for the interpretation of current circumstances. A third model posits that intergenerational transmission is better understood by tracing parental achievements and trajectories, as well as child outcomes, to stable parental personality orientations. The Youth Development Study includes a cohort of Minnesota youth followed from adolescence (age 14) through adulthood (age 37), and their children (mean age 15, $N = 445$). Drawing on this longitudinal data archive, we find that parental achievement orientations at age 16 are significantly associated with parental latent class agentic pathways to adulthood, parental educational attainment, and child achievement orientations, measured at about the same age. A series of logistic and OLS models indicate that parental achievement orientations during adolescence have both direct

and indirect effects (through parental agentic pathways and educational attainment) on children's achievement orientations. The effects of parental agentic pathways on children's orientations, however, are entirely mediated by parental educational attainment. We conclude that long-term processes stemming from the parents' own teenage years underlie intergenerational continuities in achievement.

Intergenerational sources of socioeconomic inequality in children's reading and math achievement

Narayan Sastry, University of Michigan, USA

In this paper, we describe and analyze the level of inequality in children's achievement according to different dimensions of family socioeconomic status. We examine the role of distinct components of socioeconomic status in shaping the transmission of inequality across three generations. Our focus is on parent and grandparent income, education, and cognitive skills; however, we also examine the effect of parents' wealth and neighborhood economic status. Data for this study come from the Panel Study of Income Dynamics (PSID) and the PSID Child Development Supplement (CDS). We used data from Wave II of CDS, which was fielded in 2002 and includes achievement test scores in math and reading for just under 2,000 children aged 5–18 years. The paper also illustrates the use of methods to analyze the sources of inequality in children's achievement (and other similar measures) that incorporate multilevel regression-based decomposition and summary measures such as Gini coefficients and concentration indices. Our results show that there are strong effects of parent-generation socioeconomic status on children's achievement; they also reveal limited direct effects of grandparent socioeconomic status on grandchild achievement after controlling for parent-generation socioeconomic status.

Social and immigration-specific differences in the development of reading comprehension: a longitudinal analysis of primary school students in Germany

Thorsten Schneider, University of Leipzig, Germany; Maximilian Pfost, University of Bamberg, Germany

According to the theory of social reproduction, parents' cultural habits, activities, and goods have large impacts on children's skills, and educational attainment (Bourdieu & Passeron, 1977). The cultural mobility model is less restrictive than the theory of social reproduction. Students from lower social classes, in particular, can promote their school performance if they invest in cultural activities, thus attenuating the relation between their parents' class position and their own school success (Aschaffenburg & Maas, 1997; DiMaggio, 1982). In recent times, the school performance of students from immigrant families has been the focus of attention. Cultural capital is often context specific and might lose its value as a consequence of immigration. Therefore, the relation between parents' cultural capital and students' school success should be weaker. However, according to the cultural mobility model, the relation between students' own cultural capital and school success should be stronger.

Our research questions are: What is the contribution of different forms of cultural capital on students' reading comprehension? Does the impact of cultural capital on reading comprehension differ between students from native and immigrant families? Does the evidence favor social reproduction or social mobility?

We analyzed panel data with value-added models on reading literacy from Grades 3 to 4. The data were derived from the German study BiKS (Educational Processes, Competence Development, and Selection Decisions in Preschool- and School-Age Children).

Our results provide support for the theory on social reproduction (strong influence of parents' education and highbrow activities), but are also consistent with an extended version of the cultural mobility model (the influence of students' reading habits). Most indicators of various forms of cultural capital have similar effects in native and immigrant families.

Social inequalities in cognitive scores at age 16: the role of reading

Alice Sullivan, Matt Brown, Institute of Education, UK

This paper examines socio-economic inequalities in cognitive test scores at age 16 for a nationally representative cohort of people born in Britain in 1970 (the 1970 British Cohort Study). At age 16, the respondents took tests in vocabulary, spelling and mathematics. We explore to what extent inequalities in these scores are accounted for by family material and cultural resources.

We find that parents' education is important across the board, but particularly so for children's vocabulary scores. Our findings support the importance of the home reading climate, including parents' leisure reading and parents' reading problems, in predicting teenagers' test scores. Our analysis highlights the importance of

children's own reading behaviour. Controlling for the child's test scores at ages five and ten, the influence of the child's own reading behaviour on test scores at age 16 remains highly significant, suggesting that the positive link between leisure reading and cognitive outcomes is not purely due to more able children being more likely to read a lot, but that reading is actually linked to increased cognitive progress over time.

4B: Qualitative Research

11:00 – 12:30

How was a 'normal' life experienced by two cohorts born twenty years apart, and what has this meant for their health?

Ellen Glasgow, Medical Research Council, University of Glasgow, UK

There are increasing calls for health research to be historically grounded given the significant changes over time in both the structure and quality of life. The aim of this study is to explore the role of historical context in shaping the constructions of 'normal' life transitions and the importance of health across the lifecourse, and to understand how social characteristics pattern this, focusing on class differences, although gender is also significant. Oral histories were conducted with 24 respondents born in the 1930s and 1950s, who were sub-sampled from the longitudinal West of Scotland Twenty-07 Study.

Results showed that there were differences in what were considered to be 'normal' transitions for the two cohorts within the key themes of work, family and health. Temporal distinctions were clearly evident, however these were blurred by social patterning. Reflections on having conformed or not to the 'normal' patterns were mixed, as were evaluations of the role health in them. These results underline the importance of historical context when investigating pathways to health across the lifecourse.

Sexuality in later life: a qualitative inquiry from elder adults and professionals in Chengdu

Shuyan Yang, Elsie Yan, Hong Kong University, Hong Kong

As one grows older, with sexual function declines, the desire for sexual intimacy and closeness remains. In spite of increased aging population, little is known about expression, knowledge and experience of aged sexuality in Chinese elder adults. Moreover, perception of elderly sexuality among geriatric professionals were understudied investigated in Mainland China. The present article aims to provide insights into perception and awareness of sexuality of older Chinese people. Using semi-structured in-depth interview, twenty-sixth elder participants (aged between 54 and 85) and sixteen professionals working in aging care sectors residing in Chengdu were individually interviewed. Most elder adults demonstrate lower level of sexual knowledge and expression of sexuality due to traditional Chinese values as well as social changes in their younger years. On the other hand, awareness of aged sexuality needs to be prompted among professionals who are working with elder adults. Implications for research, social service as well as policy regarding the care of elderly are also discussed.

The changing processes of ageing care among migrants in the UK: findings from a longitudinal study

Nilufar Ahmed, Swansea University, UK

With an increasingly diverse ageing population in Europe the care needs of the elderly are of heightened concern. The continued presumption that Asian families prefer to 'care for their own' can lead to inequalities in provision and access of healthcare services. As the Bangladeshi community in the UK ages in place, a combination of factors including settled progeny and a reliance on health and welfare systems mean that migrants have to adjust to the reality of ageing in the UK. How their ageing and care needs are interpreted in the context of living in the UK with its different social customs and frameworks is explored in this paper.

This paper discusses findings from a qualitative longitudinal study examining first generation Bangladeshi women in Tower Hamlets interviewed ten years apart in 2001 and 2011. It discusses ageing in the geographical location of Tower Hamlets and the dynamic relationship between people and place. As care services develop to meet the needs of the Bangladeshi community, there is evidence of greater uptake of care services challenging notions that Asians/Muslims are reluctant to make use of care services; and demonstrating the difference that appropriate services can make to carers and those being cared for.

The importance of belonging and wellbeing: moving beyond traditional notions of youth transitions to adulthood

Hernan Cuervo, University of Melbourne, Australia

Over the last quarter of a century, and amidst rapid economic and social change, the idea of positive youth transitions has become synonymous with participation in tertiary education and employment. This tendency has overshadowed other important spheres of life, such as wellbeing, that are highly relevant to young people's trajectories. While the focus on traditional transitions is appealing for its simplicity, it does little to advance our understanding of the complexity of young people's lives. This paper seeks to challenge traditional notions of youth transitions to adulthood by employing the concept of belonging on a two-decade longitudinal study of two generations of Australians, focusing on our older generation (currently aged 40) and using quantitative and qualitative data to look at their aims, decisions and choices in life. Argue that employing the concept of belonging enables a better way to understand how the participants in this study use education and work as strategies to remain connected to people, places and cultures that matter to them. They provide a more nuanced and holistic view of young people's lives. Thus, belonging and wellbeing are important indicators to identify processes and outcomes of positive youth transitions.

4C: Conceptualization and Measurement

11:00 – 12:30

Measuring social class after labour market exit

David Blane, Mel Bartley, Morten Wahrendorf, University College London, UK; Siegfried Geyer, Hannover Medical School; Myer Glickman, ONS, UK

The majority of deaths now occur after labour market exit, making problematic the analysis of social class differences in mortality, given that class schema such as EGP, NS-SEC & E-SEC assign individuals to social classes on the basis of their occupation. The presently proposed SLLS conference presentation will suggest a range of ways to respond to this problem.

Representing relative social advantage: parental occupational positions in the Millennium Cohort Study

Roxanne Connelly, Institute of Education, UK

In the vast majority of studies of health outcomes, and social outcomes more widely, we seek to represent the relative social advantage of an individual. Occupation based measures are often cited as a more stable indication of an individual's relative social advantage, compared to measures of income or poverty. Occupation based measures are also considered to avoid the 'churning' seen in poverty and income data which may not represent manifest changes in lifestyles or life chances.

In contrast to the older British Birth Cohorts, the Millennium Cohort Study provides detailed occupational information of parents at all sweeps; age nine months, three, five and seven years. However, at the birth of their MCS child many parents may still be moving towards their mature occupational position. In this paper variability in occupational position of parents over the first seven years of the MCS is carefully considered, to present a clear picture of occupational positions of MCS parents.

In representing relative social advantage of MCS families analysts must make a range of decisions regarding the age at which to utilise parental occupational data and the occupational measures to employ. The impact of these decisions is assessed and advice is given as to the stability of parental occupational information and the efficacy of different occupation based measures for the study of social inequalities over this period of the lifecourse.

Defining vulnerability using a pre-birth contemporary child cohort

Susan Morton, Polly Atatoa-Carr, University of Auckland, New Zealand

Defining vulnerability has become a policy focus within New Zealand, as an integral component of determining strategies to address the unacceptably high rates of child accidental injury and poor health in NZ compared to other OECD child populations.

Defining child vulnerability for a particular population however is not one-dimensional. The factors that contribute to vulnerability are complex, over-lapping and often cluster, accumulate and change over time. Longitudinal data collected from contemporary child cohorts that are broadly generalisable to a particular population can help policy makers to understand what defines vulnerability within their population context. Such data can also identify individual, family, community and societal factors that may confer risk and those that may be protective at different times in the children's life course.

In this presentation we use longitudinal information collected from *Growing Up in New Zealand*, a contemporary pre-birth cohort study of nearly 7000 children, to define patterns of vulnerability for contemporary NZ children. We consider the family and environmental factors that define vulnerability even before a child is born, and how these are either perpetuated or mitigated in the early childhood period. Additionally we consider how these factors are linked to proxy indicators of child health and development.

'Foreground' via 'background'? What matters in the current desistance trajectories debate – a review

Annabel Mullin, Institute of Education, UK

Desistance to crime, the idea that people cease committing crime, is yet not well understood. Current debates address critical conceptual components, temporal and methodological considerations. Desistance is increasingly discussed as a process, comprising emergence, development and cessation rather than a specific event. Focus is often divisive either on structure, biopsychosocial factors, versus agency in criminal action. Both are concerned with understanding and predicting criminality, the former describes "longitudinal socialization processes" leading to criminal disposition whilst the latter is more concerned with action around the criminal event. The interaction between the two approaches is increasingly of interest. In this paper a dual approach is taken, designed at pinpointing the current debate whilst detecting different conceptualisations based on data from the British Cohort study 1970 (BCS70). This paper identifies patterns of criminal behaviour and key determinants of the different trajectories, based on sibship demographics and early psycho-social adjustment, measured at 5, 10 and 16. For 4,725 cohort members, complete self reported (at 16, 30 and 34) criminal justice convictions, divide into four categories: none (n. 3,660), desistance (n. 354), later onset (278) and persistence (n. 433). Elucidation provides more understanding of intra generational influence on criminal behaviour and structure for further research.

4D: Socioeconomic Background and Health

11:00 – 12:30

Family structure instability and weight change across early childhood, childhood, and early adolescence

Shannon Cavanagh, Chelsea Smith, Rob Crosnoe, University of Texas at Austin, USA

Organized by the life course perspective, this study examines the link between family structure instability—parents' partnering, breaking up, and repartnering over time—and children's weight gains and losses from early childhood through adolescence. The hypothesized mechanisms are parental management of nutrition and activity and children's socioemotional functioning, with the former mattering more among young children who are still quite controlled by and dependent on adults and the latter becoming more important as young people age into adolescence and assume more responsibility for their lives. Growth curve models and fixed effects (i.e., within-child) techniques are applied to longitudinal data on a birth cohort of 1,364 children in the NICHD Study of Early Child Care and Youth Development. In general, children experience weight gains when transitioning into family structures besides two-parent married households (especially family structures involving parental

cohabitation), with an increasing tendency as they move towards adulthood. Yet, many of the factors that are strongly connected to family structure change (e.g., decreased income and increased maternal depression) are actually associated with weight loss rather than gain as children move from early childhood to adolescence, suggesting the very different ways in which changing family circumstances can lead to unhealthy weight changes.

Health and poverty dynamics in comparative perspective

Laurie Corna, King's College London, UK; Amanda Sacker, University College London, UK; Diana Worts, Peggy McDonough, University of Toronto, Canada

Health and poverty are interlocking life course processes that unfold over time and within particular social contexts. The comparative welfare states literature highlights between-country differences in social policies and outcomes, yet the interconnections between poverty and health trajectories have received little attention in this regard. We use an innovative strategy—multiple process latent transition models—to estimate individual-level health and poverty dynamics and their interdependence, along with the roles of key covariates, across four distinct welfare state types. Our data cover a 6-year period in the health and poverty histories of working-age adults, and are nationally representative of Great Britain, the US, Germany, and Denmark. At baseline we find that the probability of being poor is significantly greater for those in poor health in all four countries; however, this relationship is more pronounced in Great Britain and the US than in Denmark and Germany. Bi-directional longitudinal relationships between poverty and health are evident for all four contexts, but the strength of these associations varies by country, as does the mediating role of employment status. We discuss these between-country differences in the light of relevant social policies.

Socio-economic inequalities in health trajectories in Switzerland: are trajectories diverging as people get older?

Stephane Cullati, Delphine Courvoisier, Claudine Burton-Jeangros, University of Geneva, Switzerland

Background: Do socioeconomic differences in health status increase as people get older, as hypothesized by the Cumulative Advantaging / Disadvantaging model (CAD)?

Method: We used a random sample of 3665 respondents living in Switzerland (Swiss Household Panel, 2004-2011). Socioeconomic position (SEP) was measured with education, employment status and income. Health outcomes were self-rated health (SRH), body mass index (BMI), depression and medicated functioning. Diverging trajectories by SEP were examined with linear mixed models including an interaction between age and SEP.

Results: Income and employment, but not education, led to diverging health trajectories. Among women, being out of the labour force (vs. working fulltime) was associated with slower increase of BMI and having a high income (vs. low income) with a faster increase of depression. Among men, those having a high income experienced a faster increase of depression, of medicated functioning, and a faster decline of SRH; being out of the labour force was associated with a slower increase of BMI and depression and a slower decline of SRH.

Discussion: In Switzerland, diverging health inequalities by SEP are more frequent among men, suggesting that the CAD model may be not universally pertinent in that context.

Is social origin destiny? Social mobility and cardiovascular risk among US young adults

Katrina Walsemann, Bridget Goosby, Deonna Farr, University of South Carolina, USA

Though long-term effects of childhood disadvantage on adult cardiovascular health are well documented, few studies have investigated whether social mobility mitigates this relationship. To address this gap, we analyzed Waves I and IV of the National Longitudinal Study of Adolescent Health (n=13,426). Using parents' and respondents' educational attainment, we assessed social mobility as consistently disadvantaged (parent and respondent with less than a Bachelor's degree (BA)); downwardly mobile (parent with a BA, respondent with less than a BA); upwardly mobile (parent with less than a BA; respondent with a BA); and consistently advantaged (parent and respondent with a BA). Measured diastolic and systolic blood pressure were used to categorize respondents as normotensive, prehypertensive, and hypertensive. Upwardly mobile and consistently advantaged persons had lower prehypertension risk (OR=0.85 and OR=0.80, respectively) compared to persons consistently disadvantaged. Only persons consistently advantaged had lower hypertension risk (OR=0.66). Waist

circumference emerged as a key pathway through which social mobility affected prehypertension and hypertension risk and fully attenuated the effects of social mobility; the upwardly mobile and consistently advantaged had significantly smaller waist circumferences than the consistently disadvantaged. Our results suggest that upward mobility may be one avenue for addressing the long-term health impacts of childhood disadvantage.

Keynote **Health connections across the lifecourse**

13:30 – 14:30

Mark Hayward - *Professor of Sociology, Centennial Commission, Professor in the Liberal Arts and Director, Population Research Center at the University of Texas at Austin. Senior Fellow of the Sealy Center on Aging, School of Medicine, University of Texas Medical branch*
Chair: Elizabeth Cooksey, The Ohio State University

Abstract unavailable

SYMPOSIUM SESSION 2

S2A Convenors: John Bynner and Harvey Goldstein, UK

Chair: Robert Erikson, University of Stockholm, Sweden

14:30 – 15:45

Shaping and delivering the longitudinal research agenda: how do researchers and policy-makers interact and how are decisions made? The case of large scale birth cohort studies

Large-scale multidisciplinary longitudinal studies usually require major strategic investment from government to initiate and sustain them. Motivated in part by the history and current difficulties of the US National Children's Study (NCS), this session will consider how the research agenda is shaped and negotiated as it proceeds or stalls. How are differences of approach and priority addressed and managed? What are the ongoing processes of communication between researchers and policy-makers on such issues as sample design, recruitment, coverage, data coverage, data protection, innovation and management of risk that are crucial to maximising the study's scientific and policy impact? What public perceptions of and media engagement is there with these questions and what are their effects? We aim to address these and other questions through the examination of specific experiences in major longitudinal studies in different countries from which we believe both policymakers and the longitudinal research community have much to learn.

The session will draw out these lessons using a panel format in which the experience of three contrasting large scale birth cohort studies will be presented from the perspective of experts with specialist knowledge of each of them. Each will begin with a 10 to 15 minute presentations followed by interchanges between them and with the audience to open up wider discussion and debate.

The case of the U.S. National Children's Study

Daniel Keating, University of Michigan, USA

The unmet challenges for a productive National Children's Study in the U.S. are many, and have been well documented (e.g., Kaiser, 2013; Paneth, 2013). The timeline alone indicates the magnitude of the problem: funds began flowing to "vanguard" study centers in 2005, among the 100+ Study Center locations designed to yield a nationally representative sample of pregnancies and births. Contracts with many Study Centers (including the Michigan Alliance for the NCS) ensued, but were cancelled by 2013, in a shift from population-sampling to institution-based recruitment. Owing to concerns raised, the IOM has begun a review of NCS.

Although the future of the NCS is uncertain, important lessons can be identified, most easily summarized as a set of tensions:

- Who will participate, and how are they recruited and retained? The key tension is between a population representative sample versus logistically-driven recruitment, correlated with tensions between survey and clinical scientists, and between centralized versus local engagement of participants.

- Is the study design hypothesis-driven versus a data-collection platform to be used as a national laboratory for child health and development? Even if “only” a platform, decisions on what data will be collected are essential, ruling in/out future research questions.
- Who holds decision-making power, especially between scientific investigators and policy-makers/funders? It is easier to say “shared” than to implement this, and lack of balance in either direction creates difficulties.

The case of Life Study

Carol Dezateux, University College London, UK

Life Study builds on the exceptional legacy of UK birth cohort studies and has been designed to ensure its future as a powerful and unique cross-disciplinary research resource well into the 21st century. An ambitious and innovative hypothesis-led design was developed by a scientific leadership team drawn from the biological and social sciences in response to a tender awarded in open peer-reviewed competition. As the first UK-wide birth cohort study to recruit during pregnancy, rich and detailed information and biological samples will be collected from up to 70,000 babies and their families before birth, at birth and across the first year of life with further follow up through childhood and into adult life. A national probability sample of an additional 20,000 babies will be recruited after birth and followed similarly. Together these samples will comprise an integrated data resource enabling investigation of the interplay between social, environmental and biological influences starting in early life while enabling inference to the UK population.

Life Study will start recruitment in 2014. To date five elements have emerged as important in supporting decision-making and delivery to this point:

- **Effective cross-disciplinary scientific leadership** in developing the core design and protocol, assured in turn by peer review. This defines the scientific vision and scope against which any operational decisions can be referenced.
- A **shared strategic vision** across government, funders and researchers is essential to achieve the long term financial investment required to initiate and sustain a large scale study and the related infrastructure required to realise its benefits.
- A **public health service** free at the point of use has underpinned successful delivery of pregnancy cohorts in the UK and other countries enabling access to support from health professionals and health care systems. The UK National Health Service is a highly trusted public service which provides unrivalled opportunities to recruit women in pregnancy.
- A **governance framework** that supports clarity and simplicity of decision-making at the appropriate level; ensures fidelity to the original scientific vision and scope; and provides a flexible structure for managing innovation and delivery to time, quality and budget.
- **Participant involvement at all stages** is fundamental to the ethical and successful recruitment and retention of participants, anticipation of the implications for participants of risks and uncertainties inherent in innovation, and management of respondent burden and policies on feedback.

The case of the French Elfe Study

Marie-Aline Charles, Elfe, Ined-Inserm-EFS joint unit, France; Henri Léridon, former director and Elfe scientific advisor

Elfe (Etude Française Longitudinale depuis l'Enfance) is the first national birth cohort in France. Its “gestation” lasted 5 years before the first recruitments occurred in 2011: 18300 families have been included at the child's birth over one year. The second year follow-up is currently ongoing.

Elfe results from the merge, for cost reasons under the pressure of policy-makers, of two cohort projects: the first was a proposal of the Environment Safety Agency in the context of the first National Health and Environment

Plan; the second came from social sciences scientists who pointed out the lack of longitudinal data in France, especially on families, to study the dynamics of social processes. Interactions between researchers and policy-makers thus started at the government's initiative for the first project and at the researchers initiative for the second. As prerequisite for the initial funding of the cohort, researchers had to agree on a common protocol and especially on the sensitive issue of representativity. Next, policy makers and researchers interacted to find solutions for long-term funding of the cohort (not possible through the classical 3-4 yr project funding systems), to agree on the governance of the cohort and its scientific and budgetary evaluation. Policymakers are represented in the steering committee of the Elfe study. However, policy-makers, as well as researchers, are diverse. Coordinators of the cohort have to cope with different and sometimes contradictory requests. The media, considered as a reflection of the general public expectations and opinion, but also used as a power, is another important player. Elfe researchers as well as other French epidemiologists are currently pushing to change the French law on confidentiality of personal data that lock the matching with administrative data files.

S2B Chair: Mette Lausten, The Danish National Centre for Social Research, Denmark

14:30 – 15:45

Longitudinal surveys from Denmark

The Danish Longitudinal Survey of Youth (DLSY)

Lisbeth Trille Loft, The Danish National Centre for Social Research, Denmark

The Danish Longitudinal Survey of Youth (DLSY) is a long-term panel study of a nationally representative sample of 3,151 Danes born in 1954. The respondents were first interviewed in 1968 when they were 14 years old. The DLSY respondents, and their parents, have been followed ever since and have been interviewed in 1969, 1970, 1971, 1973, 1976, 1992, 2001, and 2004. In 2010 all children of the original DLSY sample members were interviewed and thus a third generation of respondents was added to the DLSY program. The DLSY provides a unique opportunity to study intergenerational mobility, transfers, and relations and includes information on issues such as social background, cognitive ability, educational attainment, occupational careers, income, family formation, attitudes, and aspirations.

The Danish Longitudinal Survey of Children in Denmark (DALSC)

Mette Lausten, The Danish National Centre for Social Research, Denmark

The Danish longitudinal Survey of Children born in 1995 (DALSC) is the first longitudinal study in Denmark aiming to monitor children from birth to adulthood, allowing research into the relationship between living conditions in childhood and subsequent life as an adult. DALSC consists of three subsamples: (1) 6,000 children of Danish mothers; (2) 1,120 children born in Denmark by non-Danish citizenship mothers; and (3) 1,650 children who are or have at one time been placed in out-of-home care environments. Five waves of data collections have been carried out since 1996. Next wave is planned to be collected in spring 2014 before they turn 19. Mothers and other caregivers are used as respondents in the first three waves through standardized face-to-face interviews. From age 11 the children have been face-to-face interviewed or have answered self-completed web-based questionnaires.

Children and young people in Denmark

Mai Heide Ottosen, The Danish National Centre for Social Research, Denmark

Children and Young People in Denmark is a new longitudinal panel study on child wellbeing. The panel started in 2009 and includes five age groups (age 3, 7, 11, 15, 19) to cover childhood and adolescence as a whole. The panel is going to be repeated every fourth year including new 3-year-olds in every wave. Second wave is taking place in spring 2013, comprising a gross sample of more 11,000 children. The study observes child wellbeing in Denmark by using internationally acknowledged social indicators, developed for EU and UNICEF. To obtain a detailed picture of the specific Danish situation, we have added a broad range of supplementary indicators. More than 100 indicators of child wellbeing are used, covering 8 domains.

S2C Chair: Adriaan Hoogendoorn, GGzingeest, Netherlands

14:30 – 15:45

Measuring mental health transitions in longitudinal cohort studies**Studying the course of depression and anxiety from longitudinal mental health data with attrition***Adriaan Hoogendoorn, Brenda Penninx, Jan Smit, VU Medical Center, Netherlands*

The Netherlands Study of Depression and Anxiety (NESDA) is a longitudinal study that provides data over a period of eight years on depression and anxiety. Such data offer the opportunity to study the course of these disorders: although remission occurs, the course of depression and anxiety is typified by recurrences and chronic course.

Studying the course of depression and anxiety is complicated by the fact that some respondents drop out of the study, reducing the sample size from wave to wave. Many efforts have been made to keep attrition as low as possible, but still attrition seems problematic since respondents with poorest health dropped out with a relatively high rate.

Several approaches exist to deal with attrition: completer analysis, last observation carried forward, single imputation (cold deck, hot deck, regression models, EM), multiple imputation, weighting techniques and the use of mixed methods for longitudinal data. How feasible are these methods, do they lead to different conclusions, and if so, are there any clues to prefer one method over the other in describing the course of these disorders.

Recall of suicide attempts: consistency and determinants in a large mental health study*Merijn Eikelenboom, Jan Smit, Aartjan Beekman, Ad Kerkhof, Brenda Penninx, VU Medical Center, Netherlands*

A lifetime history (LTH) of suicide attempts (SAs) is frequently assessed in mental health surveys. However, little is known about the reliability of assessing an LTH of SA. This study examined the consistency and its determinants of reporting an LTH of SA in a large cohort of persons with a history of depression and/or anxiety. Data are from the baseline and 2-year assessments of the Netherlands Study of Depression and Anxiety. Persons with a CIDI-based lifetime depressive and/or anxiety disorder (N=1973) constitute the study sample. An LTH of SAs was assessed at baseline and at 2-year follow-up. Of the persons who reported at either interview an LTH of SAs, more than one-third did not report this consistently at both interviews. Moreover, indications were found for more consistent recall among persons with a higher number of SAs and among persons with current (severe) psychopathology as compared to those with remitted or less severe current psychopathology. Our results showed that even a salient topic like a history of SAs is prone to recall error, and that current psychological state influences recall of an LTH of SAs.

Treatment effect trajectories in time series of mood disorders*Stasja Draisma, Victor Buwalda, Jan Smit, VU Medical Center, Netherlands*

In psychiatry, routine outcome monitoring of treatment becomes increasingly important. Outcomes are obtained by means of either self-report questionnaires from patients or by clinician judgments. In the present study, data of 176 patients were available who followed treatment 'as usual' for mood disorders (depression and anxiety) in an outpatient clinic. Treatment duration varied from about 6 to 16 weeks. Patients filled out two different questionnaires (the OQ45 and BSI) and clinicians provided two judgments (GAF scores and HoNos scores). Clinical significant change (CSC) could be calculated during the series of assessments. Some patients remained in treatment up to 8 assessments, while others only delivered two outcomes (start and end scores). In this paper, two research questions are addressed:

1. How can different treatment effect trajectories be characterized? Are worse start scores responsible for slower recovery and thus more assessments, or are other variables (demographic, clinician, medicine use et cetera) responsible for differences?
2. What is the relation between clinician and patient judgments? Can successful treatment, e.g. ending of the therapy best be predicted by patient or by clinician judgments?

S2D Chair: Mary Clare Lennon, City University New York, USA

14:30 – 15:45

Children in context: families, housing and the economy**The effects of the Great Recession on Parenting: evidence from the Fragile Families and Child Wellbeing Study***Will Schneider, Jeanne Brooks-Gunn, Jane Waldfogel, Columbia University, USA*

This paper examines the effects of the Great Recession on four aspects of mothers' parenting: (1) physical and psychological aggression towards children, (2) warmth and monitoring, (3) parenting activities and closeness, and (4) parenting stress. The study draws on the 9- and 5-year waves of the Fragile Families and Child Wellbeing Study, which took place between January 2003 and February 2010, and include the period of the Great Recession (December 2007-June 2009) as well the period before and after the recession. The study uses three distinct measures of the Great Recession: consumer confidence (using data from the Consumer Sentiment Index), unemployment rates (using data from the Bureau of Labor Statistics), and home foreclosure rates (using data from the Mortgage Bankers Association). We find that the Great Recession is associated with increased risk of maltreatment, as well as increased parenting activities and decreased monitoring, and that worsening consumer confidence is the primary macro-economic pathway.

The effects of the Great Recession on intimate partner violence*Daniel Schneider, University of California, Berkeley, USA; Kristen Harknett, University of Pennsylvania, USA; Sara McLanahan, Princeton University, USA*

In the United States, the Great Recession has been marked by severe shocks to unemployment. In this study, we combine longitudinal data from the Fragile Families and Child Wellbeing Study (FFCWS) with BLS data on local area unemployment rates to examine the relationship between labor market distress and romantic relationship status and quality among mothers. We find that worsening unemployment increases the risk that mothers are in violent or controlling marriages relative to non-violent/controlling marriages. We also find some evidence that mothers experiencing worsening unemployment are more likely to be in high quality cohabiting unions rather than marriages. These effects are most pronounced among whites and those with more than a high school education. Worsening unemployment significantly raised the risk that white mothers and mothers with post-secondary or college education would be in violent/controlling marriages rather than high quality marital unions.

Doubling up as a safety net*Natasha Pilkauskas, Irwin Garfinkel, Columbia University, USA; Sara McLanahan, Princeton University, USA*

Low-income families rely on a number of support systems, both public and private, to make ends meet. Doubling up is one very common source of private support. Using longitudinal data from the Fragile Families and Child Wellbeing study (N~4898) we examine the economic importance of doubling up as a source of private support among families with young children. We investigate the frequency of doubling up over time, estimate the economic value of doubling up, study the association between unemployment and doubling up, and compare the increase in the value of doubling up to the increase in the value of public cash transfers in response to the Great Recession. We find that doubling up is a very important form of private support; nearly half of mothers have doubled up by the time their child is 9-years old, and the value of doubling up is about \$3500 per year. We find that unemployment is associated with increased odds of doubling up and that during the Great Recession, the increase in the value of the private safety net of doubling up was xx% as large as the increase in public cash and near cash transfer benefits.

Housing tenure and residential mobility among children in the US and UK

Mary Clare Lennon, Anthony Buttaro, The Graduate Centre – CUNY, USA; Ludovica Gambaro, Heather Joshi, Institute of Education, UK

One important difference between the US and UK is the level of social welfare afforded by the state. The UK has six times the number of social (public) housing units as the US but only one-sixth of the population size. In this study, we use longitudinal data from the Fragile Families and Child Wellbeing Study in the US and the Millennium Cohort Study in the UK to investigate the association between housing tenure and residential mobility among young children. We find that, in both countries, home-owners move less often, particularly in the UK, while children who live in market rental housing have the greatest propensity to move. However, market rental is far more common in the US, contributing to US children's higher residential mobility. In addition, children in public housing in the US show more instability than children in social housing in the UK. Finally, our results show that in the face of changes in family or employment circumstances, such as family break-up or job loss, children in the US are more mobile and this can be partly explained by the more marginal role of public housing in the US relative to the UK.

PARALLEL SESSION 5

5A: Employment

16:15 – 18:00

The impact of employment transitions on health and well-being. Evidence from German panel data

Michael Gebel, Jonas Voßemer, University of Mannheim, Germany

Previous research has found that unemployment impairs individuals' subjective health and well-being. However, less attention has been paid to the alleviating health effects of re-employment. Hence, this article simultaneously examines transitions into and out of unemployment to address the question of whether or not it is a "scarring event" in individuals' life courses. While sociological research on the pecuniary "scar effects" of unemployment suggest permanent reductions in health and well-being, too, psychological set point theory argues that loss of well-being due to negative life events is only of transitory nature. Therefore, comparing the effects on health and well-being allows us assessing their varying sensitivity to employment transitions. Besides, we examine the differential vulnerability of workers at different stages of life. From a life course perspective, we expect different effects for workers in their early career compared to those in their mid-career. For the empirical analyses, we draw on longitudinal data from the German Socio-Economic Panel covering a period of 28 (1984-2011) years. In order to obtain direct causal effects of employment transitions on health and well-being, we apply a dynamic difference-in-difference propensity score matching estimator. This allows us to account for both selection on observables and (time-constant) unobservables.

The relationship between child limiting long-standing illness and maternal employment: longitudinal findings from the UK Millennium Cohort Study (MCS)

Steven Hope, Anna Pearce, Catherine Law, University College London, UK

The presence of a child with a limiting long-standing illness (LLI) in a family is likely to have implications for parents' ability to initiate and maintain employment. We investigated the impact of child LLI on patterns of employment up to age 7 among mothers, traditionally the main carers.

Using data from approximately 11,000 MCS children, we examined the cross-sectional relationship between LLI and maternal employment status at three data collection sweeps (ages 3, 5 and 7). Longitudinal analyses were used to further examine the relationship between LLI and employment over time.

The prevalence of reported child LLI in the MCS rose from 3% to 6% between ages 3 and 7. At all three sweeps, maternal employment (full or part-time) was more likely if the child did not have a LLI. Longitudinal analyses showed a greater risk of continuous non-employment and disrupted employment (transitions into or out of the labour market) associated with child LLI. These associations remained after adjustment for confounders.

Having a child with a LLI potentially influences parental employment opportunities. We will demonstrate how results vary by potential modifying variables, such as family structure, household income and employment characteristics, and possible explanations and policy implications will be discussed.

Boomer and generation x managers and employees at risk: evidence from the Work, Family and Health Network Study

Jack Lam, Phyllis Moen, Shi-Rong Lee, Erin Kelly, University of Minnesota, USA

How are macro-level dislocations in the global risk economy shaping the micro-level experiences of today's managers and non-supervisory employees, and are members of the older US Boomer cohort particularly at risk of job insecurity? This paper draws on data from a study of an organization to describe the effects of an impending merger for two different age-cohorts of managers and non-supervisory employees: Boomers (born 1946-1964) and Gen Xers (born 1965-1980). We combine qualitative (N=102) and three waves of survey data (N=433) to investigate US workers' assessments of their job insecurity and subsequent employability in the "new economy," examining how both managers and employees perceive and experience the merger announcement. Overall, we find members of the Boomer cohort reporting higher insecurity and lower expectations of future employability. This reflects their dashed expectations about the traditional employment contract (equating seniority with security), along with concerns about age discrimination and their limited options. Some policymakers suggest postponement of retirement in light of the growing welfare costs associated with population aging. But job insecurity and concerns about employability clearly influence the ability and desire of older workers to remain in the labor market, given the constellation of constraints and limited opportunities they confront.

5B: Academic Involvement and Educational Attainment

16:15 – 18:00

The effects of social origins and cognitive ability on educational attainment: evidence from Britain and Sweden

Erzsebet Bukodi, John Goldthorpe, Nuffield College Oxford, UK; Robert Erikson, University of Stockholm, Sweden

Much research has been undertaken into the effects of children's social origins on their educational attainment. The present paper breaks new ground in the following ways. First, we decompose 'social origins' into parental social class, parental social status and parental education – our previous research indicating that these cannot be treated as 'interchangeable indicators' of social origins but exert independent and distinctive effects on children's educational attainment. Second, we include in our analyses measures of children's cognitive ability taken at relative early ages, before the beginning of their secondary education. Third, for both countries we compare the experience of members of successive birth cohorts - three for Britain and four for Sweden - who completed their education over the second half of the twentieth century. Two foci of interest in our analyses of children's educational attainment are on the changing effects over time of parental class, status and education *in relation to* the changing effects of cognitive ability; and on differences in this regard between Britain and Sweden, countries that are generally believed to have had contrasting histories so far as the reduction of social inequalities in education is concerned.

Social capital at home and at school: long term effects on academic attainment

Mikaela Dufur, John Hoffmann, David Braudt, Brigham Young University, USA; Toby Parcel, North Carolina State University, USA

A relatively neglected problem is how individuals derive social capital from more than one context and the extent to which they benefit from the capital in each. While recent research suggests that adolescent social capital built in the family and at school have differing effects on academic achievement, little is known about whether this social capital has long-lasting effects. Using a life course approach, we examine whether social capital created at home and at school have lasting effects on academic achievement beyond the setting in which they are created by examining the relationships between family and school social capital on educational attainment at three time points: high school completion, college enrollment, and college completion. We hypothesize that youth capital from each

context promotes achievement, but that the persistent effects of family social capital will be stronger than school social capital effects. We utilize data from the National Longitudinal Education Study and the National Study of Adolescent Health and structural equation modeling.

University access for disadvantaged children: a comparison across English speaking countries

John Jerrim, Institute of Education, UK; Anna Vignoles, University of Cambridge, UK; Ross Finnie, University of Ottawa, Canada

In this paper we consider whether certain countries are particularly adept (or particularly poor) at getting children from disadvantaged homes to study for a bachelor's degree. A series of university access models are estimated for four English speaking countries (England, Canada, Australia and the United States) which include controls for comparable measures of academic achievement at age 15. We not only consider access to any university but also admission to a 'selective' institution. Our results suggest that socio-economic differences in university access are more pronounced in England and Canada than Australia and the United States, and that cross-national variation in the socio-economic gap remains even once we take account of differences in academic achievement. We discuss the implications of our findings for the creation of more socially mobile societies.

Personal control and post-secondary educational involvement from the late teens to middle adulthood: a 25-year longitudinal study

Dayuma Vargas Lascano, Harvey Krahn, Nancy Galambos, Margie Lachman, University of Alberta, USA

Previous research shows that a stronger sense of personal control over one's own life is linked with better physical and psychological health and improved socioeconomic outcomes (Lachman & Weaver, 1998; Mirowsky & Ross, 1990). Educational attainment has been identified as a predictor of age differences in personal control (Mirowsky & Ross, 2007). However, there are few longitudinal analyses of the life course trajectory of personal control and its association with post-secondary education (PSE). This paper examines intraindividual change in personal control in a sample of 971 high school students surveyed seven times over 25 years, from the late teens (1985) to middle adulthood (2010), and analyzes the covariation between personal control and PSE involvement (years of full-time post-secondary education) over this period. Sense of personal control changed in a non-linear fashion across 25 years. Compared to participants with at least one parent with a university degree, those from non-university families showed lower baseline levels of personal control and less increase in personal control over the transition to middle age. Personal control had a positive effect on PSE involvement and not vice versa. Implications of patterns of change in personal control across time and their links to PSE involvement are discussed.

5C: Transitioning to Adulthood

16:15 – 18:00

Longitudinal associations of sleep quantity and depressive symptoms from adolescence through young adulthood in a US national sample

Julie Maslowsky, University of Wisconsin, USA

Sleep is essential for healthy cognitive and emotional function. Sleeping less is correlated with elevated depressive symptoms (DS) during adolescence, but research is lacking on a) the causal direction, and b) the consistency of the association in adolescence and young adulthood. We address these questions using the US National Longitudinal Study of Adolescent Health.

Structural equation modeling was used to test directionality of the association of nightly sleep duration and DS. Four models were compared: 1) continuity model: model continuity in sleep and DS with no effects between them, 2) sleep-driven model: effects of sleep on DS only, 3) depression-driven model: effects of DS on sleep only, 4) full model, reciprocal effects between DS and sleep.

The depression-driven model fit best ($X^2(13)=80.57$, CFI=.97, TLI=.92, RMSEA=.03). Lower Wave 1 DS led to more sleep at Wave 2 ($B=-.20$, $p<.01$); conversely, lower Wave 2 DS led to less sleep at Wave 3 ($B=.24$, $p<.001$). There were no prospective effects of sleep on DS. This study is the first to assess directionality in the association of DS and sleep quantity across adolescence to young adulthood in a national sample, finding that DS drives sleep quantity. Implications regarding etiology of depression and sleep disturbance are discussed.

How adolescents' cognitive and non-cognitive skills shape their later life course

Chandra Muller, Michelle Frisco, University of Texas at Austin, USA

This paper will present early results from a new study 2013 follow-up of the High School and Beyond sample, a cohort of about 15,000 high school sophomores first interviewed in 1980 and followed up periodically through 1992. The study has especially rich measures of educational experiences and cognitive and non-cognitive skills. Our very early results on pretest data involve a study of migration and a study of mortality. Data will be collected shortly and the presentation will use the outcome that is most interesting.

Our preliminary analysis of migration patterns suggest that education, cognition and non-cognitive skills each independently and positively predict people's propensity to move in early and mid adulthood. This migration is probably related to pursuit of economic opportunities. However, there are important gender differences in this relationship whereby we observe the positive relationship for men and a curvilinear relationship for women, where it is the most and least talented women who are more likely to move, suggesting a different calculation for women. We also have early results predicted mortality that show that in general educational attainment and cognitive skills are negatively related to mortality. However, for African American men, we find an independent estimated negative effect of non-cognitive skills on mortality.

The effects of transition to adulthood on subjective health during the Great Recession. A longitudinal study with data from the German Socio-Economic Panel

Timo-Kolja Pfortner, Katharina Rathmann, Matthias Richter, University of Halle-Wittenberg, Germany

Introduction The Great Recession (GR) in 2008 is likely to have health consequences for young people which need to organise their lives towards adulthood. Our study will analyse the effect of transition to adulthood on health before and after the Great Recession.

Method The analyses were based on the German Socio-Economic Panel taking into account 17-35 years old individuals between 2004 and 2010. Individual health status were measured by subjective health status. Further, activity and relationship transition and leaving parental home were considered to cover transitions to adulthood. Descriptive analyses and panel regression techniques were applied including a dummy differentiating the health effects of transitions before and after the GR.

Results Preliminary descriptive results indicate a decrease in health after the GR. Subjective health diminished for those living in uncertainty as unemployed, marginally employed and not active people. A similar trend was found for younger individuals enrolled in general school or vocational (re-)training. Regarding the relationship transition, the health status worsened in almost all groups after the GR.

Implications our preliminary results indicate that individual health of different transitional groups has decreased after the GR. However, panel regression will show, whether our findings are of significance and will take a specific focus on the process of transition.

Re-evaluating the 'subjective weathering hypothesis': an examination of young adult identities in the stress process

Janel Benson, Colgate University, USA

Stress exposure in early life is linked to "subjective weathering" or the development of precocious adult age identities. This study examines whether an accelerated young adult life course (ages 18-22) contributes to the stress process, leading to lower levels of mental health (ages 25-29). In doing so, I use a developmental approach to young adult identity, reflecting both subjective age and psychosocial maturity. Using data from the Add Health, I first used a person-centered approach to identify four types of adult identity, jointly defined by subjective age and level of psychosocial maturation. I then examined the implications of these identity types on subsequent depression using ordinary least squares regression. The results show that subjective weathering alone does not lead to depression; the critical issue is the level of psychosocial maturity that accompanies an advanced age identity. Compared to other profile types, those with older age identities and low psychosocial maturation have the highest levels of depression, even controlling for early life stress exposure and coping resources. In contrast, those with older age identities and high maturation exhibit considerably low levels of depression. These results demonstrate that psychosocial maturity can buffer the negative effects "subjective weathering" or growing up too quickly.

5D: The Interplay of Family Decisions and Children's Lives

16:15 – 18:00

The contemporary child care environment for infants: evidence from Growing Up in New Zealand

Polly Atatoa-Carr, Susan Morton, Centre for Longitudinal Research: He Ara ki Mua, New Zealand

Growing Up in New Zealand is a contemporary population-based longitudinal study following the lifecourse development of close to 7000 children in the context of their family/whanau and broader environment. Importantly, since the developmental phase of this study, a primary aim has been the translation of evidence gained for policy relevance and this study provides the ability to evaluate the reach and impact of existing policies in New Zealand, and the equity of their impact. A key policy focus in the current New Zealand environment is the encouraged involvement in early childhood education, and support for parental return-to-work.

This presentation will provide information on the intentions for child care arrangements in pregnancy and the actual child care environment to 9 months of age for this diverse cohort. This is an unique opportunity to explore the realities for families with respect to access to formal and informal care arrangements in infancy, and to describe the differences in child care provision according to key aspects of family life such as family structure, ethnicity and socioeconomic status. The presentation will also explore the implications of these findings for the shaping and evaluation of policies in New Zealand to optimise the support for children and their whānau.

Day care (quality) and differences in children's health and personality characteristics

Peter Frauke, German Institute for Economic Research (DIW Berlin), Germany

Day care attendance is an early investment in children's human capital. Yet studies examining the effect of day care participation on later outcomes such as secondary schooling or non-cognitive skills identify mixed results. In the economic literature day care attendance has positive and negative effects on educational outcomes. These contradictive results might be due to unobserved heterogeneity of day care centres. So far day care quality has been hardly ever examined in the economic literature. But since day care facilities vary in terms of structural quality, e.g., child-staff-ratio or education of day care teachers, day care quality might distort the association between day care attendance and child outcomes. Combining data from the German Socio-Economic Panel Study and regional data on day care quality from the "Kinder- und Jugendhilfestatistik", the paper investigates differences in children's outcomes between age three and six. Using conditional difference-in-differences matching potential effects of day care (quality) on changes in children's health and personality characteristics are assessed. Health changes are measured as ear infections or eczema, and differences in personality characteristics depict changes in children's ability to concentrate and to comprehend. Results indicate that structural quality explains part of the variation in children's health and personality characteristics.

Modelling the relationships between household residential mobility and childbearing over the life course in Australia

Michele Haynes, Arturo Martinez, University of Queensland, Australia

Residential mobility often occurs as a result of disequilibrium between current housing status and changing housing needs throughout the life course. These housing needs are shaped by life course events such as leaving the parental home, the birth of children, union formation or family dissolution and seizing employment opportunities. We focus on examining whether childbearing in single and couple families is associated with the propensity to move using ten waves of longitudinal data from the Australian HILDA panel survey. The study also examines residential mobility into disadvantaged neighborhoods. We assess the feasibility of new residential mobility models to account for the unobserved intra-household bargaining process that transpires when a household makes a decision to relocate and conclude that these more flexible models better capture the household level variability. We find that couple households are significantly more likely to move residence with pregnancy and birth of a child but are less likely to move as children become older. In contrast, single parents are less likely to move residence with pregnancy and birth. Couples are significantly more likely to move into non-disadvantaged neighborhoods, while single parent households are less likely to move to a non-disadvantaged neighborhood around the birth of a child.

Support to previously cared-for children in Denmark

Mette Lausten, The Danish National Centre for Social Research (SFI), Denmark

It is generally known that previously cared-for children suffer disadvantages in later life. Based on the longitudinal survey on Children in out-of-home-Care (CiC), an extension to the Danish Longitudinal Survey of Children (DALSC), covering all children born in 1995, who currently are or formerly have been in care in Denmark, this paper investigates whether support for previously cared-for children is lacking when they return to their family.

The surveys contain questionnaires to the care environment and the mothers from age 7 as well as the children from age 11. As the survey also contains previously cared-for children we are able to follow children from foster or residential care to home. In addition DALSC contains children receiving in-home social support.

We find significant differences in behaviours according to health, risk taking (through DAWBA), wellbeing (through the SDQ), and school attention between children receiving in-home social support, cared-for children and children previously cared-for. This paper explores if these results relate to the support or lack of support given to previously cared-for children and their mothers, when the children are back home again, both from the child's and from the mother's point of view.

Day 3 – Wednesday 25th September 2013

SYMPOSIUM SESSION 3

S3A Chair: Christian Maggiori, Dario Spini, University of Lausanne, Switzerland

09:15 – 10:30

At risk situations and well being: the impact of personal resources

Unemployed professional trajectories – evidences from the first two years of a Swiss longitudinal study

Christian Maggiori, Claire Johnston, Jérôme Rossier, NCCR-LIVES, University of Lausanne, Switzerland

Based on the two first waves (T1 and T2) of a seven-year longitudinal study on professional trajectories during adulthood, this presentation focuses on the career paths of unemployed individuals. More precisely, adopting a longitudinal perspective we analyze the role and impact of personal characteristics and resources (such as career adapt-abilities and job search support) on the likelihood to reenter in – or definitely quit - the job market for unemployed participants. Furthermore, the stability of well-being related outcomes (e.g. affectivity) and personal attitudes (i.e., justice beliefs) will be considered in relation to professional trajectories.

The sample consists of 400 adults unemployed in T1 living in Switzerland. Unemployment and job search characteristics are assessed using study specific developed items. Individual characteristics and resources are measured using, for example, the Career Adapt-abilities scale (Savickas & Porfeli, 2012) and the Belief in a Just World questionnaire (Dalbert, 1999). Well-being outcomes are assessed with - among others - Positive and Negative Affect Scales (Mroczek & Kolarz, 1998). Multinomial logistic regressions will be conducted to assess the effect of individuals' characteristics and strategies on professional trajectories. Possible changes in justice beliefs and well-being in relation to the professional situation will be assessed via multilevel models.

Coping with stressful situations in the professional domain

Véronique Eicher, Christian Staerklé, Alain Clémence, Marlene Carvalhosa Barbosa, Mouna Bakouri, NCCR-LIVES, University of Lausanne, Switzerland

Within the framework of the NCCR-LIVES, we are investigating the successful and unsuccessful regulation of stressful situations of young adults in the professional domain. In this study, we are focusing on young individuals' positive attitude towards life and how this may be maintained in the face of stressful events. More specifically, we assume that resources like perceived self-efficacy and social support may buffer the negative impact of educational and professional stress on young adults' well-being. We test this assumption with data from the TREE survey, a longitudinal follow up of young adults entering post-compulsory education or the labour market in Switzerland. Preliminary analyses on 17 to 20 year olds show that, positive attitude towards life generally tends to decline over the four years. Additionally, stress does lead to less well-being, but this effect can be buffered by some resources (e.g., self-efficacy). Implications of these findings are discussed.

Social group participation as a coping strategy after the loss of an intimate partner: well-being in the second half of life

Dario Spini, Davide Morselli, Eva van Rhee, NCCR-LIVES, University of Lausanne, Switzerland

Losing a long-term intimate partner in the second half of life, through separation or death is one of the biggest stressor in adult life. Literature shows how active participation in social groups can be beneficial for coping with critical life events. Social groups function as active resources that people use to maintain or regain their well-being. The aim of this study is to test the effect of identifying with- and participating in social groups on subjective well-being after the loss of an intimate partner. The first wave of an on-going longitudinal study on developmental dynamics and differential effects of the loss of an intimate partner in the second half of life (Hutchinson et al., 2012) was used. The sample consisted of 1107 divorced individuals aged 40-69, 569 widowed individuals aged 60-89 and 1085 married individuals aged 40-89. Results show that individuals who lost a partner and who participate in one or more social groups report a higher subjective well-being than individuals who don't participate in social groups and individuals who feel well integrated in the important groups they participate in report an even higher well-being than individuals who don't feel integrated.

Shattered beliefs: how to cope when the world is not a just place?

Rachel Fasel, Dario Spini, NCCR-LIVES, University of Lausanne, Switzerland

Collective events like war traumas, economic or political exclusion can have long term effects on well-being. This communication will evaluate some proposals concerning the buffering effects of belief in a just world (BJW) on the negative effects of traumas on well-being. Dalbert (2001) defends the idea that the BJW remains stable across time and situations. It serves an adaptive function fostering a sense of well-being in everyday life and in the face of negative life events. Based on a sample of 2254 young adults living in ex-Yugoslavia (TRACES: Transition to adulthood and collective experiences survey; Spini, Elcheroth & Fasel, 2011), regression analyses showed that negative war events (wounds, member of family killed, house damaged, etc.) and economic (unemployment, homeless, etc.) or political exclusion (discrimination, rights limited, etc.) had indeed a negative effect on satisfaction with life. These events had an important negative effect on BJW. Mediation models showed that deleterious effects of negative life experiences on well-being were mediated by a positive effect of the BJW on well-being. These results indicate that past models concerning BJW do not yet enable a full understanding of the protective functions of the BJW in contexts in which collective traumatising events have been experienced.

S3B Chair: Jos Twisk, VU University, The Netherlands

09:15 – 10:30

Methodological challenges in longitudinal data analysis

The use of multilevel analysis for longitudinal data: a brief introduction

Jos Twisk, VU University, The Netherlands

In this presentation a brief introduction will be given regarding the use of multilevel analysis for longitudinal data. The basic principles behind a random intercept and random slopes will be explained and by using a simple example, and the interpretation of the regression coefficients obtained from a longitudinal multilevel analysis will be discussed.

A new approach to analyse longitudinal epidemiological data with an excess of zeros

Alette Spiensma, VU University, The Netherlands

The objective of this presentation is to introduce the relatively 'new' method of two-part joint regression modelling in longitudinal data analysis for outcome variables with an excess of zeros, and to compare the performance of this method to current approaches. Within an observational longitudinal dataset, we will compare three techniques; two 'standard' approaches (a linear multilevel model, and a Poisson multilevel model), and a two-part joint multilevel model (a binomial/Poisson mixed distribution model), including random intercepts and random slopes. Model fit indicators, and differences between predicted and observed values will be used for comparison. This presentation will show that a two-part joint multilevel model is a more appropriate method to analyse longitudinal data with an excess of zeros compared to a linear multilevel model and a Poisson multilevel model. However, in a model with random slopes for time a Poisson multilevel model also performed remarkably well.

Using multilevel item response theory when modelling longitudinal likert-item questionnaire data

Rosalie Gorter, VU University, The Netherlands

In this presentation we will focus on the analysis of longitudinal data when the outcome variable is measured using a likert-item questionnaire. The methodological challenges will be addressed and illustrated using three questionnaires from the Longitudinal Aging Study Amsterdam (LASA), an observational cohort study among the elderly (n=2987). The development over time that was estimated using a multilevel model on total scores will be compared with the outcomes of the multilevel IRT model. We found that the theoretically superior multilevel IRT model gives different results in terms of predicted values and time effect estimates, when applied to the LASA

questionnaire data. The difference between both models is most evident in the HADS questionnaire which is heavily skewed to the right. The differences in results between the models may lead to incorrect conclusions with respect to the development over time when using the standard multilevel model. The differences between both models will be discussed in the presentation.

Latent class growth mixture models: predictors and consequences of class membership

Trynke Hoekstra, VU University, The Netherlands

Multilevel models can only to some extent handle individual variability in development; they do not allow for the revelation of subgroups of individuals with distinct developmental trajectories. To identify such distinct trajectories, a range of techniques are available, of which latent class growth models (LCGM) are probably the most flexible. The aim of LCGM is to (statistically) identify the number and characteristics of distinct subgroups (or classes).

This presentation will focus on methodological challenges concerning especially the incorporation of predictors and consequences of the distinct classes. We will explain a commonly used one-step approach, a relatively conservative two-step approach and a novel three-step approach currently available. In the conservative two-step approach, individuals are first assigned to their most-likely class, providing a categorical variable denoting class membership. This variable can then be analyzed in a subsequent step using common regression techniques or ANOVA. This approach, however, ignores possible uncertainty in class membership assignment, a common issue in LCGM. This problem is overcome by the one-step approach, where predictors and consequences are already included while estimating the classes. However, these variables also influence the class formation process hereby clouding the interpretation of them. Finally, a new three-step approach overcomes both issues.

S3C Chair: Minna Torppa, University of Jyväskylä, Finland

09:15 – 10:30

Psychological well-being and academic achievement

Psychological functioning of children with and without dyslexia: a follow up study from age 4 to age 9

Minna Torppa, Pauliina Parhiala, Kenneth Eklund, Tuija Aro, Anna-Maija Poikkeus, Riikka Heikkilä, Timo Ahonen, University of Jyväskylä, Finland

This longitudinal study examines the often stated hypothesis that reading difficulties (RD) are a risk factor for psychosocial functioning or well-being. In order to show that reading difficulties are linked to increased amount of psychosocial functioning problems, a longitudinal comparison study of children with and without RD is needed. The current study examines developmental changes in psychosocial functioning (adaptation & social skills, attention, internalizing and externalizing problems) across the transition to school. The data (n=200) spans from 4 years to 9 years of age and includes repeated parental evaluations of psychosocial functioning and a diagnosis of RD in grade 2. Findings indicated that of the psychosocial functioning skills, attention, and adaptation & social skills are linked to RD. The differences were evident already at age four years suggesting that the problems are not secondary behavioral problems caused by reaction to reading difficulties the children with RD faced in school.

The role of big-fish-little-pond-effect for primary school children's academic self-concept and school well-being

Kati Vasalampi, Eija Pakarinen, Minna Torppa, University of Jyväskylä, Finland

According to the big-fish-little-pond effect (BFLPE) model, students compare their own academic ability with the academic abilities of their classmates and use this social comparison impression as one basis for forming their own academic self-concept (Marsh et al., 2007). Hence, academic self-concept depends not only on a student's accomplishments but also on the accomplishments of their peers in the same educational setting. This model has mostly been tested among adolescents. In this study, we examine whether the assumptions of BFLPE model could be found already earlier in the school career. This study is a part of the larger longitudinal follow-up in which almost 2000 children are followed from kindergarten to sixth grade. The subsample consists of 555

children (half of them having a risk for learning disabilities) who are surveyed three times: (1) in the third, (2) in the fourth, and (3) in the sixth grade of primary school. Their academic skills are also measured at the same time-points. The preliminary results are in line with BFLPE model, in particular among those having a risk for learning disabilities. In addition, we add to the previous literature by examining the consequences of BFLPE for children's subsequent school motivation and well-being.

Motivational factors and school achievement at vocational school: different paths to school completion

Sami Määttä, Niilo Mäki Institute, Finland

Lack of motivation is one of the main reasons given when secondary school students have difficulties staying in school. Most of drop-outs during secondary schooling in Finland occur in vocational schools. This study investigates the impact of motivational factors, such as achievement strategies and self-determination, on the different paths to completion of Vocational school within its theoretical duration (three years). We are also interested in the role of learning difficulties and well-being factors, such as school burnout and peer affiliation, as covariates of motivational factors. The participants are approximately 2000 students from Jyväskylä Educational Consortium in Finland. The students' motivation, well-being and peer affiliations were measured at the beginning of the first and second school year, and school achievement, completion and drop-out data is provided by the school for every school year. This study was funded by European Social Fund and Finnish National Board of Education. The analyses are in progress.

S3D Chair: Tom Schuller, UK

09:15 – 10:30

Improving the research/policy interface: the role of intermediary and brokerage agencies

The session will exchange experiences on developing effective links between longitudinal studies and the formulation and evaluation of policy. It will focus specifically on:

- a. The experience of intermediary / brokerage agencies in strengthening links between research and policy-making, with respect to policy areas such as education or health
- b. Issues around communicating longitudinal research findings to maximise policy impact, including dissemination and interpretation.

Growing Up in New Zealand

Dr Polly Atatoa Carr, Centre for Longitudinal Research - He Ara ki Mua, New Zealand

Growing Up in New Zealand is a contemporary longitudinal study that is following approximately 7000 children in the context of their families and their broader physical, cultural, social and political environments from before their birth. An overarching objective of *Growing Up in New Zealand* is the identification of critical or sensitive periods in development, and levels of influence, that will allow the effective, equitable and efficient development of policy. The ability to evaluate the reach and impact of existing policies in New Zealand, and the equity of their impact, is also an important component of this study.

The needs of multi-disciplinary research with respect to policy translation were important in study design, and remain a strong influence of the ongoing implementation of *Growing Up in New Zealand*. Balancing the tensions between policy and politics is also a learning curve for study progression. This presentation will describe aspects of the experience of policy translation for *Growing Up in New Zealand*, with a focus on folic acid supplementation in pregnancy and the current New Zealand policy focus on the 'Vulnerable Child'. It is not always easy to manage the differences between a research environment and the policy cycle, and a 'successful' outcome is not always achieved. Ultimately however, effective translation in the long term will ensure that the value, effect and relevancy of both *Growing Up in New Zealand* (including our committed participants) and of public policy are enhanced.

Research uptake, approach and examples from Young Lives cohort study

Paul Dornan, Young Lives, University of Oxford, UK

Young Lives is a longitudinal research study focused on the experience and consequences of childhood poverty in low and middle income countries. Core to the study are two birth cohorts in Ethiopia; India; Peru and Vietnam. The older cohort was born in 1994/5; the younger cohort in 2000/1. First data was collected in 2002, with further rounds in 2006 and 2009. A fourth wave is being collected in autumn 2013 with a final subsequent wave planned for 2016. This provides age points through early, middle and adolescent phases of childhood. The study uses survey and qualitative methods to follow children's experiences. *Young Lives* is made up of data collection, research, policy, and communications partners in each study country and at the University of Oxford.

As well as outlining core elements of the *Young Lives* study, this presentation will focus on the communication and uptake approach *Young Lives* and its partners take to encourage the uptake of cohort analysis in policy debates. The presentation will use examples of engagement activities around issues of children's policies, poverty and inequality, in order to identify lessons learned in terms of the effective use of cohort data to inform policy. Core areas the presentation will consider include building and maintaining links with policy makers; effective joint working with intermediary (often civil society) organisations to extend research reach; the challenges of communicating longitudinal findings within developing country policy debates; and engagement with traditional and social media across contexts.

Growing Up in Ireland

James Williams, Economic and Social Research Institute, Ireland

This presentation briefly outlines the breadth of information available in *Growing Up in Ireland* and considers ways in which the impact of longitudinal child cohort studies on policy development and service delivery might be improved. Evidence-based policy making is all the more critical in times of tight budgets and a focus on value-for-money in exchequer expenditure. Large-scale, nationally representative child cohort studies are well placed to provide the evidence necessary for those charged with policy development and service delivery in areas related to family and children. This presentation focuses on the relationship between policy and research and considers issues around the translation of research output into the policy and practice space.

The presentation will address GUI's communications and dissemination strategy for our main stakeholders (academic/research community; policymakers; general public and participants), focusing on policy issues for all groups and how we have attempted to raise awareness of the study and its input to the policy debate. I will also discuss direct interactions and engagement with the policy sector.

Keynote

11:00 – 12:00

Continuities and transitions in life course research on health

Mel Bartley - Emeritus Professor Medical Sociology and Director, ESRC Centre for Life Course Studies in Society and Health, University College London
Chair: Heather Joshi, Institute of Education, London University

The period around the creation of the Society for Longitudinal and Life Course Studies has been particularly exciting for those doing research on health. New data and emerging methods are making it possible to address research questions we could only have dreamt of 20 years ago at the height of the debate over Developmental Origins of Health and Disease. Yet at the same time progress in many ways is frustratingly slow. Our understanding and measurement of socio-economic position seems to have gone backwards. Our ability move beyond crude definitions of environmental factors has not improved quickly enough. A lot of energy has gone into blind alleys of genetics and cognitive function. This talk ends with some examples of recent developments.

SYMPOSIUM SESSION 4

S4A Chair: Neal Halfon, University of California, Los Angeles, USA

13:00 – 14:15 The life course research network: new directions for research to inform maternal and child health practice and policy

Life course health development theory: past, present and future

Neal Halfon, University of California, Los Angeles, USA

This presentation will chart the evolution of the Life Course Health Development (LCHD) framework, and illustrate its potential to transform how the maternal and child health system addresses social, psychological, biological, and genetic influences on health, eliminates health disparities, reduces chronic illness, and contains healthcare costs.

Oral health and the life course

James Crall, University of California, Los Angeles, USA

This presentation will examine oral health and major conditions that affect oral health using key life course concepts including pathways and trajectories, early programming, critical or sensitive periods, cumulative impact, and risk and protective factors. It will also offer recommendations for future research.

A life course approach to Type 2 diabetes mellitus in youth

Pamela Salsberry, Ohio State University, USA

This presentation will provide an analysis of what is known and unknown about the pathways and determinants of T2DM in child and adolescents, consider how this knowledge can and does inform current practice, and provide research recommendations relevant to the field of maternal and child health through a life course lens.

S4B Chair: Michel Oris, University of Geneva, Switzerland

13:00 – 14:15

Looking back: functional and psychological health among the generations of Swiss elderly (1979 – 2012)

Thirty years of evolution in functional health among the Swiss elderly

Aude Tholomier, University of Geneva & NCCR LIVES, Switzerland

The aim of this paper is to discuss the age- and sex-distribution of functional health among the Swiss elderly, and its evolution during the last 30 years. Results are based on a survey about health and life conditions of people aged 65 and more in Switzerland, conducted on a random sample of 4200 individuals stratified by age and sex. Done in 2011/12, this survey repeated two other surveys from 1979 and 1994. The whole creates an almost unique opportunity to measure changes in functional health over the last 30 years. Functional health is measured from the ADL- Activity Daily Living scale. This scale has 8 items and basically measure if an elderly can execute easily, with difficulty, or not, several daily activities. Depending on the scores obtained, sampled individuals are classified into three functional health statuses: independent, in difficulty or dependent. On that basis, we detail the evolution in the prevalence of different functional health statuses by age and sex and looking at the generational changes across 3 decades. We observe an increase of independency across time and age and propose several interpretations since comparative multivariate analyses repeated on 1979, 1994 and 2011 data show that the factors associated to functional health also evolve across time.

Changes in age and sex prevalence of depression among the Swiss elderly, 1979-2011

Alessandra Rosciano, University of Geneva & NCCR LIVES, Switzerland

The basis for this contribution is the same that for the one proposed above by Aude Tholomier: the exceptional existence of three consecutive surveys about living and health conditions of the Swiss elderly, from 1979 to 2011/12. Our specific aim here is to analyze the evolution of depression. To secure the comparison across time, we use an old but robust tool, the self assessing depression scale elaborated by Wang & al. (1975). Like our colleague Aude Tholomier, we establish the evolution in the age- and sex-distribution of depression from 1979 to 2011. We also propose first logistic models to identify the factors affecting the risk to be depressive and are consequently in a position to see if dimensions related to depression changed across time. First preliminary results show that being independent (in term of functional health) progressed so much that the relation with depression disappeared. On the 2011/2012 wave, social support and socioeconomic status are not significant, but marital satisfaction (for those living in couple) and religious faith are protective.

Trajectories of happiness and vulnerability: a retrospective appraisal of the life course

Nora Dasoki, Davide Morselli, Dario Spini, University of Geneva & NCCR LIVES, Switzerland

To visualize, evaluate and reconstruct the life course has a beneficial effect on well-being. This process involves selection and sorting of memory and leads to the maintenance of a coherent meaning of the life course and a sense of identity continuation. There are significant differences in the regulation of well-being according to the age of individuals, including the phenomenon of positivity with advancing age: life satisfaction remains the same or increases in some cases and positive affect is preferred to negative affect. In coherence with these theories, our hypothesis is that older people give more importance to the moments of happiness and less to those of vulnerability and this effect increases with age. The present study is based on survey data *Vivre / Leben / Vivere* already described above. Past trajectories were collected with a life calendar containing factual events but also the subjective appraisal of their life course (N = 3131). Results of the analysis will be detailed in the presentation but we can already say that our hypothesis is confirmed for moments of vulnerability, but not for happiness.

S4C Chair: Frances Tylavsky, University of Tennessee Health Science Center, USA

13:00 – 14:15

In utero exposures and disparities in health indices in urban black and white children: The CANDLE study

Maternal lifetime and adverse childhood events are related to weight status from birth to 4 years

Frederick Palmer, University of Tennessee Health Science Center, USA

Maternal reports of lifetime adverse events (AE) and adverse childhood events (ACE), Brief Symptom Inventory (BSI), and conflict resolution with partner were assessed during the third trimester. Child abuse potential was ascertained at the child's annual clinic visit. Child birth weight was abstracted from medical charts; height; weight/length were assessed at ages 1-4 years. Maternal AE was categorized as <5 AE and >5 AE. Maternal ACE was categorized as present or not. Maternal treatment by partner was categorized as violent versus not.

Mothers with higher AE and a presence of ACE had higher symptomology on the BSI, were more likely to be depressed, treated violently by their partner, or have elevated child abuse potential. No differences in birth weight and weight for length/height occurred for black children whose mothers had higher AE or reported ACE. In contrast, white children whose mothers had higher AE or reported ACE had increasing weight for length/height z scores from ages 2- 4 years.

Maternal vitamin D status during pregnancy is associated with child weight, blood pressure, and waist circumference at 4 years

Frances Tyllavsky, University of Tennessee Health Science Center, USA

In the same cohort, vitamin D (25(OH)D) measurements were obtained during the 2nd trimester and at delivery. In preliminary analyses, 2% of black children have acanthosis nigricans, a marker for obesity-related insulin resistance; and maternal vitamin D levels showed trends for a negative association with weight for length/height at birth and at 1, 2 and 3 years of age for black children. Further analyses will examine if this trend is similar in white children. In addition we will determine whether maternal ACE, AE, and estimators of maternal functioning (i.e., parenting stress, global symptomology, maternal treatment by her partner) modify the association between vitamin D and health indicators.

Hair cortisol levels in early childhood suggesting dysregulation of the HPA axis

Cynthia Rovnaghi, University of Tennessee Health Science Center, USA

In a subset of the same cohort, hair cortisol was measured at 1, 2, and 3 years-of-age. Median hair cortisol levels were higher at; 1 year (11.5 ng/mg; range, 0-433) than at 2 years (7.3 ng/mg; range, 0-309), or 3 years (9.5 ng/mg; range, 0-402). Levels were significantly associated at 1 and 2 years; 2 and 3 years; and 1 and 3 years. Hair cortisol was higher among black vs. white children at 1 year and 2. Hair cortisol levels above the median were significantly associated with Medicaid vs. other insurance at 1 year, 2 years, and 3 years, and girls vs. boys at 2 years. A positive association between hair cortisol and number of maternal traumatic life events before/during pregnancy occurred at 1 year and 2 years; no associations were found between hair cortisol levels and parenting stress at 1, 2, or 3 years or with mother's depression 1 year.

Hair cortisol values reflect greater chronic stress among black infants, females, and children whose mothers receive Medicaid. The association between hair cortisol levels and traumatic life events during pregnancy, not with parenting stress in real-time, may provide evidence for fetal programming of the HPA axis in humans.

PARALLEL SESSION 6

6A: Families and Health

14:15 – 15:45

The mediating role of disadvantage in the associations between family conditions in adolescence and mental health and economic situation in mid-adulthood

Noora Berg, Olli Kiviruusu, Sakari Karvonen, Ossi Rahkonen, Taina Huurre National Institute for Health and Welfare, Finland

Our aim was to study the associations between family conditions in adolescence and mental health and economic situation in mid-adulthood and whether disadvantage in young adulthood and adulthood mediated these associations. Participants of a Finnish cohort study in 1983 at 16 years were followed up using postal questionnaires when aged 22, 32 and 42, (N=1334). We analyzed indirect effects from adolescent family relationships and adversities to mental health and economic situation at age 42 via measures of disadvantage (health, health behavior, social and socioeconomic factors) at ages 22 and 32.

Results suggest that both poor family relationships and adversities in adolescence were associated with poor mental health and financial standing at the age of 42 even after adjusting for adolescent mental health and socioeconomic position. Among men heavy alcohol use partially mediated these associations between family conditions and mid-adulthood wellbeing. Among women education and employment status mediated the associations.

Family conditions have a long-term impact on both adulthood mental health and economic situation. The mechanisms behind these associations differ by gender. Detrimental health behavior has a role on the associations especially among men whereas educational and employment paths play a role on these associations only among women.

Living alone, partnership history and psychological well-being in mid life

Dieter Demey, Ann Berrington, Maria Evandrou, Jane Falkingham, University of Southampton, UK

There is strong empirical evidence that psychological well-being deteriorates in a relatively short period surrounding a union dissolution, but also that experiencing multiple union transitions can have longer lasting consequences for psychological well-being. However, previous studies have rarely jointly considered the duration since the most recent union dissolution and the number of union transitions. This study uses data from the United Kingdom Household Longitudinal Survey (UKHLS) to investigate how the time since the most recent union dissolution and the number of union dissolutions are related to two indicators of psychological well-being, namely dissatisfaction with life and GHQ-12 caseness. The sample is restricted to 50-64 year old British men and women who are living alone and have ever been in a co-residential union. Preliminary findings show lower psychological well-being in the two years following a union dissolution. Furthermore, psychological well-being is also lower for those who have experienced multiple union dissolutions. These findings are reported for both men and women, and remain unaltered when controlling for age, parenthood status and socio-economic status. However, the findings differ for the two measures of psychological well-being. These findings indicate that several aspects of partnership history are related to psychological well-being.

The family life course from 18-50 and trajectories of functional health in later life

Martin O'Flaherty, Janeen Baxter, Gavin Turrell, Michele Haynes, The University of Queensland, Australia

A growing body of research demonstrates cumulative and long run effects of individuals' family histories on a range of physical health outcomes, including cardiovascular disease (Zhang and Hayward 2006), mortality (Dupre, Beck and Meadows 2009), and chronic diseases (Dupre and Meadows 2007). In this paper we aim to extend this literature in a number of ways. First, we apply sequence analysis to retrospective data to create clusters of similar family biographies. This method allows us to simultaneously incorporate information on the timing, duration, and sequencing of individuals' transitions and roles in both partnering and parenting. Second, both the level and rate of change of functional health is modelled as a function of membership in different family biography clusters. To our knowledge, long run effects on functional health have not yet been explored in relation to the family life course. Additionally, the research adds methodological rigour by a) separating temporally measurement of the family life course and the health outcome in question, strengthening causal inference, and b) controlling for a wide range of potential confounding factors including childhood health/SES, childhood family status, and education.

Exploring household dynamics: the reciprocal effects of parent and adolescent child well-being

Elizabeth Webb, University College London, UK; Laia Becares, University of Manchester, UK; Lidia Panico, INED, France

Substantial evidence supports the hypothesis that maternal well-being impacts upon child well-being. In earlier work we established that this relationship is bidirectional. Here we explore how, in two parent families, both parents' well-being relates over time to their adolescent children's well-being.

Analyses were conducted using data from waves one and two of the UK Household Longitudinal Study (UKHLS). UKHLS collects data on adult's well-being (General Health Questionnaire [GHQ]) and on youth's (age 10-16) happiness with their school work, appearance, family, friends, school and life as a whole. We use a multilevel structural equation model with cross-lagged effects to investigate the reciprocal relationships between both parent's well-being and their child's well-being. The analytic sample is 831 families with two continuously partnered parents, at least one adolescent child (10-16 years) and complete data on the three key variables. Findings suggest that the well-being of one parent may positively predict that of the other parent, and also that of their adolescent child, at the subsequent wave. Adolescent well-being, however, does not predict parents' subsequent well-being. Interactions with parent and child gender, characteristics of the parents' partnership, socio-economic circumstances and other family and household characteristics will also be explored.

6B: Linking Life Course Stages by Connecting the “Health Dots”

14:15 – 15:45

Residential mobility over the life course and health in later life

Juliet Stone, Maria Evandrou, Jane Falkingham, Athina Vlachantoni, ESRC Centre for Population Change, University of Southampton, UK

Background: Previous research suggests a link between frequent residential mobility in early life and poor health outcomes in childhood, adolescence and mid-life. However, it is unclear whether the effects of this apparent ‘critical period’ for mobility persist into later life.

Methods: The analysis uses life history data from Wave 3 (2006-7) of the English Longitudinal Study of Ageing. Residential mobility throughout the life course and at particular life course phases is measured. Health outcomes at age 50+ include limiting longstanding illness, quality of life and physical measures (eg. blood pressure). Regression analyses are used to test associations between mobility and health.

Results: The findings suggest previously reported associations between childhood mobility and subsequent health do not persist into later life. However, other ‘sensitive periods’ for residential mobility can be identified. Notably, mobility in mid-life and in early adulthood show associations with later-life health and wellbeing among men and women, respectively.

Discussion: We consider our findings in relation to ‘triggers’ for residential mobility such as childbearing, union dissolution and labour market decisions. We discuss potential mediating factors, such as social networks, and the extent to which residential mobility has an effect on health that is independent of related life events.

Investigating experiences of sport and exercise in the British Cohort Study 1970

Will Parry, Institute of Education, UK

Interest in school sport and physical education has increased dramatically in the UK since the build-up to the London Olympics of 2012. Politicians are keen to promote competitive sport in schools, with the intention of making children more active and building a legacy of lifelong participation in sport. Academic researchers have voiced concern that these attempts may be misguided and could even be counter-productive (e.g. see Penney and Evans, 1997; Green 2004). Perhaps surprisingly, there is little empirical evidence for the longitudinal relationship between childhood experiences of sport and exercise and adult exercise behaviour. The current research examines data from the British Cohort Study 1970 when the cohort members are aged 10, 16, 29 and 34. It uses path analytic, structural equation and latent variable methods to determine how participation, perceived ability, intrinsic motivation and physical self-perceptions in childhood are related to exercise behaviour in adulthood. Based on the evidence presented and a critique of the historical policy landscape, some suggestions are made as to why current UK policy could be viewed as fundamentally misguided.

Do low levels of physical activity and smoking during midlife predict the progression of mobility impairment from midlife into old age? A 34-year prospective study

Benjamin Shaw, University at Albany, USA; Neda Agahi, Karolinska Institutet, Sweden

The purpose of this study was to examine the relationship between living a physically inactive lifestyle during midlife and the risk of developing functional impairment during the subsequent years leading up to, and including, old age. The extent to which smoking during midlife adds to the risks associated with physical inactivity was also tested.

Data came from a national sample of more than 1,600 Swedish adults, originally interviewed in 1968 (at ages 30-50), and re-interviewed on as many as four additional occasions, through 2002. Self-reported measures of physical activity and smoking, taken in 1968 and 1981, were used as predictors of mobility impairment trajectories, using multilevel regression.

Results indicated that compared to individuals with physically active lifestyles, those who reported persistent physical inactivity during midlife had higher rates of mobility impairment during midlife, as well as sharper

increases in mobility impairment during subsequent years. Furthermore, midlife smoking transmitted additional risk; the progression of mobility impairment was greatest among individuals who were both physically inactive and smokers during midlife.

The findings from this study suggest that both physical inactivity and smoking during midlife are important to consider when predicting the development of functional impairment during late life.

6C: Measures and Modelling Sequences

14:15 – 15:45

Parent and teacher reports of children's socio-emotional behaviour, exploring and comparing the social gradient: findings from the Millennium Cohort Study (MCS)

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Socio-economic inequalities in parental assessment of children's socio-emotional behaviour have been widely reported. Other informants, such as teachers, can provide additional insight into children's behaviour. However, little research has examined inequalities in socio-emotional behaviour rated by multiple informants. We aimed to explore and compare the social gradient of children's socio-emotional behaviour reported by parents and teachers.

We analysed data on 8,843 7-year old children from the MCS who had Strengths and Difficulties (SDQ) scores reported by a parent and teacher. We estimated risk ratios for borderline-abnormal SDQ by a number of socio-economic risk factors from birth to age 7.

There was a social gradient in both informants' ratings of socio-emotional behaviour; the gradient was significantly stronger in parent rated scores. The risk of a child being rated as borderline-abnormal by both informants was also socially distributed. For example, children always living in poverty (between age 9 months and 7 years) were five times more likely to be rated as borderline-abnormal than to be rated as normal by both parents and teachers, compared to children never living in poverty. Observed differences between social gradients may be due to reporter bias or true variations in children's behaviour in different settings.

Education and/or work? Interdependencies of education and work over the life course

Lesley Andres, University of British Columbia, Canada; Judith Offerhaus, Bremen International Graduate School of Social Sciences, Germany

It is becoming more evident that individuals do not progress from high school to post-secondary education and then on to work and other life domains in a linear fashion. In this paper we examine individual life course trajectories and patterns from late adolescence into adulthood over a time span of 22 years, and focus especially on the interrelation of two of the most influential factors in the reproduction of social inequality and societal stratification: education and employment. Using the Canadian Paths on Life's Way longitudinal data and employing sequence analysis, we find distinct and diverging passages into adulthood and beyond with respect to interdependent configurations of educational and labor force participation. For males, the de-standardization of life paths just after high school tends to re-standardize in consistent full-time employment later in life. In comparison, females have a greater plurality of pathways both early and later in their life courses due to more complex interrelations of education and employment (as well as family). Generally, individual education and employment trajectories are highly path-dependent; the starting conditions after high school tend to reproduce in sequence, leading to cumulative advantage/disadvantage as predicted by the life course approach.

Housing tenure pathways for Australian families – a life course approach

Melanie Spallek, Michele Haynes, Andrew Jones, University of Queensland, Australia

The interplay of housing transitions and key life-events such as marriage and birth of first child are becoming more complex and occur nowadays in a less predictive order. Other demographic processes such as employment are increasing priorities in housing decisions. There is growing interest in connecting people's experiences across the life course, however little is known concerning the interrelationships of housing decisions and demographic processes in Australia.

Using the technique of multi-channel sequence analysis allows us to identify typical pathways in tenure transitions by embedding changes in tenure status into sequences of life-events. The key life-events considered in this research are birth of first or consecutive child, union formation and dissolution and changes in employment for families of childbearing age, both with and without children. This method of analysis groups similar sequences of changing tenure status alongside other key life-events, and hence identifies a typology of tenure pathways. Different clusters of sequences were identified for families with stable tenure and changing tenure status throughout 2001-2010. Every cluster indicates a different housing experience in relation to demographic changes and provides an understanding of typical housing tenure pathways.

This paper reports results on multivariate combinations of housing tenure status as they unfold over time for Australian families, using ten waves of data from the longitudinal Household Income and Labour Dynamics in Australia (HILDA) survey.

Health inequalities in Sweden over the life course: monitoring the size of the gap longitudinally

Johan Fritzell, University of Stockholm, Karolinska Institutet, Sweden; Roger Keller Celeste, Universidade Federal do Rio Grande do Sul, Brazil

Usually the prevalence or accumulated incidence of many diseases is studied and it has been consistently associated with socioeconomic conditions. For almost all diseases, the well-off have better health. Although increasing health inequalities have been reported in many countries, lesser is known about the difference over the life course. Therefore, the first aim of this study is to report the incidence of one cumulative outcome (dental health) and two time-varying outcomes (psychological distress and musculoskeletal pain) at different periods of the life for two economically defined groups (poor vs. non-poor). Secondly, we will estimate direct and indirect effects of economic problem at different life stages on the incidence of the cumulative health outcome.

We used data from the longitudinal Swedish Level of Living Survey based on a representative sample of the Swedish population, aged 15-75. The first wave was conducted already in 1968 with follow-up surveys in 1974, 1981, 1991, 2000, 2010.

Our first aim will be conducted by comparing the changes in the socioeconomic gap in four birth cohorts (1925-34, 1944-53, 1957-66 and 1970-1979). Our second aim focus on the oldest birth cohort and model changes in health, and economic problem with path analysis using Mplus.

6D: International and Cross-Cohort Comparisons

14:15 – 15:45

Why are there more unplanned births in the UK than in France? A comparative analysis between the French ELFE and the UK Millennium birth cohorts

Elise de la Rochebrochard, INED, France; Heather Joshi, Institute of Education, UK

Context: Whether the pregnancy was planned is one of the factors that could have long term consequences for the child. Despite widespread use of contraception and abortion, the proportion of births following an unplanned pregnancy remains high but variable between developed countries.

Objective: To compare the proportion of unplanned births in the UK and in France and to explore if the socio-economic or demographic characteristics of the parents could explain the much higher level of unplanned pregnancies in the UK.

Data: Two large birth cohorts with nationally representative samples: the French ELFE cohort having recruited

18,322 families with children born in 2011 and the UK Millennium Cohort Study (MCS) covering 18, 552 families with children born in 2000-2002.

Results and discussion: The MCS has already exhibited a high level of unplanned births (41%). ELFE data will be available imminently and the rate of unplanned births is expected to be below 20%. In the UK, unplanned births occurred mainly among low educated mothers, large families, young mothers and mothers without partners. We will test if the differences in unplanned pregnancies between France and the UK could be explained by differentials in such characteristics of the families recruited into the two cohorts.

Age differences in mammography screening reconsidered: life course trajectories in 13 European countries

Sarah Missinne, Piet Bracke, Ghent University, Belgium

Breast cancer is the most common cause of cancer mortality among European women. To reduce mortality risk, regular mammography screening is recommended to detect breast cancer in an early stage, from 50 years onwards. Although the timeliness is crucial for the effectiveness of screening, the temporal dimension has been largely ignored in research. Studies still hinge predominantly on cross-sectional designs in which it is impossible to know whether age differences reflect 'true' age effects or whether age acts as a proxy for period effects. The survey of Health, Ageing and Retirement (SHARELIFE, 2008) allows to discern this for the first time by providing retrospective information on the age at which women commenced regular mammography screening. Moreover, its cross-national dimension permits to frame these results within the national context. By means of the Kaplan-Meier procedure we examine age trajectories for different birth cohorts in 13 European countries (N=13324). Results show that in each country, birth cohorts show similar age trajectories. Along with the observation that large country differences coincide with screening program characteristics, this suggests strong period effects due to the implemented national screening programs. Correspondingly, economic explanations which relate age differences in returns in health investment are refuted.

Mining life event sequences

Gilbert Ritschard, Matthias Studer, NCCR Lives, University of Geneva, Switzerland

In the social sciences, life trajectories are most often described as state sequences and their exploration typically consists in building typologies by means of the optimal matching approach. In contrast, the mining of sequences of customer behaviors or of web logs deals with event sequences rather than state sequences.

A state, such as being jobless, lasts the whole considered unit of time while an event, for example ending a job, occurs at a certain time point and has no duration. The event does not last, but provokes, possibly in conjunction with other events, a state change. Furthermore positions in the sequence reflect the duration since the beginning of the sequence, while in event sequences they just inform about the number of precedent events. Therefore, while state sequences are particularly of interest for studying durations and timing in life courses, event sequences are useful when the concern is the order in which events occur.

Using data describing Swiss cohabitational and occupational trajectories, we demonstrate the kind of results we can extract by mining life event sequences. We propose original methods for finding typical event subsequences which best discriminate between men and women and between birth cohorts.

Variation in the intersection between partnership and fertility: a comparison across 3 cohorts in 16 countries

Mark Lyons-Amos, Brienna Perelli-Harris, University of Southampton, UK

The intersection between partnership and fertility is increasingly complicated. This is due to increasing variety in partnership forms, diversity in fertility, and the changing interaction between these processes. This paper uses Latent Class Growth Models (LCGMs) to evaluate the relationship between partnership and fertility across the US and 15 European countries. The main aims are to establish how the association between partnership patterns and the timing of first birth varies between countries, and how it has changed across cohorts.

We analyse retrospective union and fertility histories from 16 standardised surveys in a dataset called the Harmonized-Histories. We examine the partnership states and first births that occur age 15-45. Thus, we compare women in 1945-54, 1955-64, and 1965-74 birth-cohorts.

Perelli-Harris and Lyons-Amos (2012) employed LCGMs based on trajectories for partnership, extracting 8 different partnership regimes (classes). This work adds a second LCGM, capturing women's fertility profile. We examine how partnership class membership is associated with fertility class membership using classes allocated by these models. Comparing polychoric correlation coefficients between countries quantifies between-country variation in the association between partnership and fertility patterns. Additionally, we identify trends in correlation coefficients across cohorts, measuring changes in the strength of association between partnership and fertility.