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Abstracts

Workshop 1A – Health & well-being I - room 2208

Long-term influence of parental, teacher and peer acceptance on self-esteem and life satisfaction - a longitudinal study from adolescence to middle adulthood

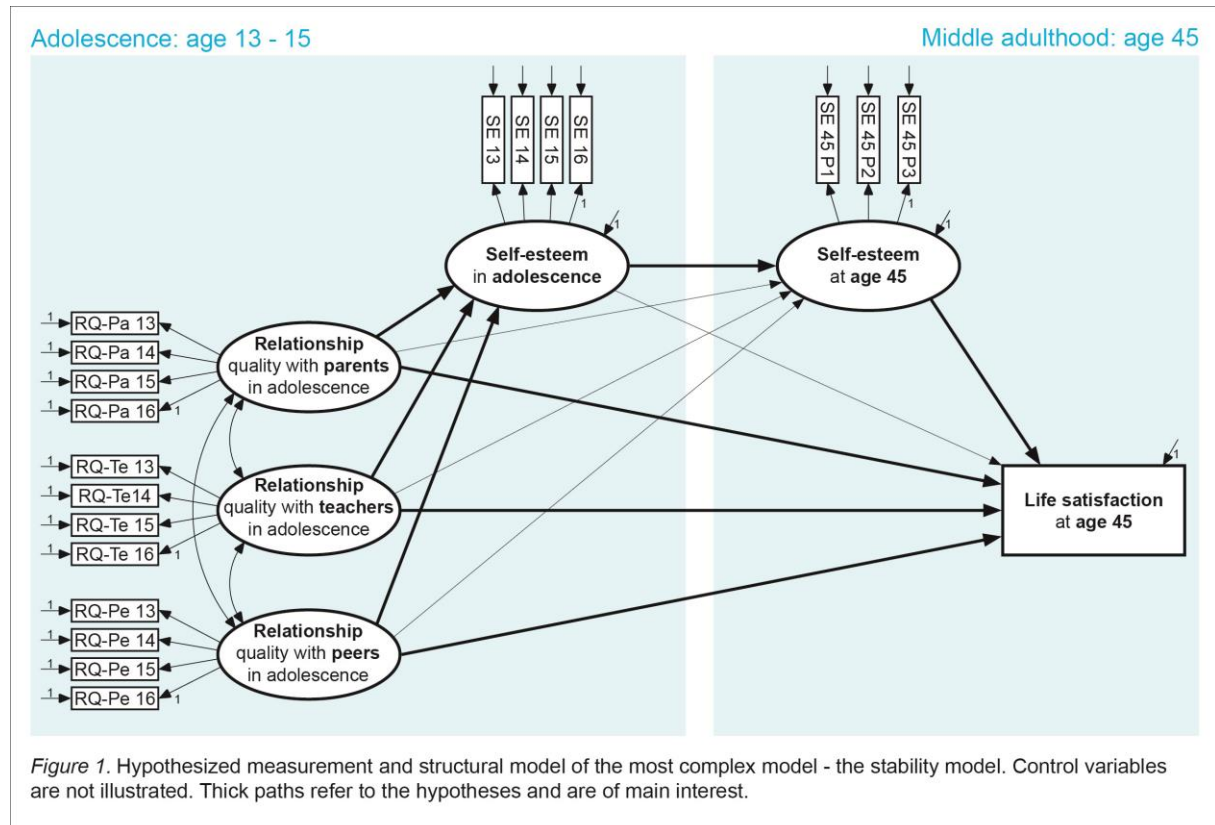
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Aims

Self-esteem is the emotional evaluation of the self and serves as a central variable for life satisfaction. It is substantially formed in adolescence and quiet stable across the life course. Self-esteem can be shaped by social context. Thus, three central social contexts in adolescence – parents, teachers and peers – might have a long term influence on life satisfaction mediated through self-esteem. However, this question has not been examined so far. Therefore I will examine long term effects of perceived parental, teacher and peer acceptance in adolescence on life satisfaction in middle adulthood. I will further examine whether these influences are mediated by self-esteem in adolescence and self-esteem in middle adulthood.

Methods

Longitudinal studies extending over transitions across life stages are rare. With the unprecedented comprehensive longitudinal Life Study ranging over 30 years it is possible to examine long term developmental effects of a German sample of 2'756 participants. Data will be used from adolescence (on a yearly base from age 13 to age 16) from 1980 to 1983 and from middle adulthood at age 45 in 2012. The analysis will be conducted by structural equation modeling and missings will be estimated using full information maximum likelihood. Life satisfaction at age 45 serves as criterion. Predictor variables at age 15 are: perceived parental, teacher and peer acceptance. Mediating variables are self-esteem in adolescence and at age 45. The analysis will be controlled for sex, for educational achievement at age 15 (educational level, verbal intelligence) and for socioeconomic status at age 45 (unemployment, ISEI, household income, parentage). For the model see Figure 1.



Result

The model showed a good model fit ($\chi^2=1739.023$, $df=548$, $p=.000$; RMSEA=.040; $pclose=1.000$; TLI=.906; CFI=.926). All predictor variables predict self-esteem at age 15 on at least a significance level of $p<.10$. Self-esteem shows a stability of $\beta=.58$ ($p=.000$) and $.38$ ($p=.053$) for men from age 15 to age 45. Self-esteem at age 45 predicts life satisfaction with $\beta=.70$ ($p=.000$) for women and $\beta=.77$ ($p=.000$) for men. Noteworthy, perceived peer acceptance has additional direct influences on life satisfaction for women ($\beta=.134$, $p=.088$). Total standardized long-term effects on life satisfaction are .124 (female) and .137 (male) for parents acceptance and .178 (female) and .137 (male) for peer acceptance. No significant total effect is found for teacher acceptance.

Conclusions

Findings underline the crucial importance of peer and parents acceptance in adolescence even for life satisfaction in middle adulthood. This effect is mediated by self-esteem. Teacher acceptance shows no long term effects.

Which factors mitigate adverse effects from life events on subjective well-being? An analysis on the role of material, religious, social and personality resources.

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Background

The substantial impact of negative life events on subjective well-being (SWB) is relatively well documented in the literature. Some of these changes, such as disability or unemployment, persist in the years following the event, a phenomenon known as the scarring effect. In addition, there is considerable variability in the degree of the reaction and adaptation to the events among individuals. This contribution addresses the role of various resources (material, religious, social and personality) regarding adaptation to adverse life events effect on SWB. More specifically, the paper looks at possible buffering effects of these resources after the experience of a negative life event. It is the first contribution comparing the efficiency of different resources as buffers.

Methods

We analyse the effects of four negative life events: separation ($n=1075$), disability ($n=805$), death of a closely related person ($n=26'284$) and unemployment ($n=1181$) using data of the SHP from 2000-2015. We test the effect of numerous potential buffering effects: Income, wealth, religious attendance, religious feelings, spiritual feelings, emotional support, number of close friends, frequency of contact with close friends, conscientiousness, openness, neuroticism, extroversion and agreeableness. The resources are measured before the occurrence of the event. Models are estimated for each event and resource separately using fixed effects regression. Only individuals experiencing the event are included in the sample. Buffering effects are captured by interactions terms between resources and time since the occurrence of the event. More specifically, we look at both significance and effect sizes of these interactions one and two years after the event occurred.

Results

We find that several resources do buffer the consequences of negative life events, but the different resources have different influences. In general, religion appears as the most frequent and strongest buffer on disability, unemployment and death of a closely related person, as illustrated by some examples in Figure 1. In contrast, material resources have no significant buffering effects. The buffering effects of social resources and personality resources are scarce and depend on the item. We found that emotional support helps to adapt to unemployment and frequent contacts with friends help following disability. However, some resources have shown to increase scarring effects. Those who frequently attend religious services have longer to adjust to a separation and those with many close friends suffer more strongly after unemployment than those with fewer close friends.

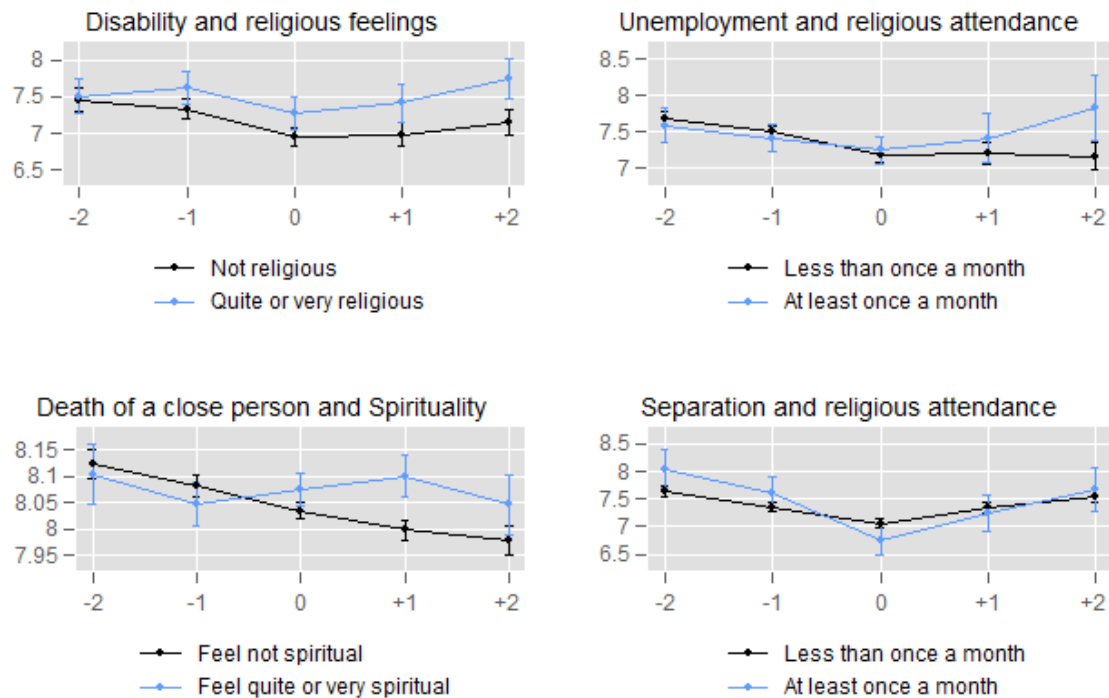


Figure 1 : Predicted life satisfaction by adverse life event and type of buffering

Discussion

In order to nourish the theoretical framework, we try to find the circumstances under which a given resource is a buffer. In order for a resource to be a buffer, it seems to be mostly internal, have no negative side effect and be unaffected by the event. The predominant positive effects of internal resources versus external resources seem to indicate that the coping is mostly internal and mostly derived from spiritual or positive attitudes. Therefore, as depicted by the spirituality resource, it seems to be a matter of how to integrate a hurtful event into a new meaningful framework, a new cosmos. Second, although a resource is in principle helpful for a particular event, it may have negative side effects, such as the moral condemnation of a separation in religious circles. Therefore, resources cannot be simply tagged as positive or negative. They need to be contextualized and can positively buffer one event and negatively another event. Finally, the resource itself should not be directly impacted by the event. That is shown in the case of social resources following the death of a closely related person. The loss of the person is a loss in the intimate network and directly impacts the other relationships within that network.

How Does Transitioning into Retirement Impacts Life Satisfaction? Evidence from the Swiss Context

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This article aims to document the impact and timing of the transition to retirement on life satisfaction (LS) while taking into account working conditions prior to retirement, social participation (participation in clubs or other groups, satisfaction of free time, leisure activities and personal relationships) and health status (impediment, satisfaction with health). The analyses are based on the last 15 waves of the Swiss Household Panel (2001 – 2015), a multithematic annual household panel based on a random sample from the Swiss resident population (www.swisspanel.ch).

Respondents aged 50 and over working in their first episode of observation and retiring only once were selected in our sample, retirement being operationalized as (a) having no remunerated professional activity and b) not seeking work in the current wave and (c) having worked at least one hour per week in the last wave. In total, 8002 complete episodes relating to 899 different individuals during the SHP waves 3 to 17 (2001-2015) were retained.

Analyses are performed separately for women and men, and controlling for demographics (age), and economics parameters (household income, education level, satisfaction with financial situation). We adopt a life course perspective and use a multilevel approach (mixed linear model) to study individual trajectories both on the

short-and the mid-term. This analytical strategy is aiming at understanding not only the immediate impact of this major transition on well-being, but also at capturing its duration through time, before, during and after the end of careers.

After having ensured that the impact of years around retirement is linear, we introduced this parameter as a continuous variable in our models, to facilitate the calculation of interaction terms with other covariates.

The first empirical results based on MLMs (table 1) showed that retirement itself does not play a key role in shaping individuals' life satisfaction, for both women and men. Nevertheless, our results demonstrate that working conditions play a key role in shaping individuals' subjective well-being before and after retirement, particularly among men.

Positive work identification is detrimental to LS after retirement; conversely precarious working conditions before retirement increase LS after retirement. For men satisfaction with health status increase LS after retirement. To a lesser extent, the capacity of individuals to endorse different roles through social and family participation also tends to affect the level of LS.

We also noted that living with a partner had slight negative impacts on women when retiring, which can be explained by the many changes in social and family life that happen with this transition.

Finally, the timing of retirement does not show any significant impact. These results highlight that retirement itself has no influence on LS and this is more the working conditions prior to retirement, the capacity to endorse new social roles and the satisfaction with health that play a key role in shaping LS after the transition to retirement.

Table 1 - MLM model explaining life satisfaction – SHP 2001-2015 – authors' calculation

parameters	women		men	
	Estim.	Sig.	Estim.	Sig.
intercept	2.674	0.000	2.144	0.000
age class - 50 to 59 years old	-0.096	0.190	-0.136	0.118
age class - 60 to 63 years old	-0.007	0.894	0.004	0.937
age class - 67 to 70 years old	0.005	0.942	-0.082	0.231
age class - 71 years and more	-0.056	0.563	-0.105	0.270
wave indicator	-0.001	0.918	0.010	0.153
low level of education	-0.137	0.084	-0.131	0.270
high level of education	0.100	0.244	-0.020	0.761
net annual household income	0.000	0.105	0.000	0.253
satisfaction with health status	0.119	0.000	0.153	0.000
health impediment in everyday activities: Extension	-0.011	0.140	-0.016	0.039
satisfaction with financial situation	0.180	0.000	0.179	0.000
satisfaction with personal relationships	0.057	0.000	0.057	0.000
satisfaction with living alone or together with other HH-members	0.186	0.000	0.135	0.000
satisfaction with free time	0.028	0.013	0.020	0.093
satisfaction with leisure activities	0.052	0.000	0.077	0.000
participation in clubs or other groups	0.007	0.850	0.026	0.519
living together with a partner	0.181	0.004	0.177	0.044
satisfaction from work	0.063	0.000	0.092	0.000
risk of unemployment in the next 12 months	-0.011	0.148	0.000	0.984
activity rate - percentage of a full-time job	0.000	0.794	0.001	0.270
retirement counter (-16 to +16, 0= time of retirement)	0.031	0.179	-0.002	0.966
retirement * age class - 50 to 59 years old	-0.004	0.786	-0.003	0.852
retirement * age class - 60 to 63 years old	-0.014	0.338	0.005	0.792
retirement * age class - 67 to 70 years old	-0.004	0.807	-0.028	0.114
retirement * age class - 71 years and more	0.011	0.472	-0.020	0.242
retirement * satisfaction from work	0.001	0.747	-0.008	0.026
retirement * risk of unemployment in the next 12 months	0.001	0.492	0.003	0.007
retirement * activity rate - percentage of a full-time job	0.000	0.659	0.000	0.545
retirement * satisfaction with health status	-0.001	0.625	0.010	0.000
retirement * health impediment in everyday activities: Extension	-0.001	0.578	0.000	0.824
retirement * satisfaction with financial situation	-0.003	0.146	0.003	0.220
retirement * satisfaction with personal relationships	-0.003	0.182	-0.002	0.468
retirement * satisfaction with living alone or together with other HH-members	-0.002	0.343	-0.003	0.246
retirement * satisfaction with free time	-0.002	0.387	0.001	0.515
retirement * satisfaction with leisure activities	0.003	0.146	0.001	0.481
retirement * participation in clubs or other groups	-0.003	0.599	-0.014	0.025
retirement * living together with a partner	-0.023	0.004	-0.002	0.885

What makes adolescents (in)vulnerable? The role of life events, loss, and friendship quality for adolescent well-being trajectories

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Background

Over the past few decades research on well-being has increasingly focused on positive aspects and global assessments of the human condition combined with a prominent emphasis on how people's thoughts and feelings amount to a "subjective sense that one's life is good" (Lucas & Diener, 2008, p. 471). Understanding the foundations and composition of this subjective element of well-being is crucial, as it facilitates the building of (social) resources and motivates people to openly encounter many of life's major challenges (cf. Lyubomirsky, King, & Diener, 2005). This being said, subjective well-being during childhood and adolescence, particularly in the form of self-evaluated global affect balance, warrants particular attention. Heading towards adult life, this period is almost quintessentially characterized by social and emotional challenges and change. Little is yet known about the emergence, stabilization, and vulnerability of children and adolescents' global evaluation of their own emotional condition. The present paper aims to provide a remedy by exploring patterns and social environmental underpinnings of stability and change in youth's self-assessed global affectivity. To characterize young people's social environments, we consider daily as well as exceptional social experience in the form of life events. We first investigate whether, and how far, child and adolescent self-assessed global affectivity can be described as a trait-like and/or life-stage specific characteristic. Second, we examine the role of major life events as well as positive and negative experiences in peer contexts for the temporary variability of self-assessed global affectivity.

Conceptual framework and assumptions

While alterations in environmental characteristics and personal adjustment are likely to induce change in subjective well-being, its stabilization may emerge from personality dispositions and consistency of life circumstances. Indeed, evidence based on adult samples has shown that subjective global evaluations of life comprise a stable trait-like component and a temporary component responding to life events and daily experience (Lucas & Diener, 2008), with the trait component explaining an increasing amount of variance in occasion-specific manifestations of subjective well-being from young to late adulthood (Lucas & Donnellan, 2007). Following this line of research, we assume that child and adolescent self-assessed global affectivity can also be decomposed into a trait-like and life-stage specific components, with the trait component explaining an increasing amount of variance as individuals grow older. We further assume that in order to understand the stabilization of subjective well-being during this early life phase, we need to acknowledge that global evaluations of life are a complex, thus cognitively demanding, task (cf. Schwarz & Strack, 1999). As cognitive skills and abilities for self-reflection typically advance with the passing of the adolescent years, we expect temporary manifestations of self-assessed global affectivity to become an increasingly realistic reflection of conceptually related factors of well-being (e.g., psychological distress). This amounts to the expectation that personal distress gains importance as a predictor of self-assessed global affectivity when adolescents grow older.

To illuminate the role of major life events for adolescent self-assessed global affectivity, we follow previous research suggesting that experience of personal loss impairs (adult) subjective evaluations of life (see e.g., Lucas & Diener, 2008). Taking into account that effects of these events on the (perception of one's) social environment may vary across age, we argue that the significance of loss for temporary manifestations of self-assessed global affectivity alters between childhood and adolescence. With regard to daily events, we focus on experiences in peer contexts, given their outstanding relevance for youth's social and emotional development. Establishing close and supportive bonds with peers belongs to the most salient developmental tasks during adolescence. It is thus not surprising that aversive peer experience, on the other side, can be particularly harmful for adolescent well-being (e.g., La Greca, & Harrison, 2005). As previous research suggests that adolescent positive and negative affectivity trace back to different causes (Miccullough, Huebner, & Laughlin, 2000), we expect that favorable and stressful peer experiences have a non-redundant impact on self-assessed global affectivity.

Data and methods

We use data from the Swiss Longitudinal Study of Children and Youth COCON (www.cocon.uzh.ch). To identify trait and state components of young people's self-assessed global affectivity from late childhood to the brink of adulthood, thus linking our research directly to previous investigations based on (young) adult samples, we combine data for the COCON child cohort (6-year olds followed up until age 16, N = 1273) and the youth cohort (15-year olds followed up until age 21, N = 1258). The respondents rated their own global affectivity on a 10-point scale from "very bad" to "very good". To analyze predictors of evolving self-assessed global affectivity and its temporary variability across late childhood and adolescence, we then focus on the child cohort. Besides reports on major life events (e.g., death of a close person), we use multi-item scales assessing support in

friendship (positive peer experience), peer rejection (negative peer experience), and psychological distress measured at the ages of 9, 12, and 15 years. We specify latent trait-state models within a structural equation modeling framework (see e.g., Steyer, Schmitt, & Eid, 1999), including the estimation of relations between age-specific state factors and their potential predictors.

Findings

The results show that for both cohorts an underlying trait factor contributes significantly to self-assessed global affectivity. While the latent mean of this trait factor is astonishingly similar in the two cohorts, the amount of variance it explains increases as individuals grow older. As expected, psychological distress predicts life-stage specific manifestations of self-assessed global affectivity, with an increasing effect size across the years. Apparently, the trait-like character of self-assessed global well-being begins to evolve progressively in late childhood, and with advancing age, the temporary manifestations of self-assessed global affectivity become an increasingly reliable reflection of other aspects of psychological well-being.

Interestingly, major life events exert lagged effects on self-assessed global affectivity. The effects work partly through psychological distress, particularly at early ages. In line with our expectations, positive and negative daily experiences in peer contexts contribute uniquely to self-assessed global affectivity, both directly and partly indirectly through psychological distress. We discuss the findings paying special attention to life-stage specific social and emotional challenges encountered during the adolescent life course (e.g., changing peer contexts due to school transitions).

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Workshop 1B – Education and labour market I - room 2224

The impact of modernization and labor market conditions on the school-to-work transition in Switzerland: A dynamic analysis of the period from 1946 to 2002

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Background

Given the long-term consequences of one's work history and its impact on future opportunities (e.g., Blossfeld 1987; DiPrete et al. 2001), the transition from education into the labor market is a significant and sensitive phase in the life course of young generations. While it is undisputed that school-to-work transitions depend on individual resources and background characteristics (e.g., Buchmann & Sacchi 1998, Jann & Combet 2012) as well as on the structure and organization of both the education and the employment system (e.g. Wolbers 2007), less attention has been paid to the time-dependency of these trajectories.

In this regard, the transition into the labor market for different birth cohorts is reconstructed as a dynamic process that is time-dependent on (a) the transition duration from the education system to the first job (age or

life-cycle effect), (b) period specific changes of labor market conditions and the level of modernity after leaving education (period effect), and (c) the economic and social conditions at the time of graduation (cohort effect). Thus, we try to assess the role of modernization and economic business cycles in determining the speed of the transition and the likelihood of attaining a prestigious job on the one hand and the influence of social background and educational qualifications across cohorts on the other hand. Furthermore, we ask whether the linkage of the education and the labor market system as well as the corresponding institutional arrangements provide “safety roads” for young professionals to start a career.

Data and Method

To address these questions, we use data from the retrospective biographical calendar which is part of the Swiss Household Panel (SHP). The dependent variable is respondents’ social status in the labor market after leaving education and is based on the International Socio-Economic Index (ISEI). In order to include those who do not enter the labor market, a categorical variable was constructed with six values: those not in the labor market, the unemployed, those in the first, second, third, and fourth (highest) quartile of the status distribution. Main independent variables are the level of unemployment as a measure of economic business cycles and the level of modernity, which was constructed as a metric variable based on the scores of a factor analysis of 15 time-series. These included private and public consumption, investments, share of employees in the tertiary sector, number of students in universities and similar characteristics. Further independent variables are respondents’ educational qualification, the highest education of the primary income earner when respondents were fifteen years old, migration background, gender, and a dummy variable for further education after graduation. The transition into the labor market and to different status quartiles was then estimated using an exponential proportional hazards model. In order to include time-varying covariates (period effects), the episodes were split on a yearly basis (Blossfeld et al. 2007).

Results and Discussion

In line with other studies (e.g., Zangger & Becker 2016), respondents’ educational qualifications generally increase across birth cohorts. Furthermore, the level of modernity at the time of graduation increases the likelihood of entering into the labor market while the corresponding cohort effect of the level of unemployment is not significant. This indicates that along with the higher qualification across cohorts, there is also an increase in labor market participation (as higher levels of modernity refer to younger cohorts). Furthermore, similar effects are observed for the propensity of entering the lowest status quartile: compared to older cohorts, younger cohorts seem to have a higher risk to enter low-status jobs. Finally, with regard to the likelihood of entering into the most favorable positions after graduation, we find some – on first sight – puzzling effects. While there is no effect of the level of modernity, higher levels of unemployment seem to increase the propensity to enter the highest quartile of the status distribution. A closer examination, however, reveals that this effect is entirely driven by the high levels of unemployment between 1992 and 2000. This then suggests that this effect might again reflect the dichotomous difference between younger and older cohorts.

Since the data only allow the identification of events in distinct years (rather than months), the proper interpretation of period effects, however, is severely impeded by the high collinearity between cohort and period effects (reflected in inflated coefficients and standard errors). It is therefore hard to tell whether the negative period effect in the case of entering the labor market is by any means substantial or if it rather reflects the negative effect of longer search duration.

These results and especially the absence of any significant interaction of respondents’ prior educational qualification and the cohort measures indicate that there is no solid evidence for a polarization or displacement at the time of transition into the first job (Oesch 2013). Thus, at least with regard to entering into one’s first job, the institutional arrangement of the educational system and its linkage to the labor market seem to protect the majority from precarious employment conditions. However, the presented evidence also emphasizes the effects of persistent social inequality, especially on the propensity to enter the highest or lowest quartile of the status distribution.

Table 1: The dynamic process of entry into the labor market and status attainment

		Labor Market Entry			Highest Quartile			Lowest Quartile		
Education prior to entry (Ref.: Compulsory Schooling)										
(Some) Vocational education		2.009*** (0.132)	1.775*** (0.120)	1.768*** (0.120)	3.018*** (0.658)	2.942*** (0.660)	2.944*** (0.661)	1.042 (0.108)	0.994 (0.108)	0.983 (0.107)
General education & maturity		1.130 (0.111)	1.098 (0.107)	1.095 (0.107)	4.023*** (0.997)	4.055*** (1.010)	4.067*** (1.012)	0.382*** (0.084)	0.376*** (0.083)	0.371** (0.082)
Higher vocational education		1.852*** (0.203)	1.676*** (0.185)	1.671*** (0.184)	11.775* (2.841)	11.521* (2.836)	11.544* (2.842)	0.153*** (0.070)	0.146*** (0.067)	0.144* (0.066)
University (of applied sciences)		1.695*** (0.153)	1.538*** (0.140)	1.516*** (0.139)	14.636* (3.292)	14.385* (3.303)	14.306* (3.287)	0.157*** (0.047)	0.151*** (0.045)	0.144* (0.043)
Social Origin (Ref.: Compulsory Schooling)										
(Some) Vocational education		1.186** (0.076)	1.141* (0.073)	1.139* (0.073)	1.454* (0.251)	1.455* (0.251)	1.451* (0.250)	0.773* (0.085)	0.760* (0.084)	0.754* (0.083)
General education & maturity		1.210* (0.116)	1.158 (0.111)	1.158 (0.111)	1.478 (0.322)	1.467 (0.320)	1.465 (0.320)	0.696 (0.137)	0.687 (0.135)	0.681 (0.134)
Higher vocational education		1.146 (0.092)	1.113 (0.090)	1.110 (0.089)	1.821** (0.343)	1.827** (0.345)	1.821** (0.344)	0.580*** (0.095)	0.572*** (0.094)	0.568** (0.093)
University (of applied sciences)		0.974 (0.095)	0.965 (0.094)	0.967 (0.095)	1.487* (0.292)	1.497* (0.294)	1.495* (0.293)	0.367*** (0.099)	0.364*** (0.100)	0.371** (0.102)
Further education after labor market entry		1.254*** (0.058)	1.215*** (0.057)	1.167** (0.059)	1.021 (0.100)	1.012 (0.099)	1.017 (0.100)	0.995 (0.102)	1.268* (0.119)	1.240* (0.118)
Cohort Effects										
Modernization		1.098* (0.050)	6.337*** (2.099)	6.521*** (2.163)	0.922 (0.086)	1.037 (0.673)	1.053 (0.684)	1.494*** (0.141)	2.904* (1.445)	3.179* (1.591)
Unemployment		0.997 (0.024)	1.067 (0.063)	1.061 (0.062)	1.108* (0.048)	1.263* (0.132)	1.256* (0.132)	0.937 (0.049)	0.928 (0.113)	0.917 (0.112)
Period Effects										
Modernization			0.177*** (0.058)	0.180*** (0.059)		0.916 (0.585)	0.932 (0.596)		0.512 (0.253)	0.541 (0.269)
Unemployment			0.919 (0.053)	0.925 (0.053)		0.866 (0.089)	0.871 (0.089)		1.009 (0.118)	1.023 (0.120)
Cohort (Modernization) * Further education				0.856* (0.060)		0.879 (0.132)				0.673** (0.094)
Number of sub-episodes		3,834	3,834	3,834	3,582	3,582	3,582	3,582	3,582	3,582
Number of Events		2,247	2,247	2,247	564	564	564	536	536	536
Log-Likelihood		- 2705.25	- 2685.64	- 2683.19	- 1180.89	- 1179.75	- 1179.38	- 1264.54	- 1263.51	- 1259.51

N: 2,344; Exponentiated coefficients; Additionally controlled for Gender and Citizenship; Standard errors in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

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Shaping vocational careers through the interplay of education, training and career-enhancing work design

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The Swiss dual-track vocational education provides for a variety of careers which match different individual abilities and interests. With technological, economic and societal changes in mind, the necessity to generally increase the level of education and to integrate education, training and employment towards higher employability over the course of life becomes more important for many occupations. The project aims at better understanding different occupational trajectories within and across occupations and into tertiary education and subsequent professional career paths. This knowledge will help to identify challenges in keeping certain occupations attractive and to define measures for work design and learning opportunities in these occupations.

Background

In the Swiss education system, pupils continue their education by entering upper secondary education after nine years of compulsory school. Transitions into general education programs, preparing for further education on tertiary level but without receiving a professional education are possible as well as transitions into vocational education and training (VET). Most VET programs are a combination of part-time apprenticeships at a host company and part-time classroom instruction at a vocational school. Within this dual-track approach there are around 230 occupations to choose from. Two-thirds of all young people in Switzerland enroll in VET (SERI, 2017). In addition, holders of the Federal Vocational Baccalaureate (FVB) have the option to enter further education on tertiary level. Despite its immediate focus on the labor-market, VET lays the basis for life-long learning and allows flexible transitions within the education system which is permeable on all levels. Therefore, vocational careers and occupational pathways may differ a lot between VET graduates. Facing technological, economic and societal changes, which generally appear to push towards a higher level of education, even more agile educational systems that integrate education, training and employment are needed to ensure employability over the life course. For routine intensive occupations, the impact of computerization resulting in a decline of employment is already well established in the literature but as technology evolves, low-skill and low-wage occupations of different domains are at risk as well (Frey & Osborne, 2013). In order to analyze the development of different vocational occupations and educational pathways in the Swiss context we observe trajectories of a cohort, finishing compulsory school in the year 2000. This approach allows us to follow individual career paths, identify undertaken career shifts and interpret them.

Method

TREE (Transition from Education to Employment) is an ongoing Swiss prospective longitudinal panel study following young adults on their post-compulsory pathways to employment and adulthood. It's representative at the national level and for the three main language regions of the country. The overall sample is based on about 6000 young adults who were surveyed for approximately fifteen years and have now reached the age of 33 (TREE, 2016). Using phase 2 of the TREE data (starting from 2004) we combined the available year specific data files into one longitudinal dataset. As we are interested in trajectories of VET graduates, we selected a corresponding subsample. We analyzed frequencies of reported occupations for each measurement wave and grouped the results based on the Swiss Nomenclature of Occupations (SNO, Federal Statistical Office, 2014), a four-level hierarchically structured classification which is also comparable to international classification systems. As a parallel approach, we used sequence analysis to analyze turnover related changes in different occupational divisions, also according to the SNO classification.

Results

The results of the frequency analysis indicate mobility in almost all occupational divisions. While some domains experience growth in the observed time span, others have negative net turnover rates. Preliminary sequence analysis results suggest that it will be possible to identify clusters of certain occupations that display different trajectories over time. Some occupations in the industry, arts and crafts sector, construction and mining, transportation and traffic, hotels, catering and personal services, management, administration, banking, insurance and legal tend to be quite consistent over time. The overall frequency of people in these groups seems to remain quite stable over time, possibly indicating lower levels of turnover within these groups. Patterns that suggest movement between occupations are also observable. For example, it seems that individuals move from occupations of the industry, arts and crafts division into the technical and information technology division. Additionally, individuals move from a number of different occupational groups into managerial positions, possibly indicating hierarchical career progression over time.

Discussion

The results of the undertaken analysis lay the foundation for further analysis of occupational domains concerning significant differences in work characteristics such as job variation, freedom of action, strain, social support, and available career paths. While many occupations presumably will need to transform into more academic professions, for others vocational education - possibly complemented by targeted further education programs - will still be sufficient. A better understanding of the factors of high occupational turnover will support the objective of keeping individuals interested and employable in relevant vocational jobs. The reported results are based on occupational information up to seven years after finishing VET, for most individuals even less. One other limitation are the used occupational classifications that are still on a very broad aggregation level. A more differentiated analysis is needed both in terms of how occupational codes are used and how many clusters are interpreted in the sequence analysis.

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Adolescents' development of occupational aspirations in a tracked educational system

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Introduction and research question

The formation of educational and occupational goals is an important developmental task during adolescence. Its successful mastery supports adolescents' transition into adequate post-compulsory education and training, which in turn is a prerequisite for a stable integration into the labour market (Clausen 1991; Heckhausen et al. 2013). Adolescents' occupational aspirations play a crucial role in this process: They have been identified as important precursors of adult occupational attainment (Rojewski 2005; Schoon 2001). Occupational aspirations are particularly significant for later attainment in countries such as Switzerland, where occupations serve as institutions linking the educational system and the labour market.

Previous research has shown that occupational aspirations are influenced by adolescents' educational performance, socio-economic background and self-efficacy beliefs (e.g., Bandura et al. 2001; Bozick et al. 2010). A comparative study of Buchman & Dalton (2002) provides some evidence that a country's educational system affects the formation of aspirations. However, research on the relationship between system-specific educational pathways and the development of occupational aspirations is still very scarce. Our paper will contribute to filling this gap by analysing the formation of ideal occupational status aspirations in a tracked educational system, taking Switzerland as an example. We examine how social and individual factors – and in particular characteristics of the educational pathway – influence the status development of ideal occupational aspirations between the age of 15 and 21.

Theoretical assumptions

In order to formulate hypotheses, we draw on institutional assumptions regarding the effect of educational tracking (e.g., Meyer 2007 (1977); Gamoran 1996; Dannefer 1992). From this perspective, track allocation and the concomitant institutional structures of educational tracks assign individuals to particular roles and positions within the system. This impacts young people's developmental outcomes and pathways by shaping their performance gains and the perception of their abilities and options. Along this line of reasoning, adolescents

internalise personal qualities and expectations, which are deemed appropriate for their school type and academic performance and attainment. We thus assume that characteristics of the educational pathway, such as track allocation or disruptions, are likely to affect the level and the development of adolescents' occupational aspirations. Based on status attainment and social cognitive theory we also assume that the development of occupational aspirations depends on young people's social background and on academic self-efficacy beliefs.

Data & Methods

Our analyses are based on the adolescent cohort of the Swiss Longitudinal Survey of Children and Youth (COCON). The adolescents, born between September 1990 and April 1991, were surveyed in 2006, 2007, 2009 and 2012 at the ages of 15, 16, 18 and 21 respectively. We chose all individuals who participated at least in two waves (N= 895) and ran multilevel models with a repeated measures design. We decomposed time-varying covariates into a within and a between component, thus allowing the analysis of intra- individual change and inter-individual differences in occupational aspirations. The dependent variable of the multilevel models is the status (ISEI) of adolescents' ideal occupational aspirations, measured at the time of the four survey waves. Our independent variables are the allocation to lower- and upper-secondary school tracks, changes in upper-secondary track allocation, interruptions of secondary education, academic self-efficacy, academic performance, SES and gender.

Results

The results confirm that the status development of adolescents' ideal occupational aspirations strongly depends on the track allocation in lower- and upper-secondary school. At the age of 15, the level of young people's occupational aspirations is closely related to their level of lower-secondary school. After the transition to upper-secondary school, the type of upper-secondary education becomes influential and young people align their status aspirations to the opportunities provided by their upper-secondary track. Furthermore, young people in specialised and vocational baccalaureate tracks and those in vocational education and training with high requirements are most likely to increase their status aspirations during upper-secondary school. The reason may be that those two groups have easy access to universities of applied science and thus to fairly high-status jobs. All in all, the findings are in line with institutional arguments, which claim that the level of occupational aspirations as well as the likelihood for change depends on opportunities provided by the social environment.

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Socio-economic determinants of school transition in Morocco: Longitudinal analysis

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This article aims to identify the influence of socio-economic factors students aged 6-25 old on the academic successes expressed by the transition from one cycle to the next, or graduation from the actual cycle and enrollment in the next cycle.

The studies conducted by the researchers identified three main types of factors that could have a significant impact on academic achievement: socio-cultural factors, pedagogical factors, and socio-economic factors.

It is therefore necessary to conduct research to test these relationships and to confirm or invalidate these results. We will be interested in this research only in socio-economic factors.

Sources of data

The data are extracted from the individual and household files of the two waves of 2012 and 2015 of household panel surveys carried out by the National Observatory of Human Development (ONDH) of Morocco. They provide a large number of variables to explain and understand the determinants of children's school transition.

For 9-year-olds who have been in grade 4 in primary school in 2012, the college-level schooling situation can be filled in via the wave 2015. For the secondary and college education, the longitudinal data of the waves 2012 and 2015 determine exactly the situation of the transition between the two cycles regardless of the year of the study.

Choice of variables

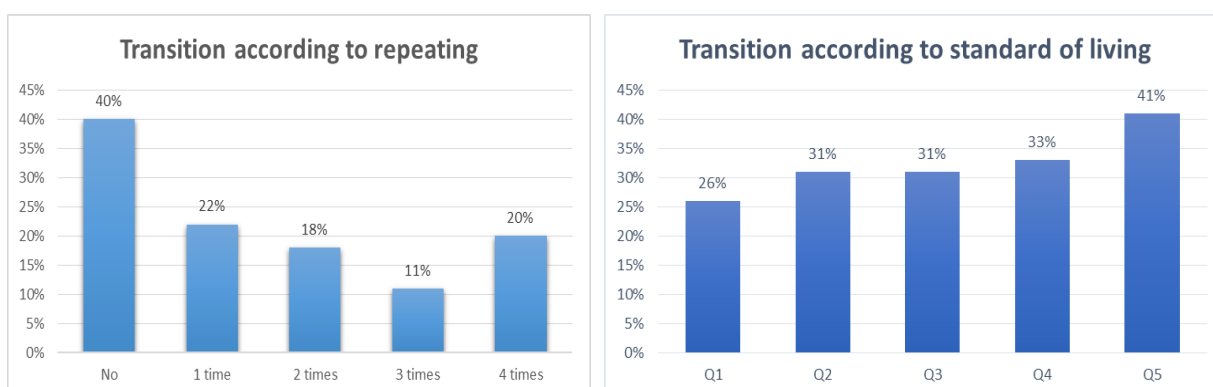
The variables used are : the place of residence, the gender, the pupils' academic delay, the number of doubling, the level of education of the head of the household, the type of dwelling, access to electricity, access to drinking water, the average number of people per room, the household's standard of living expressed by the quantile of expenditure, the change in this standard of living from 2012 to 2015, expressed as the difference of the quantiles of the waves 2012 and 2015 and the size of the household. The variable explained is a boolean that takes the value 1 if the child has made a transition between the two dates and 0 if else.

Methodological approach

The analysis of the data is based on binary logistic regression techniques. The choice of these techniques is dictated both by the nature of the exercise to be carried out and by the type of variable to be explained: the transition between two successive cycles between the two dates 2012 and 2015.

Main results

The first results of this analysis show that for children aged 9 to 25 who have attended school in 2012 and before, only 30.8% of them have made a transition during the period 2012-2015. This result can be explained by the academic delay, doubling and dropout. Depending on the number of doubling, the proportion of children who experienced transitions decreased sharply from 40% for no repetition to 11% for three doubling. Depending on the standard of living, this proportion ranged from 26% for the 20% poorest to 41% for households classified in 2nd, 3rd and 4th quantiles, to 41% for the 20% richest.



In this study, we emphasize the overall alignment of the results of the econometric analysis based on logistic regression with those of the statistical description. Thus, the academic delay and the number of times of doubling adversely affect the process of transition from one school cycle to another. However, the contribution of the

cultural capital transmitted by the head of the household remains undeniable: the more educated he is, the more he pushes his children to study.

At the socio-economic level, household poverty would prevent children from pursuing their studies normally and guaranteeing a transition from one cycle to another. The change in the standard of living of the household greatly affects the transition from one school level to the next. The more drastic is the change, the smaller is the proportion of children with transitions and vice versa.

Housing issues are key determinants of school transition. These include, in particular, the overcrowding in the house, expressed as the average number of persons per room (absence of a space reserved for the child) and the problems related to access to drinking water (Well and river).

Overall, the variation in the standard of living of households has an important influence on the transition of children when it is abrupt and strong.

Tables

The following table presents the results of the logistic regression model conducted on the longitudinal data extracted from the waves 2012 and 2015.

Coefficients	Estimate	Std. Error	z value	Pr(> z)	
(Intercept)	-1.103e+00	8.147e-01	-1.353	0.17592	
Male gender	1.803e-01	5.583e-02	3.230	0.00124	**
academic delay	-4.818e-01	1.611e-02	-29.907	< 2e-16	***
number of doubling	-1.971e-01	3.890e-02	-5.066	4.07e-07	***
type of dwelling	7.715e-03	1.573e-02	0.491	0.62368	
Electricity	4.531e-04	4.956e-02	0.009	0.99271	
water	-9.462e-02	2.136e-02	-4.430	9.43e-06	***
Household size	1.244e-02	1.360e-02	0.914	0.36064	
Persons per room	-2.163e-01	8.528e-02	-2.536	0.01121	*
Education level	6.833e-02	1.963e-02	3.481	0.00050	***
DAMP	-1.079e-06	2.079e-06	-0.519	0.60355	
VarQDamp-3	1.429e+00	8.388e-01	1.704	0.08838	.
VarQDamp-2	1.627e+00	8.062e-01	2.018	0.04356	*
VarQDamp-1	1.564e+00	8.011e-01	1.952	0.05096	.
VarQDamp0	1.557e+00	7.997e-01	1.947	0.05148	.
VarQDamp1	1.715e+00	8.003e-01	2.143	0.03210	*
VarQDamp2	1.757e+00	8.023e-01	2.189	0.02856	*
VarQDamp3	1.729e+00	8.083e-01	2.138	0.03248	*
VarQDamp4	1.151e+00	8.408e-01	1.369	0.17086	

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

DAMP : Average annual expenditure per person

VarQDamp-x : Difference in the quantile of annual average expenditure per person

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Workshop 2A – Health & well-being II - room 2208

Regional disparities in advance care planning behaviors in Switzerland

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Background

The child and adult protection law came into force in January 2013 in Switzerland. One aim of this law is to promote the right of self-determination by introducing two legal instruments: a power of attorney and advance directives. This study focuses on advance directives (AD) that allow the patient two options in case he/she becomes incapable of discernment: determine in writing the medical treatment he/she intends to follow (living will) and appoint an individual who will have the authority to consent on his/her behalf to medical treatment (durable power of attorney for healthcare (DPAHC)).

Some results of the International Health Policy Survey of Older Adults 2014 showed that the proportion of people with a living will or DPAHC is much higher in German-speaking part of Switzerland than in the French-speaking part. This gap may be a cause of concern since AD participate in improving the quality of life not only of the patient whose capacity to make medical decisions has been lost, but also of his/her family and healthcare providers. In fact, by describing patient's values and preferences regarding medical treatments, AD facilitate the respect of patient's wishes and, in addition, support patient's family members and doctors in making appropriate decisions.

However, although AD clearly seem to be a useful instrument, some studies show that AD completion in the general population remains low, varying between 9 to 20%. Several studies mention barriers to completing AD: unawareness of AD, complexity of the instrument, not feeling concerned, and/or purposely leaving the end-of-life (EOL) decision in the hands of other people involved.

Our study aims to examine the regional variation in people who have a living will and designated DPAHC in German- and French-speaking Switzerland by sociodemographic characteristics. In addition, special attention is given to the level of AD literacy in bringing about regional differences in advance care behaviors (living will, DPAHC). Finally, regional differences in the reasons that respondents mentioned for not having AD are explored.

Method

Our analysis are based on the EOL questionnaire that has been distributed in wave six (2015) of the survey on health, retirement and population ageing of people aged 50 and over in Europe (SHARE). In the EOL questionnaire, a paper and pencil questionnaire distributed only in Switzerland, respondents were asked about their EOL preferences, knowledge and behaviors through 32 questions.

The two outcome variables, having a living will and having designated DPAHC, come from the following questions:

- "Have you completed a written statement about your wishes and refusals for medical treatments and care (advance directives)? Yes or No"
- "Have you appointed someone in writing to make medical decisions for you should you not be able to make those decisions for yourself? Yes or No"

Covariates are sociodemographic variables and AD literacy. Sociodemographic characteristics include: gender, age groups (55-64 ; 65-74 ; 75+), education level grouped into three categories (low, middle, high), having one or more living children, living with a partner, living in an urban area (big city, suburbs, large/small town) vs. living in a rural area, living in German- or French-speaking Switzerland. AD literacy is measured by two questions assessing respondents' awareness of and knowledge about AD. Finally, respondents who did not have AD were asked about the reasons for it and could choose several reasons among seven given options.

In our analysis, we first present weighted fractions of respondents who have a living will and have appointed DPAHC, overall and by regions, according to sociodemographic characteristics and AD literacy. Second, we display three nested ordinary least square (OLS) regressions for the two Swiss linguistic regions separately on having a living will and having appointed DPAHC. Third, we perform a Blinder-Oaxaca decomposition. This method consists of breaking down regional mean differences in having a living will and having appointed DPAHC into two effects: the differences in the distribution of the covariates on the outcomes (endowments' effect) and in the association of the covariates with the outcomes (coefficients' effect) in the two Swiss linguistic regions. Finally, we show proportions of respondents' reasons for not having AD for the two regions.

Results

The results showed lower rates in advance care behaviors (living will, DPAHC) in the French part. This regional gap was of 19 percentage points in having a living will and 13 percentage points in having designated DPAHC. The lower level of AD awareness in the French part largely explained the difference in having AD between the two regions. In addition, being aware of AD existence had a higher impact on having AD in the German part.

Furthermore, some sociodemographic characteristics had a different impact on having a living will according to the region. Especially, having living children had a negative impact on having a living will in French Switzerland, whereas it has a no impact in German Switzerland. Similarly, living with a partner was negatively correlated with having a living will in the German part, but had no effect in the French part. Finally, the regional gap was also observed in the reasons for not having a living will. In the French part, around one third of the respondents without a living will justified it by a lack of awareness, but also by the belief that it was useless to plan for an event as unpredictable as EOL. In contrast, in the German part, this answer was chosen by only 19% of the respondents. Furthermore, the 57% of respondents in the German part said that they planned to have AD in the future, compared to 27% in the French part.

Discussion

As having AD may contribute to improving the EOL quality for patients, their families and physicians, Swiss regional differences in planning advanced care may produce corresponding inequalities in EOL quality and should thus be of some concern to health policy makers in Switzerland. As a considerable part of this difference is attributable to the lack of AD literacy in the French part, improving the awareness regarding the existence and the advantages of having AD appears to be the first step to undertake in order to reduce this gap. However, our results seem also to show that the lower responsiveness to AD in French Switzerland is partly attributable to cultural factors that must be further investigated.

Trajectories of somatic troubles among young adults in Switzerland

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Introduction

In this study based on data collected under the Transitions from Education to Employment (TREE) project¹, we explore the development of somatic troubles among adolescents and young adults aged from 16 to 30 in Switzerland.

Somatic troubles are very common in all individuals, but their causes and consequences often remain unclear in the literature, with contradictory findings. We hypothesize that somatic troubles and their development over time can be influenced by both general and specific reasons. General reasons include fixed or generally slowly evolving factors such as gender, socio-economic status of the family, educational track or residential area. Specific reasons are factors which can appear suddenly or evolve quickly in time, such as substance consumption, stressful events (death of a family member or close friend, school failure, unemployment etc.), or transitions in the lifecourse (leaving the parental home, birth of a child, ...). With regard to the development of individuals from mid-adolescence to young adulthood, we searched to identify specific subgroup trajectories of somatic trouble development and link these trajectories both to personal and socio-economic factors.

Methods

The TREE data operationalize somatic troubles through a score summarizing yearly the level of eight troubles: stomach-ache, lack of appetite, lack of concentration, vertigo, sleeping disorder, nervousness, tiredness, and headaches. This score ranging from 0 to 32 was used as dependent variable in the analyses.

The fixed covariates were gender (female/male), country of birth (Switzerland/other), academic track attended at mandatory school (high/extended/basic), residence (rural area/urban area), PISA reading literacy (6 levels from 0 = very low to 5 = very high; treated as a numerical scale hereafter), highest parental socio-economic status (ISEI² scale) and family wealth (scale representing the possessions of the family such as cars and TV sets). They were measured in year 2000 during the PISA survey, one year before the beginning of the TREE study. Critical life events and substance use were measured at each subsequent wave of the TREE survey. The number of critical life events reported each year was used as a time-varying covariate in the analysis. Reported critical events comprised relocation of parental family; moving out of the parental home; parental and own separation or divorce; death, serious accident/illness or unemployment of relevant others; trouble with the police; unhappy love; serious conflicts in the family, at school or at work; pregnancy and parenthood. Finally, the consumption level of four types of substances (alcohol, tobacco, cannabis, tranquilizers/sleeping pills) was assessed with five possible answers ranging from "never" to "every day".

General reasons can shape the overall level and development of the somatic troubles score, while specific reasons imply more sudden changes. Therefore, we relied on the Hidden Mixture Transition Distribution (HMTD) model for our analysis, a two-level Markovian model able to incorporate both fixed and time-varying covariates, the goal being to identify and explain typical trajectories of somatic troubles from adolescence to adulthood. At the visible level, the HMTD model represents trajectories of somatic troubles using Gaussian distributions whose means are modelled through an autoregressive process with the inclusion of the number of critical life events as time-varying covariate. Each Gaussian distribution of the visible level corresponds to a different state of the hidden level. A homogeneous Markov chain is used to represent the transitions between states, but since we used here the HMTD model as a clustering tool, the transition matrix was constrained to the identity one. Fixed covariates were used at the hidden level to influence the probability for a specific individual to be assigned to each state. Regarding substance use, we chose not to include them directly into the model, but to assess their link with the different clusters a posteriori, because substance use was mostly a continuous behaviour that was difficult to break into specific events.

Results

Data from $n = 1161$ respondents (64.5% females) continuously observed from 2001 to 2014 were included in the analyses. Using the Bayesian Information Criterion (BIC) as selection criterion, we obtained a 5-states HMTD model. Five fixed covariates remained at the hidden level (residence, gender, reading literacy, hisei, family wealth). The mean of each Gaussian distribution was modelled using the first two lags of the somatic troubles dependent variable, and the time-varying covariate representing critical life events. The five groups of trajectories identified by the HMTD model were different both in terms of average level of somatic troubles and of variability, but inter-subject variability remained high, even within the same group. Regarding intra-subject variability, it was especially high in two of the groups.

Significant associations were found at three different levels. First, the level of somatic trouble measured in a given year was always related to the level observed in the previous years. This is a clear indication that somatic troubles persist over time. Second, the level and development of somatic troubles over time were influenced not only by gender, but also by academic achievement operationalized here through the reading literacy level achieved at the end of mandatory school. While gender is a factor exogenous to the youth him- or herself, both exogenous and endogenous factors are at work in the case of reading literacy. Even though females may tend to report a higher number of somatic troubles than males, our clustering shows that not only the average level, but also the variability from one period to the next was higher in the groups comprising more females. Third, the critical life events score was also significant for one of the five groups of the clustering. Fourth, tobacco and tranquilizers/sleeping pills were especially associated with the different trajectories of somatic troubles. Both kinds of substances were more prominently used in the groups with the highest somatic trouble levels.

Discussion

The main finding of this study was the identification of several distinct groups of somatic trouble trajectories. These trajectories remained distinct throughout the entire observation period covered by the TREE data, which is from age 16 to age 30. As these trajectories already differed at age 16, we can conclude that factors already present during childhood, and thus beyond the control of the youths themselves, caused such a differentiation. Since it is known that a higher level of somatic troubles is associated with subsequent health issues, we can conclude that 1) some groups of adolescents in Switzerland were experiencing a situation of vulnerability beginning before adolescence, and that 2) this condition is likely to persist even beyond the period covered by our study. A second conclusion is that if critical life events are related to somatic troubles, this relationship was visible only among individuals with low levels of somatic troubles. For their counterparts with high levels of somatic troubles, the impact of critical life events was mostly masked by the inherent variability observed in somatic trouble scores. This brings us back to the fact that even if critical life events experienced during the transition period of adolescence and young adulthood can have an impact on somatic troubles, this impact remains limited, and the most important causes of a high level of somatic troubles are to be found elsewhere. This also leads us to the assumption that if somatic troubles are triggered by the occurrence of critical life events, the influence of such events is mainly of short duration, as the somatic trouble score often decreased again one period later.

¹ The Swiss panel study TREE (Transitions from Education to Employment) is a social science data infrastructure mainly funded by the Swiss National Science Foundation (SNF) and located at the University of Bern.

² International Socio-Economic Index, based on parental occupation.

Perceived recovery from a psychological health problem – Evidence from an autoadministered questionnaire survey based on a subsample of the Swiss Household Panel

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Background

Despite increasing acknowledgement of the financial and subjective burden of mental health problems, Swiss research investigating subjective recovery remains scarce, especially when it comes to data from non-clinical samples. Complementary to medical models which focus on symptom remission as an indicator for “being healed”, personal recovery is seen as a subjective process enabling the concerned persons to live a satisfying life (e.g., Anthony, 1993).

Persons diagnosed with a psychological health problem are likely to be stigmatised (for Switzerland, see Lauber, Nordt, Falcato, & Rössler, 2004). Hence, the process of recovery includes an identity transformation (Haslam, Jetten, Postmes, & Haslam, 2009; Williams, 2008) in which persons have to deal with the new, rather negative social category they belong to. Persons who derive something positive from the illness category or who “come out proud” with the illness seem to achieve a greater acceptance of the health problem and greater recovery (Chiba, Kawakami, & Miyamoto, 2011; Corrigan, Kosyluk, & Röscher, 2013; Mizock, Russinova, & Millner, 2014). Yet, it is not clear which role positive identity content (that is, the association of the illness category with positive attributes such as having become more tolerant or more understanding due to the illness experience) plays when predicting perceived recovery along with variables related to the burden of the illness experience.

The aim of the following study is to identify predictors of subjective recovery combining longitudinal trajectories of depressive feelings from the Swiss Household Panel data with an autoadministered questionnaire survey with a preselected subsample of the SHP conducted in 2016.

The following two questions were asked:

Which variables predict subjective recovery?

When including perceived negative consequences of the health problem and different past trajectories of depressive feelings, does positive identity content still have an impact on perceived recovery?

Method

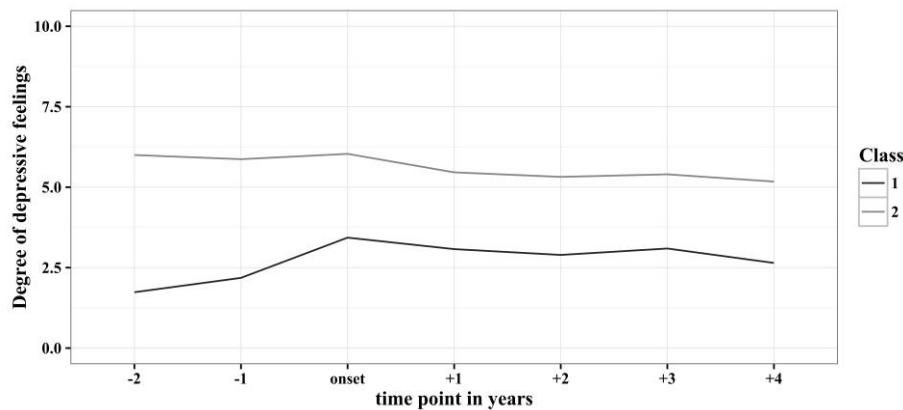
1426 persons living in the French and German part of Switzerland and participating regularly since 1999 or 2004 (SHP I and II) in the SHP were selected based on their health reports between 2003 and 2014 (psychological or physical illness). They were contacted in order to participate in an online- or paper-pencil auto-administered questionnaire survey on health (response rate: 61%). The questionnaire consisted of a general part and one part in which persons had to answer questions on one principal health problem they had experienced throughout their lives, its medical and treatment history, perceived positive and negative consequences in different life domains, perceived recovery (Recovery assessment scale; Corrigan et al., 2004) stigmatisation, positive identity content (Stigma Scale; King et al., 2007).

328 questionnaires could be analysed with reports on a psychological health problem ($N = 328$, 68% female; 66.46% German part; age: $M = 50.73$, $S.D. = 13.01$). Most health problems were depressive disorders (38.72%), burnout (18.29%) and anxiety disorders (16.12%). 95 persons could be identified for which the onset of the health problem reported in the follow-up study matched (± 2 years) the onset indicated in the SHP, so that trajectories of depressive feelings around the onset of the health problem could be related to responses in the follow-up-study. The analyses reported here concern this subgroup ($N = 95$, 64.21% female, 67.37% German part, age: $M = 47.08$, $S.D. = 12.98$).

To obtain different types of trajectories of depressive feelings ranging from two years before onset to four years after onset, we applied Latent Growth Mixture Modeling using MPlus 7.4 in order to identify discrete trajectory classes. The class probabilities obtained from the analyses were then introduced as a predictor in a multiple hierarchical regression (OLS) predicting the mean of subjective recovery.

Results

Figure 1: Two trajectory classes evolving from two years before to four years after onset of the health problem.



The best model solution revealed 2 latent trajectory classes (Class 2: 28 persons, Class 1: 67 persons). The model showed good entropy; fit indices (AIC, BIC) were smaller than for the 1 class model (see Table 1).

Table 1 Overview of class solutions for the LGMM.

Fit index	Growth mixture model		
	1 class	2 classes	3 classes
AIC	3192.62	2450.92	2449.20
BIC	3238.59	2489.23	2495.17
Entropy	-	0.78	0.86
BLRT p value	-	0.000	0.154

Table 2 shows the mean negative consequences due to the health problem as most important predictor for perceived recovery as well as positive identity content. The probability to be categorised in the trajectory of Class 2 (higher depression values which remained relatively stable over time) predicted perceived recovery negatively. This effect was mediated by positive identity content: The latter was negatively predicted by the probability to be categorised in Class 2 ($\beta = -0.37$, $p < 0.01$). The effect of class probability on recovery disappeared when adding positive identity content to the model, the Sobel test was significant ($z = 2.55$, $p < 0.05$).

Table 2 Results obtained by hierarchical multiple regression analyses on perceived recovery.

	Step 1		Step 2		Step 3		Step 4	
	<i>B</i> (<i>SE B</i>)	β	<i>B</i> (<i>SE B</i>)	β	<i>B</i> (<i>SE B</i>)	β	<i>B</i> (<i>SE B</i>)	β
Age	-0.01 (0.46)	-0.15	-0.01 (0.01)	-0.16	-0.01 (0.01)	-0.16	-0.02 (0.01)	-0.21*
Male	0.37 (0.01)	0.18	0.37 (0.19)	0.18	0.27 (0.19)	0.13	0.44 (0.18)	0.21*
French language	-0.16 (0.21)	-0.08	0.09 (0.20)	0.04	0.14 (0.20)	0.07	-0.04 (0.19)	-0.02
Ongoing health problem	-0.61 (0.21)	-	-0.12 (0.24)	-0.60	-0.03 (0.24)	-0.01	-0.17 (0.22)	-0.08
Time since onset	0.02 (0.21)	0.05	-0.01 (0.03)	0.03***	0.01 (0.03)	0.02	-0.01 (0.03)	-0.02
Impact			-0.03 (0.13)	-0.03	-0.01 (0.13)	-0.01	-0.06 (0.12)	-0.06
Mean negative consequences			-0.47 (0.13)	0.47***	-0.45 (0.12)	-0.45	-0.40 (0.12)	0.40***
Probability for Class 2					-0.52 (0.24)	-0.21*	-0.20 (0.24)	n.s.
Positive identity content							0.35 (0.09)	0.35***
R^2	.14		.30***		.33*		.43***	

The variables perceived recovery, impact, mean negative consequences, and positive identity content range from 1 “not at all” to 5 “to a great extent”; *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Discussion

Our results combine trajectories of depressive feelings with a subjective measure of recovery. They point to the importance in considering past trajectories and negative consequences of psychological health problems when investigating perceived recovery. Yet, they also indicate that deriving something positive from the health problem could buffer these negative effects. Future research should be conducted including clinical symptom measures and bigger sample sizes.

The Relationship between Health and Occupational Trajectories: A Study on Life-History Calendar Data

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Francesco Guidici, NCCR LIVES, Ticino Statistical Office

Among the social determinants of health, scholars underline the role of atypical and precarious work conditions vs. standard occupations (full-time, permanent jobs with benefits). The literature shows that part-time job and fixed-term contracts are associated with poor mental and physical health conditions (Bühlmann 2013; Lepori, Greppi e Marazzi 2012). The explanations range from the precariousness to which atypical workers are exposed, to lower incomes and poor pension coverage associated with these occupations, and the impossibility to organize and plan social life, as well as the stress perceived.

Two groups of questions that we want to tackle with our studies are emerging in the recent literature on the topic:

First: are atypical employment relationships generating precarious career pathways, or are they present only in the first years at the entry in the labor market (Raitano e Struffolino, 2013)? If atypical careers exist, which are the characteristics (gender, social origins, migration status, educational level) of the individuals who experience them? It is of particular interest to focus on gender differences, as we know that women have the most discontinuous trajectories compared to men when they have children.

Second: the emergence of atypical forms of employment has been underlined as being detrimental for mental and physical health. Research claims that some type of flexible employment, especially when it is not explicitly requested by the worker but imposed by the employer (Bühlmann 2013), could generate lower health, less job satisfaction, and a higher degree of fear of losing his job. However, it is not clear what is the causal relation between work and health. Cross-sectional studies mainly show an association between atypical work conditions and bad health but rarely show that precarious work conditions lead to poor health and not the opposite (the so-called “healthy worker effects”).

Data and Analytical Strategy

In this study, we analyze data from the third sample of the Swiss Household Panel, which started in 2013 and used in the first wave a Life History Calendar to collect retrospective life trajectories on several domains. The data included trajectories of 9885 Swiss residents aged 16 to 100, of which 5387 had entered the job market and 26161 events were reported. The calendar collect data on different dimensions; cohabitation, residence, couple's history, birth of children, health, professional career. In this study we focus on the occupational trajectory (changes in activity rates of main and secondary jobs, change of job type, unemployment spells, inactive periods, etc.) and the health trajectories (episodes of mental and physical health problems). In order to minimize the risk that some occupational trajectories were influenced by preexisting health conditions, individuals who experienced mental or health problems before entering in the job market were excluded by the sample. The final sample is composed of 5387 individuals.

Seven professional status types were used to explore the professional trajectory “working full-time,” working part-time 50-89%, “working part-time less than 50%,” “social assistance,” “unemployment,” “inactive,” and “temporary contract.” We used optimal matching (OM) methods to classify the work pathways observed during the first 20 years following the entry into the labor market. Our OM analyses were followed by cluster analysis with Ward's method to develop a set of distinct categories describing occupational pathways and to classify individuals into these categories based on similarities in the pathways. This method allows us to observe the strength of the associations among the occupational pathways. This descriptive analysis is an advance over most other research on life course patterns, many of which treat a particular domain (e.g., the educational career, or the work career) in isolation from others, and do not take account of frequent observations of an individual's status (Abbott, 2001).

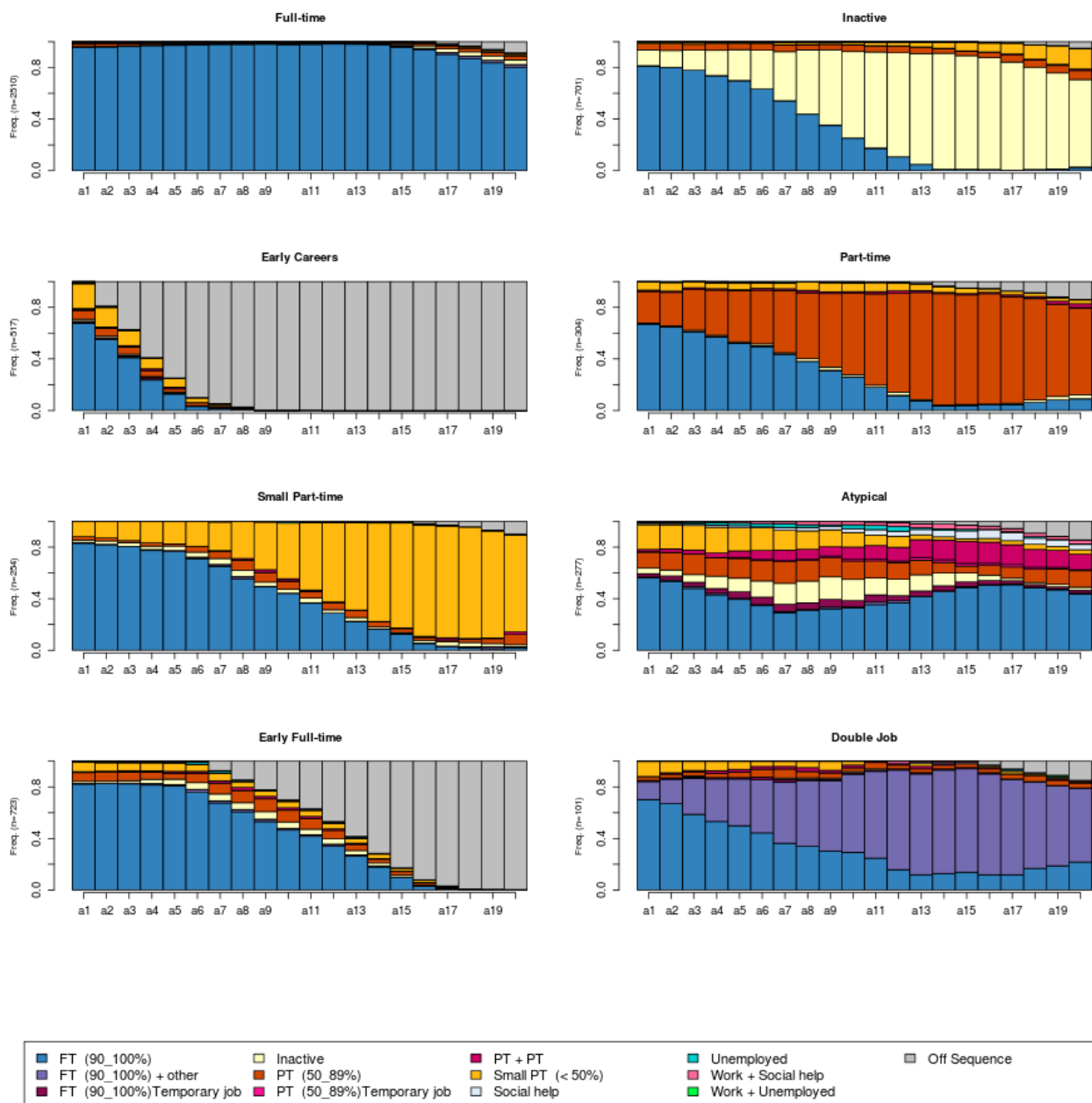
We aligned the sequences of occupational status on the year of the entry into the labor market, in contrast to other studies that use OM techniques to align sequences according to age. TraMineR, software designed to study transitions and pathways (Gabadinho et al., 2009), is used to match sequences. OM analysis seeks to quantify the difference between two sequences in terms of the number of elementary operations of insertion, deletion, and substitution of an individual's status needed to transform the first sequence into the second one (Sankoff and Kruskal, 1983). When the elements in a sequence are ordered, as is the case here, it is also important to weigh the cost of these operations (Abbott and Tsay, 2000). In our case, the cost of transformation is set to two for every transformation. TraMineR produces a matrix of distances between all pairs of individual sequences. We treat this matrix with a Ward method of classification, in order to obtain distinct clusters (or types) of individual longitudinal sequences. This method minimizes the intra-group variance and hence yields groups which differ substantially from one another (Lapointe and Legendre, 1994).

The professional trajectories were then inserted in multivariate regression models to test their relationship with health outcomes, notably having experienced mental health problems after the entrance in the job market, and the current depressive symptoms and self rated health. The analyses were controlled for sex, age, educational levels, satisfaction with life in general, satisfaction with current health status.

Results

Eight types of occupational trajectories for the considered population were identified in the data, using the silhouette method. The largest one is represented by individuals working "**Full-time**" since they started to work (n=2510, 46% of the sample). In the second type individuals are working full-time during the first years of the occupational career and then, at a certain point, they interrupt it and remain "**Inactive**" (n=701, 13%) for the rest of the considered period. Individuals working part-time were classified into two sequences: one of those working with 50-89% "**Part-time**" (n=304, 6%), and those in a "**Small Part-Time**" (i.e. < 50% of working hours, n=254, 5%). Early careers were also divided into two groups: individuals with an "**Early Full-time**" career, who just started their professional experience (n=723, 13%), and individuals who had entered the job market for no longer than 8 years ("**Early Career**", n=516, 10%). Finally, individuals with more heterogeneous careers, including episodes of social help, unemployment, temporary contracts, were classified under the "**Atypical**" category (n=277, 5%), and sequence of double employment were grouped together under the "**Double Job**" type (n=100, 2%).

Figure 1. Types of occupational career (Swiss Household Panel, 2013).



Regression results show that respondents in the “Atypical” trajectories were more likely to have experienced mental health problems during their life than members of the Full-Time, Inactive and both early career trajectories. However, the difference with early careers disappeared after controlling for age and gender. The other effects were instead persistent even after controlling for other health indicators: current depression, and self-rated health.

Regarding current health state, the analysis showed a significant difference between Atypical, Full-Time, and early career trajectories, with the Atypical declaring more depressive symptoms than the other. However, these differences disappeared once controlled for the other health indicators.

Short Discussion

The analysis allowed us to identify seven distinct types of occupational pathways during the first 20 of activity in the considered population. If we look at the occupational careers not leading to mental health problems, we can see that they are the traditional ones: men working full-time and women working full-time and then interrupting their career in order to take care of the children. Separated analyses of the younger cohort (not reported here)

have also highlighted one typical (full-time) and one atypical trajectory. Although younger respondents are generally in better psychological and physical health than older ones, we can still observe that the individuals in the “**Early Full-time**” trajectory have experienced lower mental illness compared to the “**Early Atypical**” one.

Women and men working with atypical contract for most of the analyzed period are the most at risk of experiencing health problems. Atypical employment trajectories are indeed, more associated with the emergence of health problems than the “standard” situations. However, also individuals with a part-time career or double job are also presenting the same odds of having experienced mental illness during their lives than atypical trajectories. This is most likely translated into a higher risk of chronic stress or burn-out syndrome than higher probability of depression. Indeed, analysis of the current state of depression, showed a weaker effect of the professional trajectories per se, which disappeared once controlled for other health variables. However, this does not exclude an interaction between professional trajectories and health in general and further analysis is needed in this direction.

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Workshop 2B – Family, gender & generations - room 222

Within-couple Career Differentials and Post-Divorce Economic Inequality

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Background and research questions

Over 30 years of research into the consequences of divorce for adults on Western populations has discussed the steeper decrease in economic well-being of women rather than men during marital separation. A core explanation for this gender difference is inequality in the careers men and women pursue after entering marriages and becoming parents. However, social scientific inquiries have yet paid only little attention to the moderating effect of careers for the economic consequences of divorce. Some studies have evidenced that women who worked more hours, had higher increases in occupational status, and had less and shorter interruptions in their working careers during the union show higher odds of holding a job, work more hours and have higher earnings after separation (van Damme and Kalmijn 2014; Tamborini, Couch, and Reznik 2015). Also, a recent study has confirmed that the economic consequences of divorce are more negative for women who exit marriages with a traditional division of labor just before divorce compared to women from more egalitarian couples (Bröckel and Andreß 2015).

Advancing these perspectives, this study examines the association between inequality in earnings within married couples and economic inequality within these couples after divorce. To what extent does inequality in earnings during marriage translate to inequality in earnings and in the take-up of monetary social assistance between the spouses after they divorce? Also, the study addresses the factors that moderate the association between pre- and post-divorce economic inequality. It asks whether earnings inequality during marriage predicts post-divorce inequality differently for *poorer versus richer* couples, for couples with versus for couples without *children* and for couples with varying *temporal features of within-couple inequality*.

Method

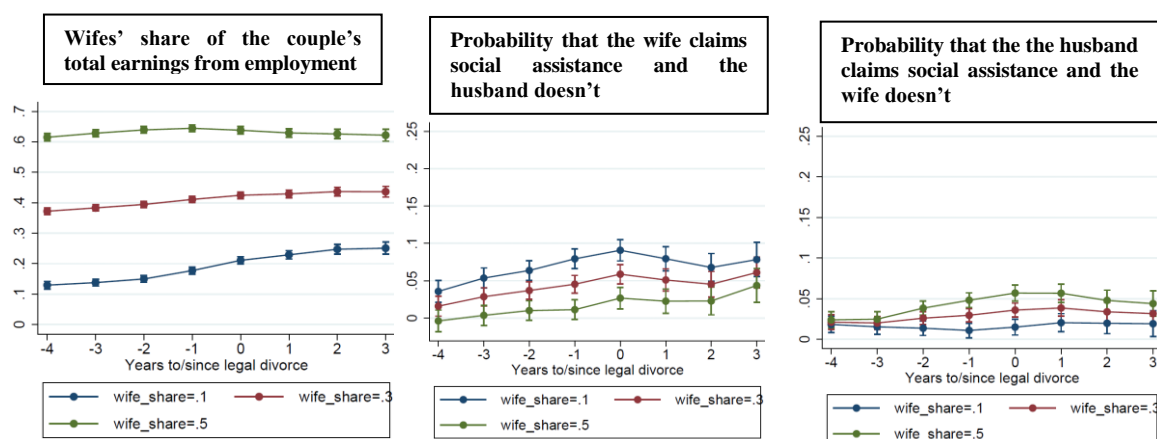
The study draws on respondents of the Swiss Labor Force Survey (SLFS) 2002 to 2014. Civil status information was merged from the statistics on natural movements of the population (BEVNAT), which allowed us to identify divorcees, their partners and the number of children the couple has had. The analytical sample consists of 6'247 couples who married between 1984 and 2014 and divorced between January 2011 and December 2014. Inequality in earnings is measured with individual records of the Central Compensation Office (CCO), which cover the couples' insured incomes from dependent and independent employment between January 1982 and December 2014. Information on monetary social assistance is merged from SHIVALV, an administrative database on social benefit usage maintained by the Federal Social Insurance Office.

Intermediate results

Inequality in earnings that existed during marriage only slightly decreases with the divorce (see Figure 1, outer left panel) and translates to the take-up of social assistance (Figure 1, middle and right outer panel). The share of couples in which the wife claims social assistance and the husband doesn't is more than three times higher among couples in which the wife earned only 10 percent of the couples' total earnings from employment (9%) compared to couples that earned equal levels (2.7%). This pattern is mirrored in the risk that the husband receives social assistance and the wife doesn't. Husbands who earned a larger proportion of the couples' earnings have lower risks of receiving social assistance after divorce.

Preliminary results also suggest that there is considerably heterogeneity in the association between within couple inequality during marriage and after divorce. First, they show that the reduction in earnings inequality in the course of divorce is strongest for the most unequal couples: wives who earned 10% of the couples earnings during the marriage nearly doubled their share from 13% (four years before legal divorce) to 25% (3 years after legal divorce), while wives with 30% average contributions only increased their share by 7 percentage points (37% to 44%). Also, the data suggests that the higher the couples' absolute level of earnings, the less consequential are differences in earnings during the union for post-divorce inequality in the risk of social assistance receipt. This can be explained with higher earning women's lower risk of becoming dependent upon social assistance, but also with the role of private transfers. The more a woman's husband earned during the union and is able (and forced) to pay transfers, the less important are her own earnings to protect her from the risk of taking up social assistance.

Figure 1: Wives average share of the couples' earnings during marriage and within-couple economic inequality in the course of divorce



Notes: Reported are linear predictions and 95% confidence intervals from GLS random effects models (wife's average share 2 years before marriage = .5, average annual earnings by couple =120 K, marital duration = 15 years or more, 2 or more children, year= 2011, age husband = 50, age wife = 48). Green (wife_share=.5) are predicted levels for a couple in which the wife's share of the couples' total earnings equaled the husband's share in an average marital year. Red stands for couples in which the wife earned 30% on average, and blue for couples in which the wife earned 10% on average.

Intermediate conclusions

The study of economic inequality between married women and men mainly derives its relevance from divorce. In these instances, previously latent economic vulnerability and strength becomes manifest: each spouse has to make their ends meet on his and her own. By looking at social assistance risk growth by levels of marital inequality, the study sheds light on the causes of economic vulnerabilization in the course of divorce. However, it also addresses the conditions under which such inequalities shrink after divorce. The full analysis will be better

able to address why a given level of inequality during marriage results in different levels of inequality after divorce for some couples than for others.

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Geographical Proximity or Distance Between Generations Over Time? Gender-Specific Patterns in Europe

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Ronny König, University of Zurich, Institute of Sociology

Marc Szydlik, University of Zurich, Institute of Sociology

Introduction & Background

Although coresidence is an important and direct part of solidarity between generations in contemporary societies, spatial proximity is a precondition for many forms of intergenerational support. Proximity in general as well as coresidence in particular can nowadays also be seen as a reaction to increasing individual and societal uncertainties. This is because support and cohesion between generations becomes an important characteristic of parent–child relationships, especially in times of economic, political, and social crisis accompanied by a withdrawal of the welfare state. Spatial proximity and coresidence between parents and their adult children is not an uncommon phenomenon in Europe, but previous research has revealed substantial country-specific differences, thus raising questions about the causes of and reasons for spatial mobility. Combining various types of spatial mobility opens up new opportunities to understand the complexity of disengagement processes in light of individual, familial, and contextual changes. While changes in intergenerational proximity might clearly be a function of moves by either parents or by their children in response to changing circumstances, previous studies have mainly focused on moves by parents toward their children and rarely considered the influence of children's moves (Michielin, Mulder, & Zorlu, 2008). Against this background, the study addresses intergenerational geographical mobility from an international and time-related perspective.

Data & Methods

Our analyses are based on the SHARE (Survey of Health, Ageing and Retirement), which provides standardized information on respondents aged 50 years and older in 17 European countries. To capture dynamics in geographical distance within parent–child relationships, namely, adult children moving into and out of the parental home as well as changes in residential distance for non-coresiding parent–child relationships, we used a two-wave panel design in which each respondent participated in at least two of all current available SHARE surveys. Moreover, we only focus on those relocations, who were initiated by the children only (approx. 99%) and which resulted in a significant change of their geographical distance to their parents.

The used panel design is based on the elimination of interpersonal similarities between two waves and focuses on the dynamics, which allows one to neutralize the transformation effect of the explanatory variables on the development (Giesselmann & Windzio, 2012). To estimate changes for a person (within variance), each variable (dependent and independent) needs to be subtracted by the chronologically previous eigenvalue. Conversely, time-constant variables (e.g., gender, cohort) cannot be coded as change scores and were included in their original form. The interpretation of the effects is based on their interaction with the factor time. The advantage of this design is the fact that it can, like all panel-analytical methods, expose causal effects of an event on a dependent variable. In addition, time-constant heterogeneities are also controlled for without their direct observation, and measurement errors are compensated by the model, which ultimately minimizes estimation errors and distortions (Giesselmann & Windzio, 2012).

Results

Although there are differences in intergenerational spatial proximity, a preliminary glance suggests that, overall, there have been no major shifts in the average distances between parents and their adult children over time. Our analysis indicates that one out of every two adult children does not live in the same household or building with

their parents but does live in the immediate vicinity at a maximum of 25 kilometers. Whereas coresidence appears to follow the age- and life-course-specific patterns of adult children and decreased between the two observation periods (from 15 to 12%), near coresidence (living in the same building) remained constant at 4%. Moreover, the proportion of parent–child relationships characterized by a general greater geographical distance generally remained stable over time. Approximately 14 or 15% of adult children stated that they live within a radius of 25 to 100 kilometers from their parental home. A further 12% lived at least 100 kilometers away, and 7% lived more than 500 kilometers away.

Despite these seemingly stable distances, further detailed analysis clearly indicates changes in residential situations and distances for individual parent–child relationships. In general, the proportion of young adults who left their parents' homes during this period of two waves is higher (about 25%) than those who returned (1%). Although moving back into the parental home is comparatively rare in Europe, country-specific differences can be found. The results suggest that returns tend to be more common in Southern Europe and Luxembourg. Although the extent to which this is more common still seems to be low; it applies mainly to those Mediterranean countries that are broadly characterized by a higher occurrence of intergenerational coresidence (Isengard & Szydlik, 2012; König, 2016; Szydlik, 2016) but are also more strongly affected by recent social, political, and economic uncertainties. By contrast, almost 50% of formerly coresiding children in Denmark and Sweden left their parental home in the period between the two survey waves, whereas this appears to have been the case for only 15% of adult children in Greece and Slovenia, respectively.

Our empirical analysis shows that changes in residential mobility are influenced by micro-, meso-, and macro-level indicators. Adult children who start a new relationship are more likely to leave the parental household or relocate in a way that changes their proximity to the parental household than children who undergo no changes in their partnership status. Having a child increases adult children's probability of remaining in the parental home or changing their proximity to it if they have already moved out. The need for additional space or the desire for an environment more favorable to raising children are major determinants of families deciding to change their residence. A change in labor-force status leads to children moving out of their parental home as well as changes in spatial mobility. Furthermore, on the basis of our analysis, we can state that changes in parents' living circumstances affect spatial proximity. For example, changes in parental finances (for the better or worse) lead to a situation in which adult children (must) leave the nest. Changes in parental health conditions or variations in their partnership status also have an influence on children's relocation. Although, sons live longer in the parental home than daughters, the geographical distance as well as reasons for such changes does not significantly vary by gender for non-coresiding children. However, daughters tend to leave their parental home more often if their single parent enter into a new partnership, whereas sons extent coresiding if the health conditions of their parents change, no matter whether better or worse. Finally, contextual structures have an impact on why children either move out of the parental home at a younger age or have to relocate more often. A more generous welfare state with higher public spending allows children to be able to afford independent living at a much younger age. By contrast, greater uncertainty in the labor market leads to a situation in which generations rely on each other more and thus move closer to one another.

To summarize, our contribution offers insight into the interplay between changing living conditions on the one hand and residential decisions on the other for adult children in Europe. Our empirical results lead us to conclude that individual changes according to the life cycle (family formation processes) as well as changes in the economic situation play a crucial role in intergenerational spatial proximity for both, daughters and sons. But societal uncertainties during (economic) crises also matter. For this reason, family cohesion in general and intergenerational support in particular have become [more] important characteristics of contemporary family relationships. Not least in our current era of economic crisis and the withdrawal of the welfare state, parents and children are taking [greater] responsibility for each other and standing by one another.

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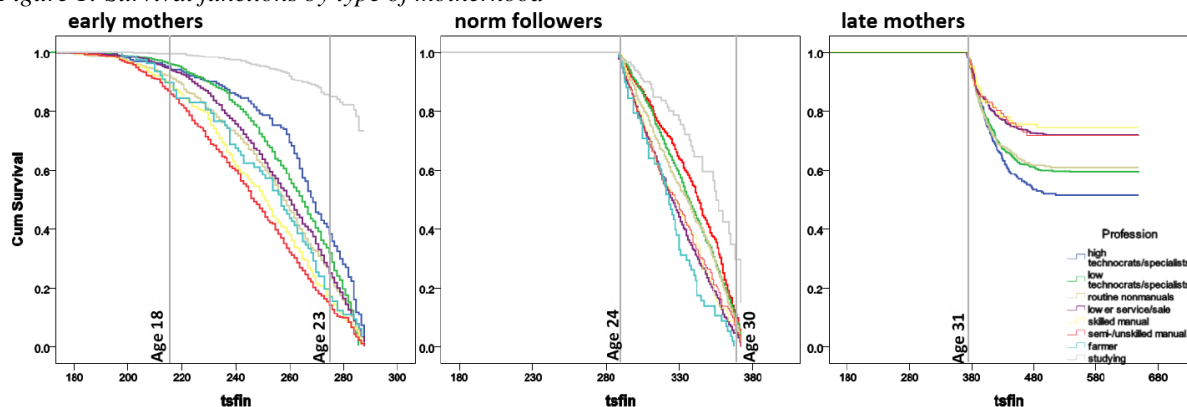
Measuring the impact of family policies: an analysis based on panel-data

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Measuring the pronatalist impact of family policies is difficult. One has to take into account that couples may realize their reproductive intentions based on either individual or societal norms. I define pronatalist impact as any form of causal determination of motivations and/or behaviors related with the number or the timing of childbirths by means of governmental support. Even if family related policies such as financial incentives, parental leave schemes or child care provisions are valuable in many respects (e.g. reducing financial tensions, facilitating work-family relation, optimizing everyday life etc.), these might hardly determine reproductive behaviors of couples that are based on their long-term life planning. This holds true in particular as concerning the decision to become parent or not. Nevertheless, one should be aware that generous policies might stimulate the timing of childbirths and/or the final number of children. According to experts (I refer on various publications and personal communications with G.Calot, J.Hoem and Ch.Höhn), the net direct and indirect pronatalist impact of policies sums up to at most 5-10% of total fertility. Based on two waves of the Generations and Gender Panel I try to examine this hypothesis.

I estimate piecewise constant exponential models that allow to measure the distinct normative and structural covariates of first motherhood separately for a) early mothers, b) norm followers and c) late mothers. Preliminary survival analyses show that among the lower classes it is self-evident and unquestioned to get their children rather early, while high skilled couples who outbalance their multiple interests rather postpone their procreative intentions (see Fig 1). In other words: there exist distinct age-specific norms which are correlated with mainly structural factors.

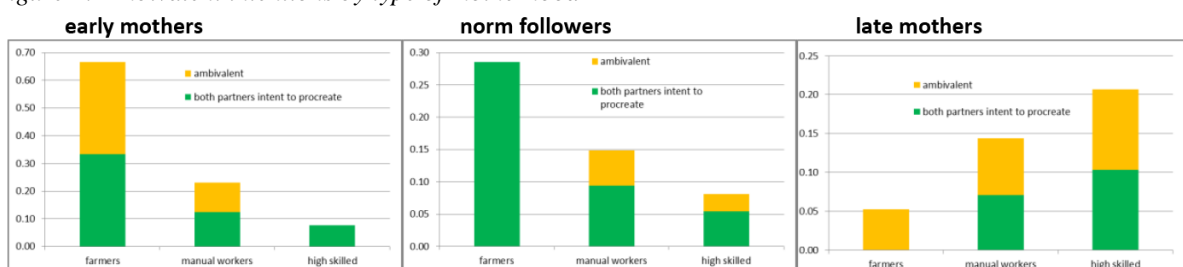
Figure 1: Survival functions by type of motherhood



The analyses are based on the following consideration. If a person or couple with particular structural prerequisites follows his age-specific reproductive norm, then family policy incentives are obviously highly welcome and positively evaluated, but don't have a causal impact in the sense of stimulating or changing the timing of reproductive behavior. By contrast, the intermediate group (norm followers) shows weak differences in the status-related survival-rates as well as comparatively high proportion of couples who intent to give birth to a child (see Fig. 2).

I therefore argue that particularly couples who are ambivalent regarding their joint reproductive decisions can be motivated to procreation by appropriate family policy incentives. Fig. 2 indicates that among early mothers the ambivalent target group is more frequently comprised of couples with lower social status while late mothers originate more frequently from higher status groups. I hypothesize that early mothers are responsive for monetary policy provisions while late mothers are rather to be motivated to procreation by means such as parental leave or child care opportunities.

Figure 2: Ambivalent intentions by type of motherhood



In a first step of the analyses, the group with uncertain and ambivalent reproductive intentions (targets of family policies) will be selected. The panel-design of the GGS allows to determine these group rather precisely (e.g. biologically able to procreate, living in a partnership). In a second step, I control for major restrictive conditions that might hamper the intentions (e.g. unstable partnership, health, work and income). In a third step, the distinct evaluations of family policies among the above-mentioned target group will be discussed. The GGS panel-data allow analyzing whether these motivate couples either to reconsider their intentions, to give birth to a child or to modify the timing of planned reproductive behaviors.

The research design distinguishes insofar between age-specific reproductive norms (early mothers, norm followers and late mothers) which are closely related to social status and by focusing on couples with ambivalent reproductive intentions. I focus on seven countries, namely the Western European countries France, Germany, the Netherlands and Austria which represent different welfare regimes as well as the Eastern European countries Bulgaria, Hungary and Czech Republic who mainly represent units of different economic strength. I assume that such a research design might contribute on the one hand to further elaborate the theory of planned behavior (M. Fishbein; I. Ajzen) and on the other the debate on welfare regime. The main focus of the paper is to provide an approach the pronatalist impact of family policies can be quantified.

Are Men in Management Jobs Happier than Women? Empirical Evidence for Switzerland

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Introduction

Management jobs are typically associated with a higher level of responsibility, more interesting work, a higher pay check and more social prestige compared to non-management jobs. However, these jobs also require a larger commitment in terms of long work hours and personal engagement, which means less time for leisure activities and time spent with family and friends. Our study investigates the impact of holding a management position on different indicators of well-being and particularly explores potential differences between men and women in this respect.

Goals and new aspects of the paper

Our paper attempts to provide insights to the following questions:

What is the effect of having a management job on the individual satisfaction level, while controlling for all relevant and observable factors known in the literature which influence the different dimensions of individual well-being such as life satisfaction, job satisfaction and financial satisfaction?

Do there exist differences between men and women, and if yes, with respect to which dimension do exist differences and what are the respective determinants?

Do the results provide any explanations for the existing under-representation of women in management jobs?

Is it possible to draw any conclusions in terms of policy recommendation for the individuals, for the employer organizations as well as for the state?

The new aspects of our study are as follows. It is the first empirical study that investigates the impact of management positions on life- and job satisfaction in Switzerland. So far, the number of studies on this topic in an international context is very limited. Also, we use the appropriate estimation method for the data on subjective well-being. In contrast to existing studies, e.g. Trzcinski & Holst (2012), we apply an improved estimation methodology which is suitable for this type of data. In concrete, we use a generalized ordered logistic model for our estimations and eliminate the problem of heterogeneity in the residuals and potentially biased estimates.

Data and Methods

We use data from the Swiss Household Panel (SHP) over the years from 2000 to 2015. Our sample includes 5'079 observations, of which 49.75% are men. We estimate heteroskedastic ordered logit models in order to explain the different satisfaction variables, namely the satisfaction with life in general, the job satisfaction as well as the satisfaction with the financial situation, by work-related aspects, person-specific and integration-specific factors.

Main results

Our results point out to the fact that men and women have different preferences with respect to holding a management position, especially also in case of existing interferences between work and the private life. In particular, a management position leads to a higher level of satisfaction with life in general for men than for women in case the work life interferes with private activities such as time spent with family and friends, and this results is stable after having controlled for several other factors affecting the well-being. In order to control for potential reverse causality effects, we separately analyze the subsample of persons that moved in and out of management positions, respectively, but with no changes with respect to other characteristics except age.

The generated odds ratios confirm that women derive less satisfaction from management positions in case work interferes with the private life. .

Conclusions

So far, this issue has not been investigated for Switzerland, but there exists evidence for other countries, e.g. Germany (Trzcinski & Holst, 2012). Given that (1) women are still widely underrepresented in management positions in Switzerland and (2) the (lack of) motivation for holding such positions might be one of several explanatory factors for this inequality, it is important to study these relationships for Switzerland as well. The SHP represents an ideal dataset for this purpose.

JEL Classification: J28; J16; I31; C25

Key Words: Management Jobs; Job and Life Satisfaction; Gender Differences; Ordered logit model

Workshop 2C – Education and labour market II - room 2230

Is there a health benefit of naturalization? Evidence from a quasi-experiment

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Introduction

In the literature on the role of naturalization in the integration process, migrants are generally found to positively select into citizenship. For instance, naturalization is positively associated with education and labour market outcomes. However, little is known about how naturalization affects migrants' health. In this paper, we exploit a change in the rules for nationality acquisition as a source of exogenous variation to identify the causal impact of naturalization on health and some labour market outcomes. Until 2007, Germans and Austrians could not acquire a new nationality without losing their own. Since 2007, Germany has recognised dual citizenship (if the other nationality is either one of an EU member country or of Switzerland), while Austria still does not grant this right to their citizens. Based on panel data from the Swiss Labour Force Survey (SLFS) for the years 2003-2009, we use a difference-in-differences approach to compare the change over time in naturalization propensities of Germans who were granted the right of dual citizenship (*treatment* group) with the change in naturalization propensities of Austrians for whom the law has remained unaltered (*control* group). We also rely on this approach to estimate the effects of the change in naturalization policy on health, unemployment, self-employment and earnings. The results show that Germans are more likely to acquire the Swiss nationality compared to Austrians. On the other hand, the effects of dual citizenship on health and labour market outcomes, if mediated through naturalization, are not significant.

Data

The empirical analysis in this study is based on panel data from the SLFS from 2003 to 2009, including up to five waves for each individual. To identify German and Austrian nationals eligible to naturalize, we restrict the analysis to those who have been living in Switzerland for at least 12 years (5 years if married to a Swiss citizen). The dependent variable for the acquisition of the Swiss citizenship in year t is self-reported by the respondents whose nationality at birth was non-Swiss. The health outcome is derived from the question 'Do you have a physical or psychological problem/illness which in some way restricts your daily lives and you have already had for more than one year?' with an affirmative or negative answer. This outcome is coded as 1 for yes and 0 for no, reflecting the risk of *chronic illness*. We also add three labour market outcomes, such as *unemployment* (= 1 if unemployed, 0 if employed), *self-employment* (=1 if self-employed or partner in his relatives' firm, 0 if salary worker) and the *log yearly gross earnings* (deflated into 2000 Swiss francs and adjusted to full-time equivalent basis). It should be noted that, since 2003, the SLFS data include an additional sample of 15,000 immigrant

individuals, and is then capable of providing reliable information on various outcomes for individuals with a migration background.

Empirical Methods

Our modelling strategy aims to identify the causal effect of the extension of the dual citizenship rights for Germans on the acquisition of the Swiss citizenship, health and labour market outcomes in Switzerland. It builds on the central idea of a ‘natural experiment’ that creates at a certain point in time (2007 here) a shift in the naturalization policy for Germans but not for Austrians. Consider the following baseline difference-in-differences model:

$$y_{it} = \alpha_0 + \alpha_1 \text{Post-Shock}_{it} + \alpha_2 \text{German}_{it} + \delta_{\text{did}} (\text{Post-Shock}_{it} \times \text{German}_{it}) + \text{control variables}_{it} \beta + \text{error}_{it},$$

where y_{it} denotes the outcome of interest for individual i in year t . Post-Shock_{it} is a dummy variable indicating if time t occurs from 2007 to 2009 (i.e. the periode since the reform). German_{it} is also a dummy variable which equals 1 for Germans and 0 for Austrians. Because the extension of the dual citizenship rights only affects Germans and not Austrians, δ_{did} is the causal effect of the policy shock. Control variables include sex, age, age squared, foreign born, years since migration, years since migration squared, education level, marital status, wave and canton dummies. Another control is a dummy for unemployment when estimates are based on the labour force sample. In a subsequent step, to allow the policy impact to vary over time, the post-shock variable in the baseline specification is replaced by a vector of year dummies (with the period before the reform being the reference period). A further check consists in applying the difference-in-differences estimator to compare changes in outcomes between Germans and Austrians in the years before the reform. If there are no preexisting differences between treated and control groups, i.e. we cannot reject the hypothesis that $\delta_{\text{did}} = 0$, the common trend assumption is likely to hold in the pretreatment period and the difference-in-differences estimator will produce unbiased estimates. The difference-in-differences specifications are estimated using the fixed effects method in which the error term includes the individual unobserved heterogeneity c_i : $\text{error}_{it} = c_i + u_{it}$

Preliminary Results

Difference-in-differences fixed effects results for the impact of extending the dual citizenship rights				
Variables	Naturalization		Chronic illness	
	(1)	(2)	(1)	(2)
δ_{did}	0.039** (0.008)		0.020 (0.018)	
$\delta_{\text{did}07}$		0.027** (0.007)		0.014 (0.020)
$\delta_{\text{did}08}$		0.048** (0.012)		0.027 (0.026)
$\delta_{\text{did}09}$		0.090** (0.020)		0.039 (0.034)
Control variables	yes	yes	yes	yes
Observations	7,282	7,282	7,282	7,282
Number of i	3,295	3,295	3,295	3,295
Within R^2	0.104	0.127	0.013	0.014

Source: Swiss Labour Force Survey 2003-2009, data are unweighted.

Notes: Robust standard errors in parentheses, ** p<0.05, * p<0.10.

Difference-in-differences fixed effects results and common trend assumption					
	Naturalization	Chronic illness	Unemployment	Self-employment	Log(w)
Variables					
δ_{did04}	-0.005 (0.009)	-0.021 (0.024)	-0.005 (0.020)	-0.005 (0.020)	-0.002 (0.036)
δ_{did05}	0.006 (0.007)	-0.035 (0.023)	0.014 (0.028)	-0.002 (0.022)	0.001 (0.037)
δ_{did06}	0.009 (0.008)	-0.027 (0.022)	0.023 (0.024)	-0.013 (0.026)	0.047 (0.042)
δ_{did07}	0.033** (0.010)	-0.013 (0.029)	0.024 (0.028)	-0.013 (0.024)	0.029 (0.053)
δ_{did08}	0.055** (0.014)	-0.000 (0.034)	0.037 (0.029)	-0.018 (0.030)	0.055 (0.073)
δ_{did09}	0.097** (0.021)	0.011 (0.040)	0.008 (0.035)	0.010 (0.034)	-0.039 (0.076)
Control variables	yes	yes	yes	yes	yes
Observations	7,282	7,282	7,282	7,014	6,014
Number of i	3,295	3,295	3,295	3,205	2,857
Within R^2	0.128	0.015	0.020	0.010	0.023

Source: Swiss Labour Force Survey 2003-2009, data are unweighted.

Notes: Robust standard errors in parentheses, ** $p < 0.05$, * $p < 0.10$.

Gender differences in early career mobility of university graduates in Switzerland

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Aim of research

In contemporary labour markets, men and women do not hold the same hierarchical positions. This is also true for Switzerland: In 2015, the share of women holding a leadership position was 35% (BFS 2016b). In the management boards of the top 100 Swiss companies 6% were women and in the boards of administration their share was 16% (Schillingreport 2016). One of the presumed reasons often advocated in public debate is that women are less interested in pursuing an occupational career, and that they have other preferences, such as combining work and family life. Whether these arguments hold up to empirical tests is less clear. Some of the econometric literature adds work-related values to the common human capital explanations to better understand the gender pay gap. They show that, for men, pursuing an occupational career and earning a high income are more important than for women and that these divergent preferences explain some of the gender wage gap (Chevalier 2007; Braakmann 2013). Other studies demonstrate that strong career aspirations positively influence the probability of pursuing a career, but they found no gender differences in career aspirations (Abele and Spurk 2009; Ashby and Schoon 2010).

Higher education graduates do not substantially differ in their human capital and mostly they do not have children yet. This eliminates some of the main explanations for unequal career outcomes. Despite this fact, Imdorf and Hupka-Brunner (2015) provide evidence of vertical segregation in Switzerland at labour market entry among higher education graduates. Also, it is not clear whether the observed differences in attaining a leadership position are due to self-selection or discrimination. Therefore the proposed paper asks *whether the differential in career outcomes is due to different work-related values between men and women*.

Data and methods

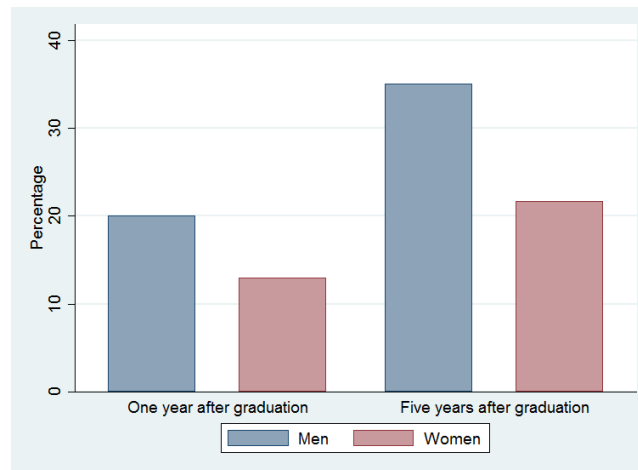
The Graduate Surveys of the Swiss Federal Office of Statistics (2007 to 2015) comprise a panel design, consisting of two waves, one year and five years after graduation. The surveys cover graduates of all Swiss universities and universities of applied sciences. Unlike most other labour market surveys in Switzerland, they also contain questions about work-related values such as, for example, the importance of pursuing a career and earning a high salary, combining work and family, or having a good working atmosphere.

So far, results on gender differences in career outcomes in Switzerland are either merely descriptive or based on cross-sectional data (for an exception see BFS 2016a). Applying logistic regressions and Oaxaca decompositions on longitudinal data this paper sheds light on the processes that lead to the known unequal outcomes in career success. In particular, it tests whether upward career mobility depends on initial career aspirations (net of human capital, field of study, sociodemographic factors, and other control variables) and quantifies how much of the observed gender differences in career outcomes can be explained by this mechanism.

Main results

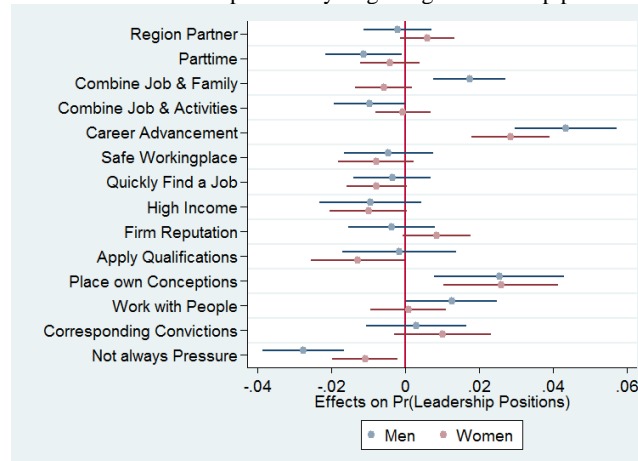
One year after graduation 20% of men and 13% of women hold a leadership position. Five years after graduation 35% of men and 23% of women do so (Figure 1).

Figure 1 : Leadership position by gender



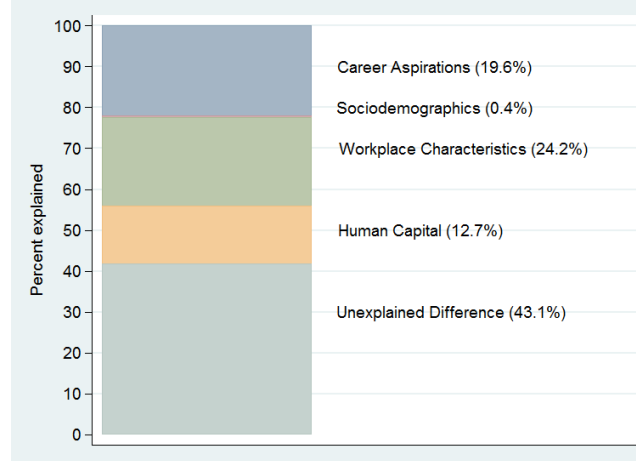
In line with previous research, results show some gender differences in work-related values: The biggest difference concerns part-time work. Whereas this is very important for women, it is less so for men. At the same time, the desire to be able to combine work and family is as strong among men as among women. Further, for men it is somewhat more important to get a leadership position and to earn a high salary than it is for women. Among those work-related values, to find a job with good career prospects has the strongest positive influence on obtaining a leadership position. Wanting to work part-time or not wanting to work under pressure is negatively associated with obtaining a leadership position. Some of these values have differential effects on career outcomes for men and women. Most strikingly, men putting emphasis on combining work and family are more likely to get a leadership position, while the reverse is true for women. Overall, the positive relation between career-aspirations and the probability of obtaining a leadership position is stronger for men than for women. This means that women are less likely to progress in their careers than men even if their aspirations are the same. The effects of the different work-related values are shown in Figure 2.

Figure 2 : Effects of work-related values on the probability of getting a leadership position (average marginal effects)



Employing Oaxaca-Blinder decomposition methods for binary dependent variables I estimate how much of the gender gap in leadership positions can be explained by different groups of variables. The core question of this paper is to determine whether different work-related values between men and women can explain the underrepresentation of women in high hierarchical ranks. Overall, these values explain 20% of the gender difference in the probability to obtain a leadership position five years after graduation. Workplace characteristics, such as company size, previous job position, and employment level explain 24% of the difference; human capital variables explain 12%. A total of 43% of the gap remains unexplained (Figure 3).

Figure 3 : Decomposition of the gender gap in leadership positions



To summarize, the analyses show that among young university graduates, men and women only slightly differ in their career-aspirations and that work-related values only explain about 20% of the gender difference in leadership positions. These results provide evidence against the argument that women's different preferences cause the gap in career mobility.

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The wage penalty for motherhood and discrimination: evidence from panel data and a survey experiment for Switzerland

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Question and theory

Mothers tend to earn lower wages than non-mothers across the Western World. Motherhood may hamper the evolution of wages for two reasons: productivity and/or discrimination. Having children may interfere with mothers' labor market attachment, lead to career interruptions, leave mothers with less energy for their job and thus reduce their productivity at work. Alternatively, the importance of the bargaining process for wage setting suggests that non-economic factors such as power resources and cultural beliefs also affect workers' earnings, leaving room for employer discrimination. One such cultural belief expects a conflict between the normative

demands on the ideal worker – to be constantly available for his or her employer – and the normative expectations on the good mother – to be constantly available for her children. The dominant social norm across much of the Western World considers mothers' primary role to be at home with their children, whereas her paid job appears of secondary importance, leading to lower wages for the same productivity.

The best studies on the motherhood wage gap use longitudinal surveys that make it possible to include person-specific fixed-effects that account for women's time-constant predispositions and ability. Studies with this design suggest that there is an unexplained wage residual associated with motherhood – a residual that is large in Germany, moderate in Britain and the United States and negligible in the Scandinavian countries. The challenge faced by the literature is to empirically determine whether the unexplained wage residual is due to unobserved differences in productivity or employer discrimination. Our contribution tries to open the black box of the motherhood wage gap by directly measuring discrimination in Switzerland.

Data and method

We analyze the motherhood wage gap with two different methods. We combine the analysis of longitudinal surveys, the Swiss Household Panel and the Swiss Labor Force Survey, with a factorial survey experiment (also called vignette study). The use of national population surveys provides us with insight into the supply-side of the labor market – workers and their wages – and gives us strong external validity. The factorial survey experiment on recruiters, in turn, informs us of the demand-side of the labor market – employers and their ratings – and helps us to unravel causal effects.

We use the Swiss Household Panel 1999-2015 (SHP) which provides us with 17 annual waves between 1999 and 2015 and the Swiss Labor Force Survey (SLFS) which included, between 1991 and 2009, an annual rotating panel that followed the same respondents for five years. The replication of models across two panel studies permits us to gauge the uncertainty in the results due to common errors in surveys linked to coverage,

sampling, non-response and measurement. We estimate fixed-effects regressions to establish the size of the wage residual for motherhood.

In parallel, we do a factorial survey experiment among 4700 HR managers in Switzerland whom we sent a web-based questionnaire. We obtained responses from 714 individuals who were asked to assign a starting wage to the résumés of 12 fictitious job candidates applying for three different occupations. By randomly varying the number of children, the factorial survey experiment helps us to unravel causal effects. Other sensitive attributes (dimensions) such as age, gender, nationality or motherhood status are randomly combined in the résumés (vignettes). These ever changing combinations make it difficult for respondents to pick out and provide a politically correct answer to the one dimension which researchers are interested in.

Results and conclusion

The analysis of the two longitudinal population surveys produces an unexplained wage penalty per child that ranges from 4 to 8 percent, the first child being less consequential than the second and third. The survey experiment shows that recruiters assign wages to mothers that, overall, are 2 to 3 percent below those of non-mothers. The wage penalty is larger for younger mothers, increasing to 6 percent for ages 40 and less. In contrast, our experiment shows no wage penalty for mothers working in the least skilled of our three occupations, as building caretakers. Having children reduces the likelihood of getting invited to a job interview and the recommended starting wage for HR assistants and, to a lesser extent, accountants, but not for caretakers. Our experiment throws doubt on the assumption that the wage penalty found in the panel surveys is solely driven by work productivity. The lower wages for mothers in general and young mothers in particular suggests that social norms and employer discrimination also play a role.

Who are those in between poverty and security ? Comparing four concepts: poverty, material deprivation, precariousness and vulnerability.

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Background

This paper aims to compare four measurements, namely of poverty, deprivation, precariousness, and vulnerability, to assess whether they are suitable to, first, identify people being vulnerable to poverty, and second, to analyse their sociodemographic characteristics. Is there a common typology of people being vulnerable to poverty ? While the concept of poverty has been widely explored, and analysed, people being vulnerable to poverty and who are struggling to maintain a certain standard of living are often neglected. This fact is probably due to the heterogeneous definition of those being vulnerable or the concept of vulnerability itself. These four indicators are conceptually and methodologically substantially different one from another ;

however, they may be suitable to identify people living above a specific poverty threshold. Indeed, each concept was initially designed to define a certain group of the population concerned by poverty or vulnerability.

The term vulnerability is polysemous as it is used in various disciplines. It appears mainly in the 1970s in psychology, psychiatry, paediatrics, and psychoanalysis as well as in geriatrics as a synonym of frailty. Its large diffusion in scientific articles during the 1980s was always associated to the term resiliency. Then, in the 1990s the term vulnerability was widely spread and used by researchers from different disciplines (Thomas 2008).

As said previously, four indicators or approaches are used in this paper to identify people being vulnerable to poverty. First, the relative income approach, also called the “at-risk-of-poverty rate”, is the main poverty indicator used by the European Union (EU). It estimates people being poor as the share of population living in households where the equivalised disposable income is below the threshold of 60% of the national equivalised median income after social transfers. Second, we use the material deprivation indicator; in fact, several criticisms are addressed to using only income as a measure of poverty. Using a monetary approach does not reflect enforced lack of access to resources required to enjoy a good standard of living and to be able to participate in the societies in which people live. The relative deprivation approach is thus a non-monetary concept of poverty, and was initially based on a list of items commonly available to British households during the 1970s (both material and non-material) (Townsend 1979). We use here the material deprivation indicator based on a nine items list. Third, the precarious prosperity for which Hübinger (1996) was the first author to introduce the concept, as referring to a particular structural position. The precarious prosperity concept has been developed by Swiss sociologists and refers to the analysis of a dynamic group that is in-between the poor and the non-poor (Budowski et al. 2010). The precarious prosperity concept aims therefore at identifying people living above or adjacent to a poverty threshold, and has been developed for comparison purposes. Fourth, we use the vulnerability to poverty approach. Following the World Development Report of 2001, the World Bank started to investigate research on vulnerability to poverty as an extension of their poverty measurement. Indeed, this approach allows observing (when using poverty measures) an *ex-ante* situation instead of an *ex-post* one, where all the uncertainty has been resolved (Calvo & Dercon 2005). It measures the probability of falling into poverty in the future instead of measuring one that fell under a poverty threshold in the past.

Data and Methods

The Swiss Household Panel (SHP) serves as the database for the empirical analysis. In this paper, we run our analysis on the last available wave, that is to say, 2015. For the construction of our fourth indicator, the vulnerability to poverty, we will be using data from 2011 to 2015 as some life events are considered to elaborate the measure. All four indicators aim to distinguish three groups: those in a secure position, those vulnerable to poverty and finally, those affected by poverty.

The relative poverty indicator uses two cut points to identify the vulnerable group: the lower cut-off is the 60% of the median equivalised income and the upper threshold is set at 80%. The material deprivation indicator is based on a 9 items-possession list and only people missing an item because of financial reasons are considered. The index is standardized to have values ranging from 0 to 100. Looking at the distribution of the index, three main blocks appear and correspond to our three groups. Regarding the precarious prosperity approach, three definitions are used to identify people in an in-between position: 1) people under the relative poverty line set at the 60% of the equivalised disposable median income and with one or no deprivation, 2) individuals between 60 and 80% of the equivalised disposable median income and who have no deprivation, and 3) people with more than 80% of the equivalised disposable median income but with two or more deprivations. Deprivation is measured according to the same item list presented for the material deprivation and follows an identical construction, meaning we only consider items not possessed because of financial reasons. Finally, we replicate all steps in measuring vulnerability to poverty using the methodology proposed by López-Calva & Ortiz-Juarez (2014), which is a measurement of expected poverty based on a downside risk. This approach in three stages requires longitudinal data (the other three measurements are cross-sectional) for its construction, and aims to estimate the predicted income associated to the probability of falling into poverty. The resulting income is used as an upper threshold definition for the vulnerable group. Following their approach, we use five waves of the SHP, 2011 to 2015 and only households that have participated in all five waves are retained. The lower cut-off is based on the Swiss Conference for the Institutions of Social Actions, which is 2'200 Sfrs per month for a single individual. As the aim is to identify people being vulnerable to poverty from those in security, a threshold set at 20% of the probability of falling into poverty would easily correspond to the upper threshold for the vulnerable group. The predicted income associated to this level of probability of falling into poverty is 3'032.90 Sfrs. Therefore, people being vulnerable to poverty have a household disposable median income ranging from 2'200 Sfrs to 3'032.90 Sfrs.

Results

In table 1 below, we observe dissonances in groups definition according to each indicator analyzed. In fact, except for the vulnerability to poverty approach, about the same proportion of people, about 70%, are in a secure position and therefore can maintain a good level of living conditions. Regarding our main interest group, those vulnerable to poverty, we observed strong differences in distribution according to each indicator; for those

including material deprivation, more than 20% of the Swiss population is vulnerable to poverty, about 14% are in this position using the relative poverty approach and finally, *only* 6% using the vulnerability to poverty approach. The latter measurement seems to overestimate people in a secure position, compared to the other three approaches, but is closed to the relative poverty measurement regarding people affected by poverty. Three points may be worth to be investigate further. First, the upper threshold sets to distinguish people being vulnerable to those in a secure position using the vulnerability to poverty approach: is the threshold too low and missing vulnerable people due to its construction? Second, indicators using a material deprivation perspective report higher number of people belonging to the vulnerable position, but why? Thirdly and finally, it seems that there is a difference between income-based indicators (relative poverty and vulnerability to poverty) and material deprivation-based indicators (material deprivation and precarious prosperity) when it comes to distinguish people being vulnerable to poverty and those affected by poverty, we could therefore question the lower threshold.

Table 1 : Structure of the population according to the four measures

Categories Concepts	Secure	Vulnerable position	Affected	Total
Relative Poverty	73.81%	13.59%	12.6%	100%
Material Deprivation	71.10%	20.54%	8.35%	100%
Precarious Prosperity	71.05%	25.35%	3.60%	100%
Vulnerability to Poverty	82.43%	5.80%	11.77%	100%

Source: SHP, 2015. Data are weighted.

Regarding, the sociodemographic characteristics we can make the following statements: women are more represented in vulnerable position using all four indicators (about 40-45% of men and 55-60% of women). More than one third of the population aged 65 and over are vulnerable to poverty, with all four indicators, followed by those aged 50 to 64 (except for the relative poverty approach). Within the vulnerable to poverty group, almost 40% are composed by couple without children and between 20 to 28 percents of single women, using all four indicators. This specific position seems therefore to be gender driven as all four indicators identified women as more vulnerable and being out of the labour market (those aged 65 and over) seems also to contribute to vulnerability (with all four indicators, about one third of the population being vulnerable to poverty is retired). Results, when analyzing the household structure, are going in the same direction as the main important groups affected by vulnerability are the couple without children and single women. Finally, most of people belonging to the vulnerability to poverty have a secondary education (percentage of this group ranges from 50% to 57% according to each indicator).

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Inequality of opportunities in the labor market in Mococco

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Introduction

The paper tries to extend the Human Opportunity Index (HOI) methodology to the Moroccan labor market, using data of the two first waves of the Moroccan Household Panel Survey. Opportunities are measured, among people aged 15-59 years, successively as (a) being employed (b) working at least 20 work hours a week (c) working at least 40 work hours a week (full time) and (d) having a job with desirable qualities (contract, social security, paid

leave, retirement pension). Circumstances are measured through several variables: gender, residence (urban/rural and geographic region), educational level of the head of the household (instead of that of parents, because of data limitations), and income (per capita expenditures) class of the household. Individual characteristics are captured through age (a proxy for experience) and education.

Results

Regression analysis shows that all the independent variables used seem to play a significant role in the access to most of our measures of labor market opportunities. Age is positively correlated to each of the four opportunities, as expected. This result may also be interpreted as a kind of known disadvantage of the youth on the Moroccan labor market. Education is negatively linked to each of the first three expressions of opportunity, but positively linked to the fourth one, as access to such a job of good quality requires better educational level, in general. Education of the head of the household, as well as the household income (expressed in per capita expenditures) are important factors in favor of accessing labor market opportunity. Males tend to have better access chance than females, except for the fourth (and of the best quality) opportunity. Also, urban residents tend to have less access than their rural counterparts, except for the fourth opportunity.

In 2012, overall coverage (C) for opportunity 1 is about 85,9% whereas the dissimilarity index (D) is 7,0%. As the opportunities 2,3 and 4 are progressively more desirable, the coverage goes successively to 79,4%, 64,0% and 15,4%. But D is also increasing to 7,4%, 8,5% and 47,2% respectively. The HOI, which is here an inequality adjusted coverage, decreases from 80,0% to as low as 8,1% accordingly. One year later, overall coverage, as well as the IAC, had increased for all opportunities, except the last one.

In 2012, the frequency rate of opportunity 1, 2 and 3, among the population of study, was 86%, 79%, 64%, and has increased to 88%, 83% and 70%, respectively in 2013. The frequency for opportunity 4 has stayed at the same level of 15%.

Using the panel structure of the data, we also estimated transition probabilities from one status of the opportunity (having it or not) to the other, between 2012 and 2013. Among all people who were occupied in 2012 (i.e. had opportunity 1), nearly 95% stayed occupied in 2013, and about 5% had lost Opportunity1. On the other hand, 42% of those who had not the opportunity, remained without it in 2013.

Finally, the overall (person-year), the between (individuals) and the within (time) differences in the distribution of each opportunity have been examined. The within percent tells us the fraction of the time a person has the specified value of the opportunity. For example, conditional on a person ever having $Oppt1=0$, about 79,9% of her observations have $Oppt1=0$. Similarly, conditional on a person ever having $Oppt1=1$, about 95.6% of her observations have $Oppt1=1$. These two numbers are a measure of the stability of the $Oppt1$ values, and, in fact, $Oppt1=1$ is more stable among these people than $Oppt1=0$.

The Shapley decomposition technique allows us to estimate the inequality share due to circumstances, compared with that of individual characteristics in the determination of the chance of access to each of the opportunities defined. The share of age exceeds the half for Opportunity 1, but it decreases quickly to a quarter for opportunity 3 and to 10% for opportunity 4. The share of education is more important for opportunity 4 (25%) than for the others.

Thus, the important message is that circumstances, over which the individual has no control, contribute a lot to the inequality of opportunity in the Moroccan labor market, not only in access to a job, but also and even much more in access to better quality jobs. Indeed, the share of circumstances to this inequality of opportunity is estimated to a third for opportunity1 and almost two thirds for opportunities 3 and 4.

Among those circumstances, for opportunity 1, urban residence, region of residence and gender contribute almost equally with 8% each to the overall inequality. Parents' education and household income have less important contribution. Age contributes by nearly 56% whereas education contributes by 13% only. Thus, circumstances seem to play a great role in this inequality with 31% contribution. Moreover, the relative contribution of circumstances to a full-time job inequality is about two thirds the total inequality. Age's relative contribution decreases to only a quarter of the inequality in this labor market opportunity. The shapely decomposition of inequality is very different when it comes to a job with desired quality (opportunity 4). Here, the relative contribution to inequality becomes the lowest for age (11%), relatively high for education (25%) and stays very high for circumstances (64%). This last result is noteworthy.

Refined analysis among circumstances show that gender contribution is very low for opportunity 4, and medium for opportunities 1 and 2. It is however at its greatest level for the third opportunity. Interpretation of this last result is not very clear, but there is also some ambiguity in the interpretation of the opportunity 3 definition itself. Working 20 hours a week is not, for sure, less desirable than working full time. The contribution of urban residence to inequality is about the same for each of the four opportunities.

For opportunity 4, the greatest contribution to inequality comes from parental education (37%), followed by income (15%). Gender has a very weak contribution to inequality (less than 2%).

Finally, the change in the HOI can also be examined between the two years and decomposed into two parts: (a) the composition effect, due to changes in the distribution of "circumstances", and (b) the coverage effect (the contribution of changes in the access rates of different circumstance groups). The coverage effect is again

decomposed into (b1) the scale effect (the change in the coverage rates across circumstance-groups) and (b2) the equalization effect (the improvement of those below average toward the best-off). For opportunity 1, there has been an improvement in the coverage of about 3,1%, between 2012 and 2013. About 52,7% of this change is due to the composition effect, 15,1% to the scale effect and 32,2% to the equalization effect.

Conclusion

To conclude, the main findings of this paper is that education which, in principle, should increase the opportunity of a person to access a job and a good-quality job, does not do so in Morocco. Birth circumstances, which are beyond the person's control, play an important role in being employed and even more in having a job of desirable quality. However, our results do not differ from similar findings for countries like Egypt and Tunisia (World Bank Group 2016).

Workshop 3A – Politics & attitudes - room 2208

Extremist Attitudes among Urban Youths: Prevalence, Developmental Risk Factors, and Risk Groups: Results from the Zurich Project on the Social Development from Childhood to Adulthood (z-proso)

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Background

The events of the past years and months have highlighted the importance of understanding the extent to which violent extremism is rooted in experiences during childhood and adolescence. However, only very little developmental research exists on the prospective factors associated with support of violent extremism. In this presentation we give an overview on findings from the Zurich Project on the Social Development from Childhood to Adulthood (z-proso) on the developmental antecedents of attitudes supportive of violent extremism, as well as on concurrent risk factors.

The study

z-proso is an ongoing longitudinal study of 1'675 children who entered primary school in 2004 in one of 56 schools in the city of Zurich. The sample is representative of the population of pupils in the city. The main data collection waves were at ages 7, 8, 9, 11, 13, 15 and 17. Several features of z-proso make the study especially suited to examine developmental mechanisms associated with attitudinal support for violent extremism.

- The study sample is characterized by high religious diversity. 26% of the participants are Roman Catholic, 21% Muslim, 20% Protestant, 9% Christian Orthodox, 5% Hindu, and 2% have another affiliation. 18% reported no religious affiliation.
- Over 60% of the study participants have at least one parent who was born outside Switzerland. Many parents have come to Zurich from areas affected by violent ethnic, religious and civil conflict.
- The study participants were aged about 18 at the time of the last survey (2015). This generation has grown up in a context of huge attention worldwide to terrorism and extremist violence. It is therefore well suited for better understanding the mechanisms of socialization associated with extremist violent beliefs.
- The study allows researchers to examine a variety of potential risk factors measured during childhood and adolescence. This includes personality characteristics and behavior patterns, family and parenting, school, peers and leisure activities, and sociodemographic background.

Definition and measurement of violent extremist attitudes

There are currently no accepted instruments to measure the endorsement of violent extremist attitudes in general populations. We therefore created a 4-item instrument based on a definition of violent extremism proposed by the International Association of Chiefs of Police, which describes violent extremist attitudes as *attitudes that "encourage, endorse, condone, justify, or support the commission of a violent criminal act to achieve political, ideological, religious, social, or economic goals"* (International Association of Chiefs of Police [IACP] 2014).

The scale has good psychometric properties: Responses vary along the full range of the scale and the scale reliability is good with Cronbach's Alpha = .80. The answer scores across the four items were averaged to a Violent Extremist Attitudes (VEA) score.

Results

Gender differences. For all items there exist large gender differences in the extent of support for violent extremism. Male adolescents are, on average, about twice as likely to endorse violence as a political strategy. The gender difference in levels of support for violent extremism is similarly large as the gender difference in actual serious violent behavior.

Socio-demographic differences. Young people from low social class backgrounds as well as young people who attend low ability school classes are significantly more likely to endorse violent extremism. We also found significant differences by religious background. Young people from Muslim, Hindu, and Christian-orthodox backgrounds had higher levels of endorsement for VEA than young people of Protestant, Catholic and Atheist convictions. Moreover, support for violent extremism is higher among young people whose parents immigrated from countries characterized by civil strife and violent ethnic conflict. Since religious affiliation is associated with origins from such fragile states, we tested a model that included both variables and also controlled for gender. We found that the effects of gender and fragile state origin remained statistically significant, whereas the effect of religious affiliation became clearly non-significant. This finding suggests that the effect of the religious affiliation essentially reflects origins from fragile countries, and is not per se related to VEA.

Concurrent associations at age 17. In a next step we examined a range of psychological and behavioural risk factors at age 17 that may be associated with VEA. Our results suggest that support for violence is higher among young people who generally consider violence as morally justified, who have little respect for the rule of law, and who display low levels of self-control and tend toward violent ideations. These psychological risk factors are similar to those found among violent and criminal youths more generally. This fact is reflected by the notable association of VEA with actual violent and other problem behaviour.

Mid-adolescence antecedents at age 15. We further examined the association between risk factors measured at age 15 with VEA about two years later. With regard to psychological and behavioural risk factors we found similar, yet systematically lower associations as with the concurrent measurements. Moreover, several characteristics of parenting during mid-adolescence are associated with an increased likelihood of extremist beliefs. Low parental involvement at age 15 was weakly associated with VEA both in boys and girls. Low parental supervision and corporal punishment are associated with subsequent VEA in boys only, and authoritarian parenting is unrelated to VEA. Young people with elevated levels of VEA are also more likely to have a history of problems at school.

Late childhood risk factors at age 11. In a fourth step we explored whether risk factors measured in late childhood at age 11 prospectively predict the probability of support for VEA at age 17. Overall, these findings suggest a tendency for especially boys with a generally elevated aggressive potential at the end of primary school, partly expressed through beliefs and attitudes, partly through aggressive and bullying behaviors, to endorse VEA at age 17. They also tend to have poor bonds to adults as expressed by a low level of joint activities with parents and poor bonds with teachers.

Mid-childhood effects risk factors (ages 7 to 9). In a last step we examined whether any risk factors measured in mid-childhood at ages 7 to 9 were predictive of late adolescent violent extremist attitudes. Overall, we failed to find any substantial risk factors during childhood that predict extremist attitudes later in life. All examined childhood risk factors had no or only small effect sizes ($r < .15$).

Conclusions

As a general pattern we found that with increasing temporal distance from the VEA assessment at age 17, all analysed risk factors tend to be less and less predictive of VEA. This generally suggests that VEA tend to emerge during adolescence as a part of adolescents' legal and political socialization. Moreover, risk factors tend to be the same in boys and girls. However, the effect sizes are consistently lower in girls than in boys. The reasons for this difference are unclear but might be partially due to the more skewed distribution of VEA in girls as compared to boys. A third general pattern we found was that psychological and behavioural risk factors are consistently more predictive than socio-demographic (except gender), parenting-related, and school-related risk factors. Specifically, risk factors associated with a poor moral and legal socialization as well as with executive functions (self-control) are the most predictive concurrent and antecedent risk factors of VEA.

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Blurry Social Lenses: The Attitudinal Effect(s) of Associational Membership

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Theoretical background

Understanding the way an individual thinks and behaves, from a sociological point of view, implies analyzing the social dynamics he is involved in. Classical sociological approaches suggest that the most important social dimensions capable of influencing the thinking and behavior pattern are structures and life experiences that represent objective constraints an individual is embedded in. The family background and the education path are seen as the main elements determining already in the early stages of the life course the set of convictions and norms that will characterize an individual's outlook on what surrounds him throughout his existence.

More recently, other strands of sociological theory have pointed out the importance of also taking into account other elements capable of explaining the variability existing between individuals. In particular, a social dimension frequently analyzed is the membership in the so-called secondary or voluntary associations. In most cases, the membership in such organizations has the peculiar feature of being to a large extent the result of an individual choice. The conclusions of the existing literature imply that belonging to such social groups is indeed capable of (re)shaping the way an individual interprets the world around him, giving hence compelling evidence against classical sociological theory. The importance of structural constraints is not denied, but it is argued that the set of principles interiorized during the first phases of one's life can be (re)modeled through new experiences one is exposed to.

The goal of the paper is to examine these conclusions by considering the link between the membership in different types of secondary organizations and various sets of attitudes and behaviors in four countries. To what extent becoming a member of a voluntary association is capable of influencing the way an individual thinks and behaves? Are the differences existing between members and non-members of certain organizations related to a pure selection effect, pre-dating hence the actual membership, or can they be traced back to a causal effect of the social dynamics the members are exposed to?

Data

These questions are examined in four countries: Switzerland (using the Swiss Household Panel), Germany (using the German Socio-Economic Panel), United Kingdom (using the British Household Panel/UK Household Longitudinal Study) and United States (using the Panel Study of Income Dynamics and the General Social Survey). These four countries are the only ones providing good enough longitudinal data and with questions available about the membership in voluntary organizations and the attitudinal dimensions necessary for the analyses. Furthermore, they offer interesting variability in the way secondary associations are embedded in other social institutions.

The type of voluntary organizations taken into account are the following ones: trade unions, political parties, business and professional organizations, religious groups, charity organizations, sports and leisure clubs, community associations, cultural organizations and associations for the defense of the environment. Regarding the attitudes considered as outcomes, four sets of variables are taken into account: variables related to different domains of life satisfaction, political attitudes, identity and value-driven attitudes and other-regarding preferences.

Methodological elements

Existing research is almost exclusively based on cross-sectional studies. Since the decision of joining a secondary association is in general voluntary, such organizations tend to attract individuals that resemble each other and distinguish themselves from non-members already before joining them. In other words, the average difference one observes between the individuals joining one of these voluntary organizations and those non-members may not only be related to an actual effect of the fact of being involved in the social dynamics of the association, but it may also be the product of pre-existing differences. The existing literature tackles the problem by supposing that a set of observed control variables should be enough to partial out the effect related to self-selection. Since the dependent variables are attitudes that are determined by a large number of individual attributes, at least a part of these attitudes might unobserved and lead the existing literature to overestimate the true causal effect of associational membership. Panel data allows solving the issue by controlling for unobserved heterogeneity between members and non-members.

In the paper, four sets of models are used to disentangle the proper causal effect. First of all, a pooled OLS model without control variables gives a purely descriptive account of the average attitudinal difference between members and non-members. A second set of models imitates the results of the existing literature by adding a set of observed control variables to the first model. In a third one, by exploiting the longitudinal structure of the data, all time-invariant unobserved factors are also controlled for. Finally, where necessary, an IV estimation is applied to rule out the impact of time-varying endogeneity.

Additionally, panel data allows exploring how the effects vary dynamically. In this paper this is done by using a generalization of distributed lag models, the so-called "leads and lags" model, in which the main explanatory

variables are a series of dummy variables, each one identifying a specific moment in the membership trajectory. By estimating the model through fixed effects, it is possible to track how the effect varies year by year before, during and after the membership event.

Main results and implications

The results show that most effects usually attributed to the affiliation in voluntary associations are in reality the result of a selection effect mainly related to unobserved heterogeneity. Being involved in associational dynamics produces important effects only for (very) young individuals. An analysis of the way the attitudinal level varies before, during and after the membership reveals in most cases the presence of important anticipation effects, prospective members gradually approaching their views to those defended by an association well before joining it. In other words, the membership event, rather being the cause of the attitudinal variation, is a consequence of a process of attitudinal change that begins well before joining an association.

The results are interpreted by re-exploring the pertinence of the theory of social capital and of the importance of secondary socialization. The inertial character attitudes show in adult individuals implies that the sets of interpretative schemes acquired during the first years of an individual's life are the most important aspects that influence the way he perceives and interacts with the surrounding world. Various forms of secondary socialization are unlikely to modify such views. Indeed, they rather reinforce them since voluntary interactions tend to take place between individuals that share the same views.

Differential socialization: Worldviews and associational membership

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We argue that the effect of associational membership on members' worldviews varies according to different social characteristics and with regard to how closely new members' worldviews are synchronized with their new community. Associational socialization is a specific form of political socialization, which subsumes "processes by which individuals engage in political development and learning" (Sapiro 2004: 3). We consider membership as one of these processes and examine it in three types of organizations: unions, environmental and charitable organizations. Socialization happens through social interactions whereby one effect is the synchronization of worldviews by its members. We concentrate on worldviews because they are a thinking-feeling tool setting individual's intentionality (Jasper 2014). In addition, worldviews are shared within social sites (or communities) and constructed through social interactions.

We posit that associational socialization is group specific and depends notably on the kind of worldviews a new member already has before starting commitment. Some will join an organization holding already similar worldviews as the ones predominantly represented within a community. They self-select into these organizations and consequently, have little room for socialization. Other will join an organization with dissimilar worldviews and this group has to synchronize their worldviews with existing members in order to maintain their commitment. A plurality of effects on the worldviews of individuals who join a political or a civic organization can thus be expected.

Further on, we focus on three questions with regard to the latter type of member: Which worldviews are affected? To what degree do they synchronize their worldviews with their new community? Who are they and do they belong to specific social groups? Our answers to these questions are based on members of the first eleven waves of the original sample of the Swiss Household Panel (SHP I: 1999 – 2009) and on five waves of the second sample (SHP II: 2004-2009). During these years membership was annually measured. One characteristic of panel data is obviously that they have to start at some point in time. This leads to the problem that for individuals who are coded as members in the first wave (1999 for SHP I and 2004 for SHP II), we do not know their worldviews before they started their commitment. As this problem concerns many "new" members (around 40% to 50%), we nevertheless integrated them into our analyses by ascribing the values of the first wave to them.

Which worldviews are affected?

The literature tends to focus on specific types of worldviews. The most prominent among these are probably social trust and values related to democratic politics. While our take on this question is to broaden up the scope of worldviews, we start by testing our assumptions on two indicators: Social trust and political interest. Eventually, we aim to integrate many more variables like people's intention to protest, their opinion on the amount of social expenses, general satisfaction with democracy, political trust, gender equality, foreigners, environment and egalitarian values.

To what degree do they synchronize their worldviews with their new community?

Debates among social movement scholars and researcher working on social capital urge us to be sensitive with regard to two major issues. First, the effect size and direction of associational socialization varies with regard to the type of organization and the type of outcome. We find therefore literature showing both positive and negative effects, research papers demonstrating mixed results and empirical evidence for no relation at all. Here, we try to tackle this challenge by a comparison of three types of communities. Second, the particularity of worldviews among members of organizations could be explained by a self-selection and not by a socialization process. ‘Democratic friendly’ organizations are therefore rather “pools” than “schools of democracy” (van der Meer and van Ingen 2009). We can assess this assumption thanks to the longitudinal nature of the SHP data. Comparing “one-shot” (only one year), durable (more than one year) and non-members we find that, in the aggregate, both types of members differ from non-members with regard to social trust as well as for political interest already before they become members. For one-shot members, we also find little evidence for a socialization effect, neither for members of unions, of environmental nor of charitable organizations. Durable members, in contrast, become both more trusting and more interested in politics. If one selects only new members who join one of these three organizations with low levels of trust or interest (less than five on a ten point scale), this effect is further amplified. There is thus evidence for both: self-selection and socialization. Sure, individuals select themselves into organizations and it remains an important to ask who, how and why individuals commit themselves for a cause. However, the evidence presented here shows that individuals who durably participate and those with dissimilar worldviews are socialized. The fact that we are confronted with a majority of passive members makes this evidence even more astonishing.

Who are they and do they belong to specific social groups?

The literature on social movement participation and on political socialization urges us to wonder whether individuals with dissimilar worldviews and who are most strongly affected by participation belong to specific social groups. We look at five characteristics: Gender, social class, social networks, age and education. First, it has been shown that the experience of commitment is different for men and women. Second, socio-cultural specialists work in an environment where similar worldviews as those transmitted by the three types of organizations are widespread. Third, informal networks like the family, friends or colleagues could sensitize an individual. The SHP makes it possible to check whether members of the household were already member of one of these organizations before the individual became a member. Forth, political socialization theory posits that the youth is more responsive to new worldviews. Finally, schools are considered as an important arena of socialization. First results generally support these assumptions. Individuals joining a union, an environmental or a charitable organization with low level of social trust or political interest tend to lack important socialization arenas for these types of worldviews. Few of them went through tertiary education, are socio-cultural specialists or have a committed household member. In contrast, gender and age is only a particularity for individuals with low political interest but not for social trust. This is the case for all three communities under scrutiny here indicating the scope of this research. While the three of them tend to revolve around left-wing worldviews, we believe that their differences in terms of political strategies and aims are strong enough to make comparison worthwhile.

Why differential socialization?

Why should we care about these results? We think that our research tackles three theoretical and one social problem. First, we provide answers to who is affected by associational socialization. We showed that there are strong differences and that it is possible to identify more sensitive groups. Second, our results hint at the importance to consider (political) socialization as a life-long process and thus support growing evidence for mind’s plasticity. Third, a comparative approach allows questioning the role of the type of organization. Finally, and more in general, we underline the role of these types of organizations for society and democracies. Tocqueville’s claim for a vibrant civil society is at least similarly important today as it was in his day.

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Who continues to vote for the left ? The effect of intra- and intergenerational social mobility on support for social-democratic parties in the UK, Germany, and Switzerland

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Introduction & Theory

This paper investigates to what extent intra- and intergenerational social mobility affect the support for social-democratic parties in the United Kingdom, Germany, and Switzerland. We build on research that has associated changes in the composition of social-democratic constituencies to the post-industrialization of the occupational structure. It has been argued that with the decline of the industrial sector – and of blue-collar jobs – social-democratic parties have increasingly catered to middle-class constituencies, especially socio-cultural professionals, at the cost of working-class votes (Beramendi, Häusermann, Kitschelt, & Kriesi, 2015; Kriesi et al., 2012). This recent change in the occupational structure has led to new forms of inter-generational class mobility and different configurations of parental and offspring class location. While individuals' class location has been frequently associated to party support, less attention has been placed on the impact of parental class, while this is especially relevant in light of the research that has found that workers embedded in traditional blue-collar milieus are more likely to support the social-democrats (Arndt & Rennwald, 2017). The main focus is, thus, on voters from classes who are identified as traditional and new core supporters of the left: production workers, service workers, and socio-cultural professionals. We hypothesize the intergenerational transmission of class identity to play an important role in stable left-wing party support across generations. Furthermore, we expect that changes and instability in the own occupational status over the life course can lead to volatility and demobilisation of (former) social-democratic voters, leading to differences between mobile and immobile groups.

Research Design

Making use of household panel data (SHP for now, to be extended with G-SOEP and BHPS), we compare social-democratic party preference across groups who have and who have not experienced intra- or intergenerational social mobility, within class locations. For the operationalization of class location, we use the 8-class scheme of Oesch. Intergenerational mobility is operationalized as having a different vertical class location than one's father (retrospectively provided): upward or downward. Intragenerational mobility refers to the extent to which respondents move from a working-class to a middle-class position (upward), or vice versa (downward), over their life course.

In cross-sectional models, we investigate 1) the effect of respondents' class location and their father's class location on social-democratic party support; and 2) how within class locations, support for the SP differs by *intergenerational* vertical mobility. Using longitudinal models, we investigate how *intragenerational* vertical mobility for voters of different classes of destination affects social-democratic party support. All models are linear probability models with as dependent variable party preference (1=social-democratic party (SP), 0=other party). The analytic sample comprises all nationals aged 18-64, employed, and not enrolled in fulltime education. Longitudinal analyses (RE) investigating *intragenerational* mobility, are performed using SHP waves 1-17 (1999-2015). Cross-sectional analyses (OLS regression), investigating *intergenerational* mobility, are performed using the most recent wave of observation for each respondent, controlling for survey year. We also control for part- and fulltime employment, gender, age, and marital status.

Results

We firstly focus on intergenerational mobility. The results (not presented here) indicate that when controlling for respondent's class location, father's class location predicts support for the SP. These effects are largest for the socio-cultural and technical (semi-)professionals, and clerks.

When comparing respondents within class of destination by the experience of intergenerational mobility (yes/no), there are hardly any differences (Figure 1). This seems to imply that inheritance of the father's vertical class location (middle- or working-class) does not affect support for the socio-democratic party, and therefore that class of destination is more important than class of origin in this respect. However, when dividing the analytic sample in different subgroups, we can better investigate the specific classes of interest for this research: production and service workers, and socio-cultural professionals. We divide these classes of destination by the experience of intergenerational mobility, and compare them with other middle- and working-class individuals. The results in Figure 2 indicate that whereas intergenerationally immobile socio-cultural professionals are more likely than their class peers to prefer the SP, there is no such difference between mobile and immobile production and service workers.

Figure 1. Predicted probabilities for SP party preference by intergenerational vertical mobility (N=7538).

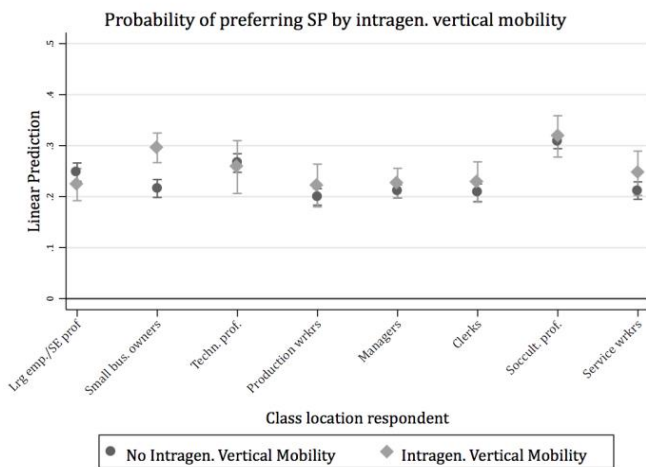
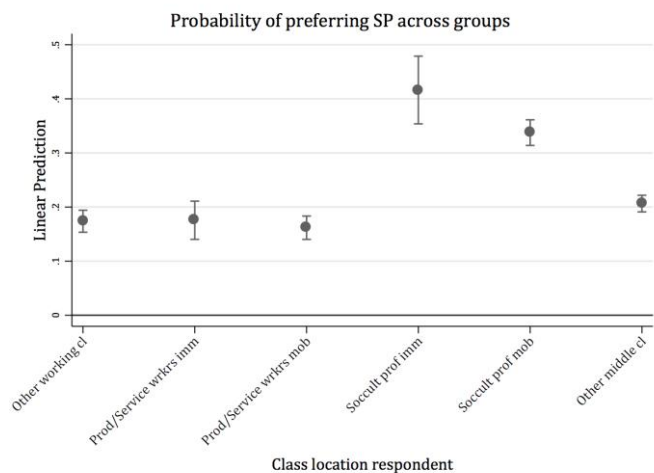
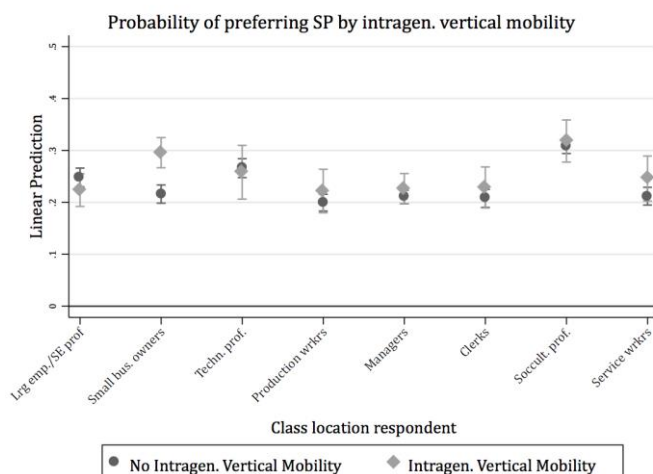


Figure 2. Predicted probabilities for SP party preference by across groups of interest (mobile/immobile) (N=7538).



Longitudinal models, comparing respondents who did and who did not experience *intra*-generational mobility, indicate small differences in preference for SP within class locations (Figure 3). Respondents who have, as a result of intragenerational downward mobility, ended up in a working-class location (clerks, production and service workers, and small business owners) are slightly more likely to prefer the SP than their immobile peers within the same class of destination. Even though the confidence intervals are overlapping, these interaction effects are statistically significant at $p < 0.1$. We do not observe such differences among the middle-class.

Figure 3. Predicted probabilities for SP party preference by intragenerational vertical mobility (N=37656).



The findings of these analyses shed light on the interplay of the effects of class of destination and class of origin, from intra- and intergenerational perspectives. Production and service workers do not differ in support for this party depending on their background. However, this is the case for socio-cultural professionals. Intragenerational mobility shows differences between groups in the working classes: respondents who have experienced changes in occupational status over the life course are more likely to support the SP than their immobile peers. Additional analyses will compare these results across Germany and the UK and investigate the individual life-course effects of such changes.

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Workshop 3B – Assessing psychological dimensions - room 2224

Fit in or move away ? An exploration of regional personality differences and geographical psychology in Switzerland

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Introduction & Methods

Recent years have witnessed the rise of geographical psychology (Rentfrow et al., 2008) that studies regional differences in psychological characteristics by means of Big Data analysis (Oishi, 2015). Various psychological mechanisms have been suggested to explain how these differences emerge, the most prominent being selective migration (Rentfrow et al., 2008).

Traditionally, scientific accounts have emphasised factors such as employment opportunities (Park & Peterson, 2010), political freedom (Oishi, 2010), safety and climatic concerns (Motyl et al., 2014) to drive residential mobility. However, there is more to migration than that.

The person-environment-fit hypothesis stipulates that living in an environment that matches one's own profile provides better chances to satisfy one's psychological and physical needs (Rentfrow et al., 2008) and is thus associated with higher satisfaction (Jokela et al., 2015; Oishi, 2015). Accordingly, the selective migration hypothesis postulates that people move to specific communities where they can achieve the best fit with their own personality traits (Hofstede & McCrae, 2004).

Against this backdrop, the goal of the present study was twofold.

First, it aimed to explore the psychological topography of Switzerland by mapping the geographical distribution of Big Five personality traits. In keeping with the geographical data contained in the SHP, the inhabitants' aggregate Big Five scores on the canton-level were computed and mapped using raw-means and heat maps (Rentfrow et al., 2015), which visualise regional differences in a meaningful and easily understandable way (Lucas et al., 2014). In addition, GetisOrd hotspot analyses (Getis & Ord, 1992 ; Ord & Getis, 1995) were carried out to identify high / low intensity Big Five clusters across the country. So far, similar psychological topographies exist for large (USA; 322 Mio. inhabitants; Rentfrow et al., 2008; Rentfrow, 2010) or medium-sized (UK; 65 Mio. inhabitants; Rentfrow et al., 2015) countries and Switzerland is not only be the first small country (8 Mio. inhabitants) to be mapped, but also the first to be multi-lingual and located in continental Europe.

Second, building upon the selective migration hypothesis I examined whether low person-environment-fit predicts intra-national migration over time. To that end, fit variables (distance, shape, scatter) were derived, reflecting the individual profile's deviation from the normative canton (/ economic, linguistic region, respectively) of residence's profile (Furr, 2008, 2010). Subsequently, hierarchical logistic regression analyses were conducted, whereby Big Five person-environment-fit (base year : 2009) was used to predict actual intranational migration from 2009 to 2015, controlling for sociodemographic factors (i.e., age, sex, educational status). Furthermore, similar procedures were applied to predict moving intentions in 2015. Of note, all analyses were carried out in three differentially fine-grained frames of reference, i.e., the person-environment-fit was simultaneously calculated based on the deviation from the normative profile of (1) the canton of residence, (2) the economic region of residence, and (3) the linguistic region of residence to determine the most suitable and impactful conceptualisation of people's living environment and henceforth the person-environment-fit.

Results & Conclusions

GetisOrd hotspot analyses yielded the following results (sorted by Big Five trait).

Agreeableness: hotspots: Aargau, Appenzell Inner-Rhodes, Fribourg, Solothurn, Thurgovia (all $z > 2.576$); coldspots: Valais ($z < -1.96$), Zurich ($z < -2.576$)

Conscientiousness: hotspot: Fribourg ($z > 1.96$)

Extraversion: coldspot: Ticino ($z < -1.96$)

Neuroticism: hotspots: Neuchâtel ($z > 2.576$), Valais, Zurich ($z > 1.96$); coldspots: Schaffhausen ($z < -1.96$), Appenzell Inner-Rhodes, Thurgovia, Aargau, Solothurn, Fribourg ($z < -2.576$)

Openness to Experience: –

Maps exhibiting the results for Agreeableness and Neuroticism are displayed below (see Figure 1, Figure 2).

Beyond that, hierarchical logistic regression models revealed that adding person-environment-fit indicators to the control model, containing age, sex and educational status (model 1: $R^2 = .096$, $\chi^2 = 722.62$, $df = 18$, $p < .001$) improved the model fit significantly (step: $\Delta R^2 = .00$: $\chi^2 = 9.74$, $df = 3$, $p = .02$; model 2: $R^2 = .097$, $\chi^2 = 732.36$, $df = 21$, $p < .001$).

Next, the different person-environment-fit variables (e.g., person-canton-fit, person-economic-region-fit and person-linguistic-region-fit) were compared, employing the Akaike information criterion (AIC) as well as the Bayesian information criterion (BIC). In accordance with the intuitive assumption that a more narrowly-defined, fine-grained conceptualization captures person-environment-fit more accurately, the person-canton-fit ($AIC = 6860.75$, $BIC = 7009.78$) outperformed both the person-economic-region-fit ($AIC = 7036.50$, $BIC = 7185.96$) and the person-linguistic-region-fit ($AIC = 7036.13$, $BIC = 7185.59$).

Analogously, I ran a hierarchical multiple regression model to examine whether person-canton-fit would also predict self-reported moving intentions. After entering the control variables, i.e., age, sex, educational status (model 1: $R^2_{adjusted} = .103$, $F = 52.81$, $df = 18$, $p < .001$), the person-canton-fit indices were entered in a second step, thereby significantly improving the model's predictive power (step: $\Delta R^2 = .002$, $F = 9.51$, $df = 3$, $p < .001$; model 2: $R^2_{adjusted} = .105$, $F = 46.77$, $df = 21$, $p < .001$).

Summed up, in a conceptual replication of previous findings in the USA (Rentfrow et al., 2008) and the UK (Rentfrow, 2015), the present research demonstrates a significant regional variation in four of the Big Five personality traits across Switzerland. Furthermore, the deviation of individuals' personality profiles from the normative profile of their environment, best represented as their canton of residence has been shown to be a statistically significant predictor of both moving intentions and actual moving behavior. Being the first study in geographical psychology to propose a proper quantification of person-environment-fit, the current research breaks new ground and compiles empirical evidence for the relevance of this psychological concept that merits further attention – both in Switzerland and beyond.

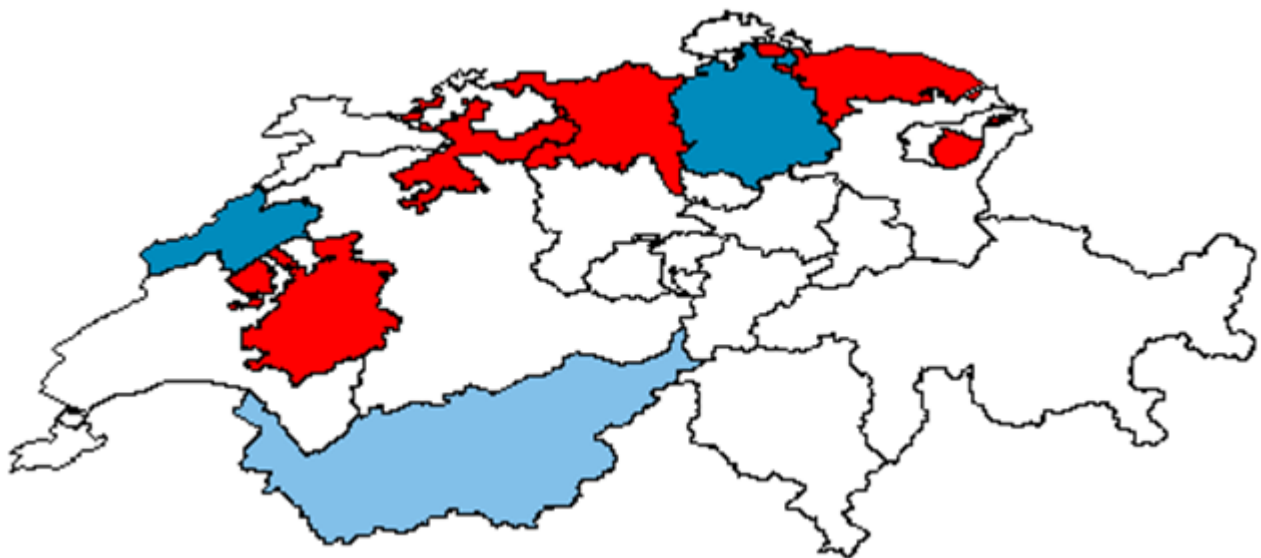


Figure 1. GetisOrd hotspot analysis Agreeableness. Light blue = coldspot ($z < -1.96$), dark blue = coldspot ($z < -2.576$), orange = hotspot ($z > 1.96$), red = hotspot ($z > 2.576$).

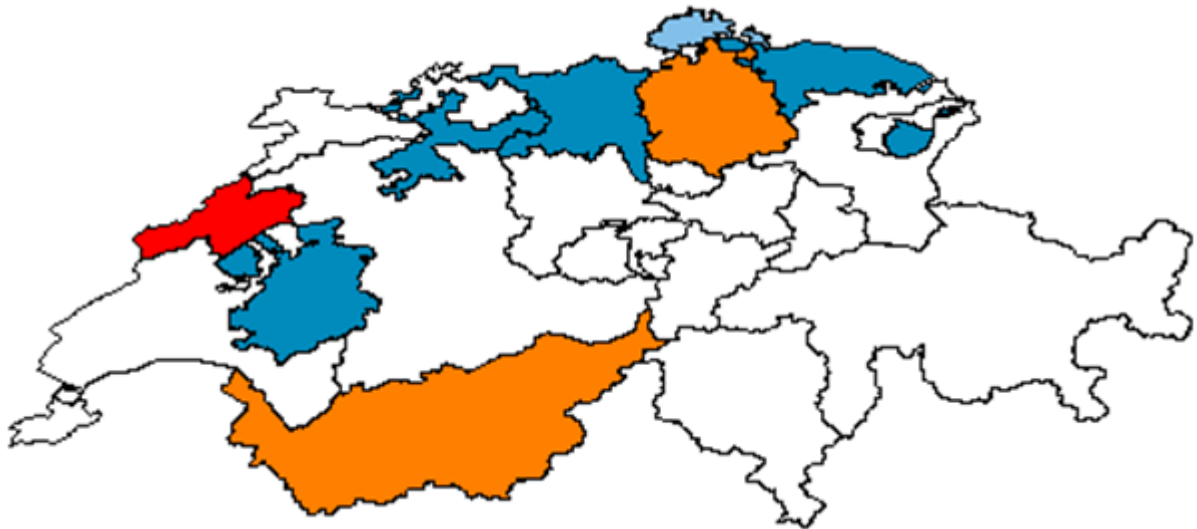


Figure 2. GetisOrd hotspot analysis Neuroticism. Light blue = coldspot ($z < -1.96$), dark blue = coldspot ($z < -2.576$), orange = hotspot ($z > 1.96$), red = hotspot ($z > 2.576$).

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How congruence between personality and occupation relates to objective success at work

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Person-Environment fit theories share the underlying assumption that a better fit between a worker and his or her surrounding results in more positive work outcomes (Chartrand, 1991; Kristof-Brown, Zimmerman, & Johnson, 2005; Nye, Su, Rounds, & Drasgow, 2017). There are many types of P-E fit such as the correspondence between a person and the organization, a specific job, or a team (Kristof-Brown et al., 2005; Kristof, 1996; Tak, 2011). In this study, we focus on congruence between the personality of a worker and the personality of other job incumbents. Based on predictions of the P-E fit paradigm, we examined if individuals who work in an occupation where other job incumbents express similar personality traits are more successful at work compared to persons that work in occupations with more dissimilar traits of other job incumbents (Ballout, 2007). As an indicator of success at work, we focused on a commonly used objective type of success, namely income.

We hypothesized that (H1) congruence between the personality profile of a person and the average personality profile of job incumbents in his or her occupation is positively related to their income level and, beyond that, (H2) positively predicts an increase in income over an observed 6-year time span. We further expected that (H3) change in congruence is related to change in income. We tested all hypotheses based on correlations and based on path analyses by predicting changes in congruence and income by the level of congruence and income in 2009.

Measurement

We assessed Person-Job fit by characterizing persons and occupations with the Big Five measurement comprised in the Swiss Household Panel (SHP) survey in 2009 and 2015 (Ryser, 2015). The five personality dimensions of Neuroticism, Extraversion, Openness, Conscientiousness, and Agreeableness were measured by a total of 10 items in 2009 and 15 items in 2015. Seven of the items are part of both surveys and one item related to artistic

interests is highly similar. The two agreeableness items in 2009 do not correspond directly to the agreeableness items in 2015; we therefore selected two items in 2015 that correlated highest with the two items in 2009. The personality profile of occupations was based on the mean personality traits of all job incumbents of an occupation classified by the International Standard Classification of Occupation. Only occupations with more than 5 workers were used for analyses to counteract the influence of possible outliers. Congruence was calculated based on Euclidean distance by summing up the difference of a person and his or her occupation's personality score for each item (Kristof, 1996; Rounds, Dawis, & Lofquist, 1987). For objective success, we calculated the gross hourly wage based on the yearly full-time equivalent income divided by 2'226 (= 53 weeks multiplied by 42 hours of work).

Results

The mean, standard deviations and bivariate correlations between the variables are in table 1. Unexpectedly higher congruence in 2009 is not related to higher income (Refuting H1) and does not significantly correlate with increasing income (contradicting H2). Contrary to our expectation (H3) change in congruence was not related to change in income over the 6-year time span. Further analyses and implications of the results for P-E fit theories will be discussed at the conference.

Table 1. Arithmetic mean, standard deviation and correlation of congruence, change in congruence between 2009 and 2015, work income, change in work income from 2009 to 2015, and control variables.

	<i>M</i>	<i>SD</i>	1	2	3	4
1. Congruence 2009 ^a	79.60	7.78				
2. Δ congruence ^b	-0.83	7.53	-.65***			
3. Hourly work income 2009 ^c	33.34	27.53	.06	-.06		
4. Δ hourly work income ^d	2.69	19.54	-.04	.05	-.29***	
5. Sex ^e	1.49	0.50	-.04	.05	-.46***	-.004

Notes. *** $p < .001$; ** $p < .01$; * $p < .05$; $N = 578$. *M* = arithmetic mean. *SD* = standard deviation.

^a Congruence between the personality of a person and his or her occupation based on Euclidean distance of all 10 Big Five items included in the Swiss Household Panel.

^b Change in congruence between 2009 and 2015; plus values indicate growing congruence, minus values indicate decreasing congruence over the 6-year period.

^c Hourly gross work income 2009 in Swiss Francs.

^d Change in hourly gross work income between 2009 and 2015 in Swiss Francs; plus values indicate growing work income, minus values indicate decreasing work income over the 6-year period.

^e 1 = men, 2 = women.

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The case of the personality accentuation hypothesis

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Life-course social psychologists Caspi and Moffitt (1993) have advanced the hypothesis that dispositional differences among people are magnified by social transitions. That is, periods of social and historical discontinuity or crises tend to accentuate people's personality. Individuals tend indeed to regain control over the changing situation through existing cognitive and behavioral structures, especially when behavioral norms are broken or absent. The accentuation hypothesis posits that a larger variance in personality traits can be observed under circumstances of disruptive social change and harmlessness. Curiously, most of the test of this hypothesis has been performed at the individual level, using both experimental designs and longitudinal surveys. In this paper we make the case for an ecological approach to the accentuation hypothesis. Swiss Household Panel (SHP) data are thus used to estimate collective indicators describing the perceived social change and the dispersion of the personality traits across the Swiss cantons. Spatial weighting methods are used to aggregate SHP data by canton and reduce measurement error due to the large discrepancy between the canton sample size and the population size. These collective indicators can therefore be used in multi-level analyses for testing interaction effects between the cantonal social climate, the magnitude of social change, and the individual life courses.

Workshop 3C – Life course analysis - room 2230

Age and context effect on subjective well-being (SWB) in the process of aging

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Valérie-Anne Ryser, FORS

Davide Morselli, NCCR LIVES, University of Lausanne

Theoretical background

Advanced ages are characterized by physical and cognitive slowing down. Older individuals tend to experience increasing difficulties performing activities of daily living as well as instrumental activities of daily living; they are also more exposed to loss and loneliness. Therefore they can be characterizing as vulnerable individuals. This vulnerability corresponds to an intermediate state between dependence and independence, and can be presented as increased difficulties to cope with the exposure to environmental demands. However, despite the increasing vulnerability in old and especially in very old age, old people's subjective well-being (SWB) remains quite stable or decline only slightly. The relationship between physical decline and SWB is even relatively low, as evidenced by numerous studies. The relative stability of SWB during the ageing process is presented in the literature as the "paradox of subjective well-being in old age."

Several studies demonstrated that life satisfaction, the cognitive dimension of SWB, remains stable in old and very old age or decline only slightly. Concerning the affective dimension of SWB, the positive and negative affect, numerous studies confirmed that ageing and the functional decline are negatively associated with positive affects, resulting in a somewhat decline of experiencing positive affect in old and very old age. However, there is no evidence of an increase of depression or the prevalence of depression in old and very old age. In addition the functional decline is not linked with an increase in negative affect resulting in a stability of negative affect in old and very old age.

The relative stability of the different dimensions of SWB in old and very old age is explained by the fact that elderly's SWB is characterized by several emotional regulation strategies adopted by the elderly to compensate the vulnerability process. Self-regulation processes such as beliefs, control strategies, coping strategies, adjustment purposes, or optimism are thus essential for maintaining SWB of seniors. But in addition, some dimensions of personality trait also shape the evolution of both the cognitive and the affective dimension of SWB. But besides individuals characteristics, contextual features such as living conditions, income, education, physical health, social network, also impact elderly's SWB.

These contextual and individuals characteristics are fundamental to fully understand the relative stability of the different dimensions of SWB in old age because they mediate or compensate for the deleterious effects of increasing vulnerability on the different dimensions of SWB. But in addition research on life satisfaction trajectories showed cohorts effects for women, which suggest that, at least to some extent, some dimensions of SWB might also be affected by context influences. Recent researches highlighted that the cognitive dimension of SWB -life satisfaction-, is influenced by cohort effects. It has been shown that new cohorts of elderly women living in Switzerland tend to report lower levels of life satisfaction despite that their living conditions have significantly improved compared to the former cohorts.

Therefore, the first aim of this study is to understand how the three components of SWB are altered by characteristics of the period in which individuals live: to what extent, the economic crisis and cohort effects influence the different dimensions of SWB. The goal is to shed lights not only on one dimension of SWB – the cognitive dimension operationalized by life satisfaction - but to also consider the trajectories of the positive and negative affect that composed the affective dimension of SWB. The second aim is to figure out how two dimensions of personality trait that are neuroticism and extraversion, modulate the effects of age, period and cohort on the affective and cognitive dimensions of SWB that are life satisfaction, positive affect, and negative affect.

Data, Method and Sample

Our analyses are based on a subsample of individuals aged 60+ of the Swiss Household Panel (SHP) and take advantages of the longitudinal characteristic of the SHP. Because we consider age, period and cohort as different sources of SWB change (in addition to personal and individual characteristics), we conducted a set of multilevel crossclassified models (Bell and Jones, 2015). Following Bell and Jones (2015), age effects are individual, whereas periods and cohorts can be considered as social contexts affecting individuals that reside within them. The difficulty is to disentangle between these three age, period and cohort effect. The multilevel cross-classified analytical strategy allows us to model distinctly the effects of age, period and cohort.

Preliminary Results

Based on multilevel cross-classified models, preliminary results confirm first cohort effects on the three dimensions of the SWB taken into account in the analyses. More precisely the first result show cohort effect in line with previous research: The older cohorts tend to express higher level of life satisfaction compared to the youngest ones. But the novelty of our research is to demonstrate that these results also hold for the affective dimensions of SWB. That means that the oldest cohorts tend to express higher level of positive affect compared to the youngest ones. The opposite holds for the negative affect: the oldest cohorts tend to report less negative affect than the youngest counterparts.

A second set of models tend also to indicate period effects. That means that the three dimensions of SWB tend to be influenced by the period in which individuals are living in.

Finally, further analyses will explore and better understand the processes underlying these effects and better understand the role of the personality trait –neuroticism and extraversion – in the dynamic between age, periode, cohort effect and SWB dimensions.

Conclusion

The study of the evolution of the cognitive and affective dimensions of SWB during the ageing process is central to assess the overall quality of life and the quality of the adaptation to the ageing process of the seniors. The aim of this research is to better understand that the trajectories of the different dimensions of SWB are not only influenced by contextual and individuals characteristics but are also significantly influenced by the cohort and the period in which individuals are involved in.

Childhood Family Structure and Home-Leaving - An Application of Sequence History Analysis

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Florence Rossignon, NCCR LIVES, University of Lausanne

Matthias Studer, NCCR LIVES, University of Geneva

Jean-Marie Le Goff, NCCR LIVES, University of Lausanne

Conceptual framework

Previous research have demonstrated the multiple effects of previous co-residence trajectories on the departure from the parental home (Blaauboer & Mulder, 2010). There are also some reasons to believe that the number of siblings living in the same household is likely to affect the probability of young adults leaving the parental home (Buck & Scott, 1993). First and foremost, growing up with two biological parents—which is still the most common form of living arrangements in Western Europe—is linked with closer family bonds and longer stays in the parental home (Goldscheider & Goldscheider, 1998). Second, several studies showed that children of divorced parents tend to leave parental home earlier than those of intact families (Zorlu & Gaalen, 2016). As noted by several authors, this effect might be more related to low family socio-economic background than to the absence of one of the parental figures (See e.g., McLanahan & Carlson (2004). Aquilino (1991) showed that young adults who grew up in a single-parent household *from birth* do not have a higher hazard of leaving home than those who grew up in an intact family. Therefore, the stability of co-residence structure could also have an impact on the timing of leaving home. Third, children from stepparent family tend to leave home earlier than young adults from intact families.

Among various explanations, stress the difficulty to welcome a new parental figure, step-siblings, and/or half-siblings into one's home. Other studies have shown that severe conflicts and disagreements within stepfamilies play a significant role in early nest-leaving (Gossens, 2001).

Data

We use data from the LIVES Cohort Study, a panel survey which first wave was conducted from mid-October 2013 to the end of June 2014 (Elcherroth & Antal, 2013). The sample includes 1691 respondents, among which 415 were Swiss and 1276 were from a foreign background. The sample is composed of people aged 15–24 on January 1st 2013 and who began a Swiss school before the age of 10. Second-generation immigrants are over-represented in the sample and a particular attention is paid to offspring of low- or middle-skilled migrants who mainly hail from Southern Europe or from the Balkan Peninsula.

Methods

To address the issue of the interplay between child family structure and the dynamics of home leaving, we develop a new and innovative method called *Sequence History Analysis (SHA)*. This method is a combination of Sequences Analysis and Event History Analysis, which as these two methods are based on very different approaches of life-course data. Sequence Analysis is based on a holistic approach of life course trajectories. The overall trajectory of each respondent is examined and compared with that of the other individuals. Conversely,

the focus in Event History Analysis is rather the investigation of the probabilistic distribution of life course events over time according to individual characteristics. It is well-known that many common problems can arise from the combination of Event History Analysis and Sequence Analysis. The procedure we propose combines both approaches in such a way it tackles the previously mentioned methodological issue. This method works in two steps. We start by identifying typical past trajectories of individuals over time by using Sequence Analysis. We then estimate the effect of these typical past trajectories on the event under study using discrete-time models.

Results

The occurrence of divorce and having siblings do not play a strong role on the departure from the parental home. Conversely, childhood co-residence patterns influence the ways in which young adults leave the parental home. More precisely, the occurrence, the timing and the sequencing of the events have a specific effect on home-leaving.

Having spent some years in a lone-parent household has a positive impact on the risk of leaving home. It does not seem to matter much if it occurred in the presence of siblings or not, as both situations lead to an increase in the likelihood of leaving home.

Having siblings matters when it comes to leaving the parental home. However, behind that simple fact, our method showed that birth order and arrivals or departure of siblings matters more. Moreover, when the family socio-economic background is taken into account, being an only child significantly increases the odds of leaving the parental home.

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Tax incentives and savings behavior: evidence for «Pillar 3a» in Switzerland

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Introduction

Most of the states are today strongly committed to social security and especially retirement provision. Switzerland is spending around 25% of its GDP on social security expenditures. Almost all OECD countries support complementary private retirement savings. One possibility to do that is that the state is encouraging private savings by tax incentives.

Each tax and pension system has effects on individual decisions. The literature shows that we can expect participation, contributory and substitution effects, deadweight losses and take-away effects in the case of tax incentives. It is unclear whether additional savings are made or whether free resources are re-allocated in tax favoured accounts. Certain references suggest that especially high-income persons profit from tax incentives and the target group (younger, financially weaker persons with needs to save for retirement) is partially missed.

The research question is: What influence do tax incentives have on the voluntary, supplementary retirement savings? The study is limited to the so-called "Pillar 3a" in Switzerland. These are tax-subsidized banking and insurance products for private voluntary retirement provision. Since 1987, contributions to pillar 3a in Switzerland can be tax deducted.

Literature review

The assessment of the savings behavior is methodically difficult. The impact of tax incentives on savings is unclear. The evidence for Switzerland shows that up to now a capital stock of more than 100 billion Swiss francs has been saved. Approximately half of the eligible persons have a pillar 3a. The main driver of the payments into the pillar 3a is the income situation.

Methods

Our hypothesis is that there is a positive correlation between tax incentives and the probability of having a pillar 3a. We exploit econometrically the variability of the tax incentive to pay into a pillar 3a (fluctuating tax burden). Based on data from the Swiss Household Panel from 1999 to 2014, we apply models with logit regression. The robustness of the results is tested with different specifications. About 58,000 data points are available. We apply heteroskedastic robust White standard errors. For skewed income and tax data we use log-values.

Results

The results are largely consistent with the findings of the literature. The empirical models show that the rate of participation in tax preferred voluntary pension provision in Switzerland is high in international comparison with 76% of households. We assume that this result is based on a strong tax incentive on the "middle range income" households to take part in the pillar 3a.

Significant regional differences in the participation rate are evident. In German-speaking Switzerland and rural cantons, the quota is much higher than in Latin Switzerland and in urban cantons. This implies "political-cultural" differences and possibly a different understanding of the role of the state of the population (participation rate GE = 59%, NW = 89%).

Both rising incomes and a rising tax burden lead to an increasing use of pillar 3a as expected. The results are, however, dependent on the financial conditions of the households. A savings rate or financial reserves increase participation in pillar 3a, even if we control for taxes and income in the statistical model. An increasing age, a higher level of education and a growing level of life satisfaction increase efforts to save in pillar 3a. In the case of separated or divorced persons (where we expect more difficult financial conditions), the participation rate also drops.

For households of the middle income range, the influence of taxes and income on the probability of participation in the pillar 3a is highest. For medium-income households, the tax incentive dominates the income effect. Households with lower incomes use the pillar 3a when they can afford it. However, the chance of running a pillar 3a does not drop to zero even at very low tax burden and correspondingly low absolute and relative tax incentives. And high-income households almost always use the pillar 3a because of the high absolute tax incentive, even if the relative tax incentive is declining. In the case of low and high incomes, the income effect dominates the tax effect.

Discussion

We can say: Whoever does not have a pillar 3a in Switzerland can not afford it financially.

This study has significant limitations. On the one hand, the variable to be explained is only dichotomous, which does not allow for an analysis of the tax and the income elasticity effect. On the other hand, a quantitatively oriented research approach can not conclusively distinguish between "not wanting to save" and "can not save".

Should the government promote private retirement provision at all? Where retirement provision ends and free asset formation begins, depends essentially on whether the retirement pension is defined relative (retirement income as a percentage of the former labor income) or absolute (in the sense of an amount in francs for the minimum standard of living). This is ultimately a political decision.

Workshop 4A – Migration & ethnic minorities - room 2208

Intergenerational links in self-employment. The Swiss case

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In the last decades, immigrant self-employment and entrepreneurial activity have become a huge source of interest for academic research. Self-employment capacity is often considered an important aspect of the economic integration of immigrants in their host country since they play a "social hinge" role (see Hettlage et al. 2007). Previous research found evidence for over-representation of immigrants in self-employment in several countries, compared to natives (e.g. Borjas 1986; Fairlie and Meyer 1996; Fairlie 1999; Clark and Drinkwater 2000). Switzerland represents a peculiar case, immigrants were not allowed to start a business (except in particular cases) before the European Union 2002 bilateral agreements. Thus, even today, immigrants'

propensity to be self-employed is lower (Guerra and Patuelli 2014, Guerra, Patuelli, Maggi 2012, Piguet 2010, Juhasz Liebermann et al. 2013). There is a vast literature about the entrepreneurial capacity of immigrants and its determinants, but only recent research focused on the self-employment activities of second-generation immigrants. Hout and Rosen (2000) define the “inter-generational pick-up rate” (with respect to self-employment) as the probability that the child of a self-employed parent will become self-employed him-or-herself. Their main assumption – given the state of art of sociological, psychological and economic literature – was that “the likelihood that a person succeeds in self-employment depends in part on the human capital he or she receives from a self-employed father/mother and the amount of that human capital may differ from one ancestry group to another”. These findings suggest that it would be interesting to shed light on the mechanism of inter-generational transmission of entrepreneurial abilities and the differences between immigrants and Swiss citizens. Moreover, to the best of my knowledge, while in Switzerland there is evidence for the under-representation of first-generation immigrants, there is a lack of literature about second-generation. Previous literature suggests both an increase and a decrease in entrepreneurial capacity of immigrants’ children. Portes and Shafer (2007) analysed the mass migration of Cuban exiles to Miami in the 1960s and 1970s. They discovered that self-employment rate among children was halved. Their hypothesis was that many second-generation Cubans entered in high-skilled wage-employment since they had the opportunity to obtain advanced degrees, thanks to the accumulated resources of their parents’ entrepreneurship. Kasinitz et al. (2008) suggest that education and professional careers might be a preferred route to economic success among second-generation immigrants. A competing hypothesis suggests an increase in self-employment from immigrant parents to their children. Fairlie (1999) and Hout and Rosen (2000) found this evidence among US immigrants, but the strength of inter-generational transmission varied between different ethnic groups.

A brief history of immigrant self-employment access in Switzerland

Since its foundation in 1848, the Swiss Confederation has been an immigration country, due to its strategic location, neutrality and economic stability. In particular, starting from the end of the nineteenth century, the Swiss economy has been in constant need of recruiting foreign workers in its labour market. Immigration brought considerable effects on the Swiss economic and social life. More than a hundred years after, a huge step for the integration of immigrants was taken. The 1st June 2002, the Agreement on the Free Movement of Persons (AFMP) between Switzerland and the European Union was approved. This was the first time since the foundation of the Swiss confederation in which the provision for the self-employment of immigrants in Switzerland was possible. People from EU/EFTA were allowed to start a business on their own; they could obtain a five-year permit under some economic self-sufficiency conditions. A distinction was made between immigrants from EU/EFTA countries and those from so-called third countries; they were given permission to take up self-employment in Switzerland only in case of family reunification or highly skilled workers responding to specific needs in the labour market. The AFMP lifts restrictions on EU citizens wishing to live or work in Switzerland. The right of free movement is complemented by the mutual recognition of professional qualifications, by the right to buy property, and by the coordination of social insurance systems. The same rules also apply to citizens of EFTA member states. In 2013, 2.4 million of the 6.8 million people aged 15 or more living in Switzerland had a migration background (Federal Statistical Office, 2015).

Microeconomic model

Dunn and Holtz-Eakin (2000) developed a model for the individual’s selection into self-employment. In this framework, utility depends on income and a vector of personal characteristics. Earnings ability in wage-employment is a function of individual’s own assets and wage-income, while individual’s gross earnings as an entrepreneur are defined as a production function using capital and entrepreneurial ability. Furthermore, they assume that an individual is subject to liquidity constraints and both family wealth and human capital are transferred across generations (e.g., family’s background influences the ability to become self-employed). The authors assume that, solving the utility maximization problem, an individual will enter self-employment if expected income is higher than expected income from wage-employment. In this context, the decision to become an entrepreneur depends not only on tastes, demographic characteristics and resources (personal and parental assets) but also on relative (expected) entrepreneurial abilities. These abilities are affected by immigration status and/or family background.

Hypotheses

Following the previous literature and theoretical framework, I hypothesize that parental background influences the propensity to be self-employed. In particular, individuals with a self-employed parent are more likely to be self-employed; some part of the correlation may be due to a general tendency for children entering the same occupations as their parents (Hundley, 2006). Another hypothesis about parental background focuses on parental assets, assuming that a greater personal wealth relaxes capital market constraints and eases the transition to entrepreneurship (Evans and Jovanovich, 1989; Meyer, 1990; Holtz-Eakin et al., 1994 and Blachflower and Oswald, 1998). Moreover, I focus on the immigrant background of individuals. Compared with their parents,

children of immigrants are likely to be more proficient in the official languages of the host country, to have higher levels of education, and to have been educated in the host-country educational institutions. These assets may provide them with the skills and information needed to start and operate a business (Sanders and Nee 1996; Kloosterman et al. 1999). Hence, I suppose a higher rate of self-employment among children of immigrants than among their parents. Finally, the “ancestry hypothesis” is about the ethnic origin, it implies that the likelihood that a person succeeds in self-employment depends in part on the human capital he or she receives from parents; the amount of human capital may differ from an ancestry group to another. Moreover, the extent that the nature of inter-family interaction differs across ethnic groups (some fathers are “involved” with their children and others may not be), then the father’s self-employment status will differently affect his offspring’s status (Hout and Rosen, 2000).

Data

The data set used is a longitudinal survey by FORS named “Swiss Household Panel” (SHP). I only include the reference person in the individual dataset and the period after the policy change in self-employment accessibility for immigrants (2003-2015).

Main results

Based on the theoretical framework, I estimate a logit model with time fixed effects, individual random effects and lagged regressors to control for endogeneity. Preliminary results show that there is a negative and statistically significant marginal effect (at the mean) in self-employment propensity among first-generation immigrants, compared to natives. This effect is positive and statistically significant for second-generation immigrants, while it is not statistically significant for natives with immigration background. Furthermore, a role model effect seems to exist, males (females) with self-employed fathers (mothers) are more likely to become self-employed.

Policy implications

Starting an entrepreneurial activity requires social and financial support. Immigrant businesses support other foreigners providing jobs and access to information. In addition, immigrant entrepreneurs may have an advantage in providing particular services or goods to co-ethnics (Fairlie, Mayer, 2003 p. 627). They perform a “social hinge” function, which plays an important role in the integration process. Future research and policy measures have to take into account differences between immigrant generations and their potential. For the first generation, the key issue is to ease the access to business networks, financial credit, investment funds, etc. The second generation can benefit self-employment training programs, improving and diversifying the entrepreneurial framework.

Staying or leaving? The importance of the migratory status in the emigration process from Switzerland

Ilka Steiner, Institute of Demography and Socioeconomics, University of Geneva

Introduction

Most of the scientific literature on international mobility is concerned with the arrivals in a country and its consequences in terms of integration. Studies on emigration are rare. This is obviously due to the direction of recent flows and national statistical systems reflecting the governments’ priorities. Emigration is however also less covered because its measurement is more difficult: there can be delays or omissions in the registration, especially when incentives to announce such departures are lacking.

The phenomenon of emigration is however not marginal in industrialised countries. In the case of Switzerland, in 2012, more than 100,000 residents left the country. This group is rather diverse, since it includes Swiss citizens emigrating for various reasons, as well as foreign citizens returning to their countries of origin, or moving to third countries, after having spent some years in the Switzerland.

Comparing individuals of differing migratory statuses, our contribution aims at evaluating the representativeness of emigrants in the data, describing emigration flows as well as identifying the individual factors intervening in the emigration process.

Data, target population and methods

We use original longitudinal data (obtained by linking the Swiss Structural Survey and the Population and Household Statistics) that provides information on emigration flows and on the migratory background from 2010 to 2012 (Steiner & Wanner, 2015). Socio-economic characteristics are available for a sample of the population.

We distinguish between three different populations:

- First generation migrants, that is foreign-born individuals that immigrated after the age of 18.
- Children of immigrants, that is Swiss-born of foreign nationality and foreign-born that immigrated before the age of 10 years.
- Swiss-born Swiss citizens.

Also, we only consider individuals that are aged 18+ in the analysis, because we assume that they cannot yet make their own decisions about re-migration.

First, the STATPOP data allows computing emigration rates, which represent the mean of two years (2011 and 2012). They are calculated by dividing the number of emigrants over one year by the population living in Switzerland at the beginning of the same year. Logistic regression models, based on the linked SS/STATPOP-data, are used to test the effects of the different variables on the probability to emigrate (Cox & Snell, 1989). The dependent binary variable distinguishes emigrants (1) from non-emigrants (0).

Representativeness of emigrants in the data

We observe an under-registration of emigration movements in the linked data. For the total of the first generation, the emigration probability in the SS/STATPOP is almost half of the one observed in the exhaustive dataset (STATPOP) (see Table 1). Individuals who have already planned their emigration are probably less disposed to complete the survey, even though it is mandatory. The Structural Surveys therefore reach the most sedentary individuals, while rather young, recently arrived and mobile persons are underrepresented (Wanner, Steiner, & Fioretta, 2016, p. 11). The phenomenon therefore varies according to nationality, since the demographic and socio-professional profiles correlate with the nationality.

The Germans and the OECD nationals present the lowest under-representation despite their low mean duration of residence and age compared to other nationalities. In fact, in comparison with the total foreign-born population of foreign nationality, the Germans present a lower under-representation for all age groups. It is possible that the educational level plays a role, where people with a higher qualification level are more inclined to take part in a survey. In fact, other OECD-nationals (71%) and Germans (51%) present the highest shares of individuals holding a tertiary degree. Moreover, many immigrants among the youngest age category are students.

Table 1: Comparison of emigration probabilities for different origins, by data source and selected categories of citizenships, 2010-2012 (%)

categories of citizenship	STATPOP	SS/STATPOP	Ratio*	mean	
				duration of residence (years)	age
Swiss	2.2%	0.7%	0.32	5.5	52.2
Italian	2.4%	1.3%	0.56	5.5	56
French	5.3%	3.3%	0.63	4.7	43.1
remaining EU/EFTA citizens	5.7%	3.6%	0.63	4.8	44.5
other European citizens	1.5%	0.9%	0.63	5.3	40.4
Spanish/Portuguese	2.2%	1.4%	0.64	5.1	42.4
other nationalities	3.5%	2.3%	0.66	4.7	37.3
German	5.3%	3.9%	0.73	4.5	42.4
remaining OECD nationals	10.0%	7.7%	0.77	4.4	41.8
Total foreign-born	3.6%	1.9%	0.54	5.0	44.4
Children of immigrants	0.6%	0.5%	0.83	-	-
Total Swiss-born	0.3%	0.2%	0.76	-	49.7

Note: *Ratio=SS/STATPOP probability divided by STATPOP probability.

Source: STATPOP and linked SS/STATPOP data, 2010-2012.

Emigration patterns

The emigration rate (based on STATPOP data, see Table 1) for the first generation of migrants is seven times higher than for the children of immigrants, with 3.6% compared to 0.6%. In comparison, the Swiss-born Swiss citizens show the smallest likelihood to leave Switzerland (3 out of 1 000, i.e. 0.2%).

Among the first-generation migrants, we observe the highest rates among the remaining OECD nationals (10%), followed by the remaining EU/EFTA citizens (5.7%) and Germans and French (5.3%). The lowest rates are observed for the other European citizens (1.5%). These results might be explained by their differing access to mobility, inter alia due to their qualification level and citizenship. For comparison, the Swiss-born population presents the lowest rate with 0.3%.

Emigration determinants

Confirming descriptive analyses, the children of immigrants have a significantly lower probability to emigrate than the first generation. When compared to the Swiss-born Swiss-citizens, we do not find a significant effect.

Unsurprisingly, the first generation shows a clear decrease in their probability to leave Switzerland with an increasing length of stay. Also, male, highly educated, young, and childless Germans who are not in a relationship show the highest propensities to emigrate (e.g. Fioretta and Wanner forthcoming 2017; Pecoraro 2012). Being integrated in the labor market, in contrast, decreases the probability to emigrate. Also, length of stay and age are negatively correlated with the emigration behavior. Finally, locational factors do not seem to have a significant impact on the emigration behavior at all.

Once controlled for all factors, all nationalities of the first generation, except for citizens from the other European countries, show a higher propensity to emigrate than the Swiss nationals. Among the latter, we find a high proportion of naturalised foreigners (95%). This result supports the assumption that the wish to re-settle in another country is lowered because of the costly and lengthy naturalization process and therefore a stronger link with the destination country.

Conclusion

We observe a strong link between the migratory status and the propensity for international mobility: The emigration rates decrease between the first generation, the children of immigrants and the Swiss-born Swiss citizens. Also, the access to mobility, depending on the citizenship status, seems to play an important role for some specific nationality groups.

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Is There a Swiss Immigrant Epidemiological Paradox? The Role of Legal Status and Naturalization Timing

Gina Potarca, NCCR LIVES, University of Geneva

Laura Bernardi, NCCR LIVES, University of Lausanne

Introduction

All throughout the Western world, immigrants now constitute a sizeable and fast growing segment of the population, making pivotal contributions to the economic and cultural growth of host societies (e.g., Dustmann & Frattini 2014; Eraydin et al. 2010). Despite these benefits, the general public discourse, acutely shaped by rising right wing populism, focus on the challenges posed by immigration, and little on the challenges faced by immigrants themselves, particularly regarding health. From a utilitarian point of view, low immigrant health has direct costs (e.g., healthcare expenses), as well as indirect costs in terms of reducing immigrants' economic input to both the host country and the country of origin (e.g., decreased international remittances) (Rechel et al. 2013). From a humanitarian point of view, an inclusive society ought to make efforts to reduce social inequalities in health and to ensure that the human needs, primordial good health, of all of its inhabitants, irrespective of origin or nativity, are met (Davies et al. 2009).

The literature on origins and health inequalities identified a so-called "immigrant epidemiological paradox", meaning that foreign-born migrants report better health compared to both natives and second generation immigrants belonging to the same origin group, and that this difference is reduced with increasing duration of stay in the country of destination (e.g., Antecol & Bedard 2006). The bulk of research is mainly U.S. focused, with recent advances in Europe (for a review, see Domnich et al. 2012). The few studies that examined the immigrant paradox in European contexts found some evidence in support of the healthy immigrant effect (e.g., Borgdorff et al. 1998), but the phenomenon is far from being generalized. On the contrary, a fairly substantial amount of studies reveal that immigrants experience worse health compared to natives (e.g., Solé-Auró & Crimmins 2008). The factors behind this health differential are far from being understood. While both objective and self-perceived discrimination have been shown to be key factors negatively affecting the physical and mental health of immigrants (e.g., Schunck et al. 2015), further investigations into the role of other, more structural aspects, with potentially deleterious effects on immigrant health are called for (Riosmena et al. 2015).

Among these aspects, legal integration has received insufficient systematic attention, despite the fact that legal vulnerability and the stress of acquiring native citizenship are highly likely to negatively impact health (Mehta & Elo 2012). In this study, we examine whether immigrants are more likely to report worse health than natives and whether these differences could be explained by means of citizenship status and naturalization timing. By means of rich longitudinal data and multilevel regression modeling, we investigate if the detrimental effect of legal disadvantage and restrictive access to citizenship on health occurs over and above the one generated by economic vulnerability.

The obstacles immigrants face in gaining legal stability have become increasingly strenuous in recent years, against a background of austerity measures and adverse immigration policies (Barbero 2015). Switzerland is a country in which, despite economic prosperity and a large intake of highly skilled migrants (Liebig et al. 2012), state anti-immigrant efforts have gained momentum in the last few years, supported by popular vote (e.g., the 2014 anti-mass immigration referendum vote supporting stricter quotas on foreigners) and driven by the rising political influence of the right-wing Swiss People's Party (Abu-Hayyeh et al. 2014). Documenting the link between legal integration and immigrant health in the Swiss context is thus a compelling research task not only because of the large size of its immigrant group (i.e., more than a quarter of the population), but also because of the exclusionist legal conditions that immigrants settle into (Bail 2008).

Data and methods

The data for this study come from the Swiss Household Panel (SHP). The SHP is running since 1999, with further refreshment samples (meant to ensure the continuing representativeness of the population in Switzerland) added in 2004 and recently in 2013. For this study, we select a sample of 10,010 native and immigrant respondents with at least one measurement point between 1999 and 2014 (i.e., 16 waves). For the purpose of avoiding post-retirement changes in health and the onset of chronic health conditions with the advent of old age, we restrict the analysis to individuals who were between 18 and 60 years old at entry into the panel, in a strategy similar to Mazzonna and Peracchi (2012). The dependent variable is general self-rated health, assessed through the question: 'We are now going to talk about various aspects of your health. How do you feel right now?'. We dichotomized the scale in order to draw a clear-cut distinction between good health (0 = very well and well) and bad health (1 = so, so (average), not very well, and not well at all). Legal status is measured by using information on the year of birth and the year that the immigrant respondent acquired Swiss nationality. Four distinct categories are created, as follows: 1) Swiss since birth, 2) naturalized in early life (i.e., before the age of 18), 3) naturalized as adult (i.e., after 18), and 4) non-Swiss. Socio-economic status is captured via three distinct variables: educational level reached (with categories: 1) low, 2) medium, 3) high), employment status (with options: 1) active occupied; 2) unemployed; 3) not in labour force), and the natural logarithm of household income. More information about the measurement of other covariates will be provided in the long version of the paper.

We use multilevel logistic regression with random individual-level intercepts to estimate self-rated health. The nested approach accounts for the non-independence of observations within individuals, in addition to allowing for unbalanced panel structure or missing within-subject observations (Singer & Willett 2003).

Results

Findings corresponding to Model 1 show that, as expected, immigrant respondents belonging to almost all types of origin categories are significantly more likely to be in poor self-rated health than Swiss native respondents, with immigrants Southern Europeans being predominantly worse off. We initially posited that these differences would hold even after adjusting for variation in socio-economic profile. Results indicate that controlling for education, employment status and household income slightly attenuate some of the differences, but immigrants still have higher odds of poor health than natives, irrespective of origin.

Our central hypothesis proposed that immigrants' health would be particularly disadvantaged in terms of health if they are not naturalized or acquired Swiss citizenship later in life, as opposed to at birth or earlier. Findings confirm our expectation. The odds of being in poor health compared to natives progressively increase as we move up the 'naturalization timing' scale. While the differences between native Swiss, on the one side, and immigrants born with Swiss nationality, those who received it early in life or who got naturalized in adult age, on the other side, are non-significant, second generation immigrants who are still without Swiss nationality are significantly more likely to be in bad health than natives.

Conclusions

Health differentials by nativity/ origin represent a strong indicator of the level of social inequalities between immigrants and natives. Immigrants' health is shaped by specific vulnerabilities, including exposure to anti-migrant attitudes, difficulties in the labour and housing markets, in the educational and welfare systems, or in terms of political and social participation. Given the position of disadvantage experienced by this large and expanding demographic segment of the population, it is essential to assess and understand how immigrants fare in terms of health when compared to natives. Interventions to reduce social inequalities in health in general and

inequities experienced by ethnic minorities and migrant groups in particular should be a public health concern of top priority, as their implementation would benefit immigrant and native communities alike (Razum & Stronks 2014). Long-term health risk factors have occasionally been linked to the legal status of migrants, as this determines access to health and social services (Riosmena et al. 2015). While some attention had been given to monitor the health profile of undocumented migrants (e.g., Wendland et al. 2016), much less has been done to assess the health of immigrants with respect to holding native citizenship (or not) and the life course stage in which it was granted. In this study we set out to disentangle the link between legal status and immigrant health in Switzerland, a context with exclusionist immigration policies and a recent rise in nativism (Abu-Hayyeh et al. 2014). We found that immigrants display worse health than natives and that naturalization timing produces negative spillover effects on health. Migrants who did not receive Swiss nationality or who acquired it more recently fare even worse in health than natives, illustrating that being naturalized later in life does not compensate for early-life legal vulnerability (Riosmena et al. 2015).

Workshop 4B – Survey methodology - room 2224

Do Survey Respondents Lie?

Pierre Mercklé, ENS de Lyon, Centre Max Weber

Longitudinal surveys are commonly understood to be more effective than retrospective ones at capturing changes in practices and representations over the individual life course, because they reduce bias due to memory gaps and social desirability. This paper studies precisely those types of bias, on the basis of findings from various longitudinal surveys, to show that inconsistencies reach unexpected levels on topics usually regarded as less affected by memory bias – this being true throughout the life course, i.e. for adult respondents as well as for teenagers.

Do Adolescents lie?

Logically, with each new wave of the French longitudinal survey on teenage cultural participation analyzed here, the proportion of adolescents who have not yet been on each given outing should fall. However, that is not systematically the case: from age 11 to 13, the proportion of children never having been to the zoo rises 0.4 points, while that of children never having been to a show rises 0.9 points. From age 13 to 15 the proportion of

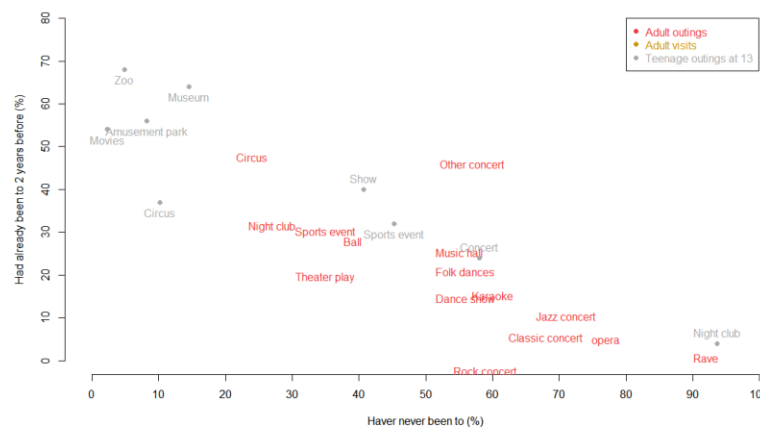
children never having been to the circus rises 0.4 points, and from age 15 to 17, 0.8 points. And the comparison of individual responses from one wave to the next reveals dramatic levels of reporting variations. For example, of the 1,295 children reporting at age 11 never having been to a sports event, 409 had reported two years earlier that they had been. To begin with, inconsistency prevalence among “No, never” respondents increases with the degree to which the outing type is practiced altogether, as the least widespread outing types are the most “salient” and that consequently they are less likely to be forgotten. Conversely, if a respondent is aware that the given practice is widespread, he/she will be more tempted to exaggerate his/her own participation in it.

Further analysis of response inconsistency determinants strongly shows that good students, girls and adolescents from upper class families contradict their reports of the preceding years significantly more often than others. This is surprising only if we assume we are dealing with exaggeration or forgetting. If we were, we could expect those factors to continue producing the same effects wave after wave, with exaggerators continuing to exaggerate and the forgetful continuing to forget. What we actually observe is that respondents who exaggerated in a given wave did not do so in the next. The relevant interpretation may be that girls and upper class adolescents are no more sensitive to social desirability or subject to memory loss, but rather that they have a stronger propensity or necessity to “rewrite” their cultural autobiographies as they grow up

Do Adults lie?

At first it was assumed that response inconsistency was specific to both teenagers and cultural participation, as it found a suitable explanation in temporal processes of cultural self-development and narrative identity construction that are at the core of what it is to grow up. If that assumption proved entirely correct, lower levels of response inconsistencies should have been observed in adult surveys on cultural participation... But this is not the case, by far: longitudinal data from two waves (2013 and 2015) of the French ELIPSS survey show that adult respondents are as inconsistent as teenagers when responding to successive questions on their cultural outings (Figure 1). Among the 720 adult respondents, 570 (79,2%) gave at least one inconsistent response on their past cultural outings, while teenage respondents from the Ministry of Culture survey respectively showed lower levels of inconsistency: 55% at 13, 58% at 15 and 66% at 17.

Figure 1. —Prevalence of non-participation and proportion of inconsistent responses among non-participants of cultural outings

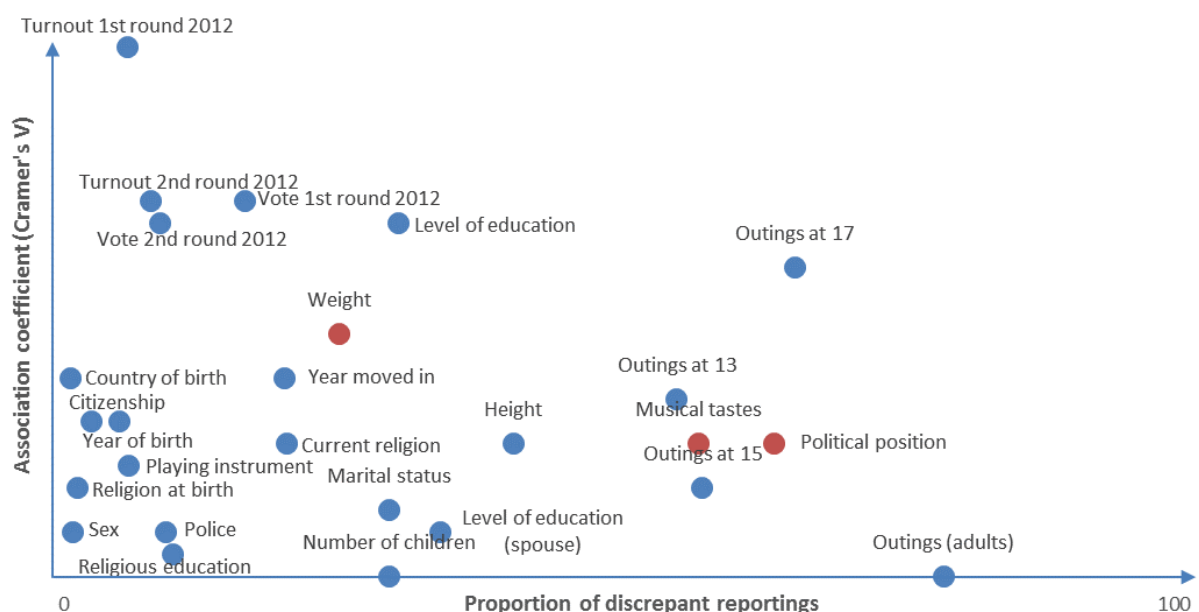


Though questions on cultural participation indeed generate the highest levels of inconsistent responses, surprisingly high proportions of inconsistencies may also be observed in adult responses on topics other than cultural participation. While response inconsistencies remain very scarce and seemingly random on questions about their most institutionalized features (sex, age), they reach already significant levels on apparently non-disputable features such as height, citizenship, marital status or the number of children. And when it comes to level of education, religion, or political participation and vote, inconsistencies reach levels that prove both quantitatively and socially significant: adult respondents from the ELIPSS survey were asked three successive times on their participation to the French 2012 presidential election: respondent with lower levels of education and income tend to be less consistent on whether they voted and who they voted for. And remarkably, since the proportion of respondents remembering they voted for François Hollande falls by 1 point every 6 months, it is likely that by the time of the end of his mandate they would have forgotten they elected him in the first place, and not his opponent.

What do do with inconsistent responses?

Considered altogether, levels of inconsistent responses in longitudinal surveys show that inconsistency is not limited to teenage cultural participation: it may also be observed in responses made by adults to questions on their cultural participation as well as on a wide variety of personal properties and actions that one would have expected to show more stability. And it may be observed in amounts ranging from a few individual cases to massive proportions, with no such thing as a discontinuity that would help distinguish “subjective” representations from “objective” individual characteristics, as shown in Figure 2, which confronts proportions of inconsistencies (horizontally) and the degree to which inconsistencies are randomly distributed among respondents (vertically).

Figure 2. —Proportion of discrepant reportings and association coefficient with socio-demographic characteristics of respondents



Eventually, the question is to determine what one should do when confronted to significant levels of inconsistency in a longitudinal survey. Previous attempts at treating teenage inconsistent responses as errors and correcting them consequently have been made with limited success: corrected levels of cultural participation and their correlations with socio-demographic characteristics dramatically vary according to the types of correction techniques, with no empirical way to determine which is the “right” correction technique. Instead of correcting inconsistent responses, the paper thus advocates on the contrary in favour of keeping them, giving them close attention, and eventually suggests the relevance of attempting to understand them in sociological terms. It refutes the “methodological” explanation holding that inconsistencies are due to survey errors that should be eliminated and chose instead a “sociological explanation” wherein reporting variations are simply accepted and the aim is to discover their determinants and meanings. This means thinking of inconsistencies between the consecutive responses adolescents and adults give in a longitudinal study not as errors but rather positive facts, and cultural behaviors and representations to be analyzed in their own right. If we refrain from correcting inconsistencies we can attend to the fact that what we designate by that term may very well be the way respondents “correct” their representations of their own trajectories, reinterpreting their past in terms of the present, and changing their perceptions and representations of themselves and the social worlds they interact with.

Using controlled network sampling to over-represent second-generation immigrants in a national panel survey: The LIVES Cohort Panel Study

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Minorities are often under-represented in surveys; i.e. national background is a strong predictor for survey inclusion in Switzerland, as shown by an analysis of three big Swiss surveys. In the light of relatively high percentages of foreign resident population, this may be a threat to the representativity of surveys by limiting their scope to the analysis of the majority rather than to represent the variability in the population. One cause for the under-representation, which is addressed in this paper, is the challenge coming from identifying members of minority groups. The target group maybe a small minority which will result in too small effectives for analysis even in the case of proportional inclusion in the sample. Additionally, selection from register data may be impossible in many cases due to data protection issues or the lack of visibility of the required characteristic in official databases.

The aim of the study was to over-sample second generation immigrants (“secondos”), defined by criteria which are not available for sampling in official registers and born between 1988 and 1997, to be added as a subsample of the Swiss Household Panel (SHP). The prevalence of this group in the population was estimated at about 17% based data from the immigration module in the Swiss Labour Force Survey (SLFS). The inclusion criteria for all participants (criteria A) were year of birth, residence in Switzerland by 1.1.2013 and attended school in Switzerland from their 10th birthday at latest. For the purposes of stratification, an additional criterion (B) applied for the screening category “second generation immigrant”: Both parents of the target person immigrated to Switzerland after their 18th birthday.

Network sampling is often used when sampling frames are unavailable or when the target population is hidden or hard-to-access. The method uses ties between individuals to recruit participants from within people’s contact networks, normally performing several waves or iterations until the desired sample size is reached. Network sampling relies on several assumptions, namely, random selection within contacts, symmetry of social ties (if A names B as a contact, B is equally likely to name A) and homophily along the target trait (i.e. the target trait constitutes a sociologically meaningful group). The LIVES Cohort Panel Study (LCPS) is, to our knowledge, the first study which uses a network sample in a large national panel survey, using a random starter sample as well as network sampling with weighted random selection within peer networks. This procedure allows statistical treatment of the data, provided that dependency of cases is controlled for. Also, the strategy implies an additional assumption: the feasibility of screening by proxy (i.e. willingness of respondents to disclose information on their peers and the accuracy of this information) in order to perform weighted random selection.

In this presentation, we discuss practical implications of network sampling methods as a mean of recruiting survey samples, empirically testing some of the underlying assumptions. Specifically, we will address the success of the strategy to a) identify the target group, and b) to reach individuals from the target group and keep them in the sample for subsequent waves.

Sampling strategy

The sampling procedure combined three elements in order to attain the objective: (1) A stratified random starter sample, based on a previous selection of cases by characteristics known to be correlated with secondo status. (2) a screening of the starter sample with the objective of obtaining a sample with two thirds of second generation

immigrants and (3) two subsequent network sampling iterations with screening by proxy and weighted random selection of eligible peers. Participants were asked to report up to 15 peers, aged 15 to 24 and living in Switzerland with whom they had had at least one non-professional interaction per week on average over the last three months. First name, gender, age, nationality, country of birth and parent's migration status (immigrated in Switzerland after their 18th birthday) were asked for each reported peer.

Results

Usefulness for the identification of the target group :

Homophily : Peers of second-generation immigrants were more likely to be second-generation immigrants than network of other participants. While one fifth of the contacts of the latter were second-generation immigrants, this ratio was near two fifths for networks of participants who met the criteria for second-generation immigrant. Screening by proxy : Participants very accurately reported non-secondos (94% of correct categorizations). However, the accuracy was much lower for the identification of secondos, with 62% of correct categorizations.

The symmetry of the links was confirmed for 96% of all dyads.

Contact, cooperation and attrition :

Contact and cooperation : The contact rate for peers selected in one of the network sampling iterations was 55.7%, with no difference between second-generation immigrants and other contacts. However, second-generation immigrants were less likely to participate (OR = 0.79). Cooperation rate was 63.2% for the stratified random sample. In this sample, 496 (59.1%) of respondents were second-generation immigrants. With 51.6%, the cooperation rate was slightly lower for the network sampling (49.8% and 53.3% for network sampling iterations 1 and 2 respectively).

Attrition : After four years, 60.4% (N = 986) of the initial 1631 participants were still in the sample. Participants from both network sampling iterations were significantly more likely to remain in the sample than individuals from the starter sample (OR = 1.61). Second-generation immigrants were more likely to drop out (ORwave2 = 0.62 and ORwave3 = 0.64). Consequently, second-generation immigrants recruited in the starter sample were the least likely to remain in the sample.

Conclusions

Generally speaking, the strategy proved both useful and feasible to gain access to an otherwise hard to reach population. The level of homophily found in the networks together with the unequal selection probabilities derived from the screening by proxy could successfully be used in order to counter-balance some of the selective nonresponse. Also, the results suggest that this group is harder to maintain in the sample than other participant. Network sampling allowed to reduce attrition even after four years in comparison to the stratified random sample.

Housing wealth in survey data

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Background

Wealth is one of the most relevant resources among national and international indicators of household finances. The concern that poverty measures are upward biased if wealth is not properly taken into account has led to the OECD guidelines on how to set up data collection on wealth, the establishment of the Household Finance and Consumption Network in 2006, and the creation of the Household Finance and Consumption Survey (HFCS) in the euro area. In Switzerland, different surveys started to collect information on wealth at the beginning of the 2000s. These surveys are the Household Budget Survey (HBS) since 1998, the Survey of Health, Ageing and Retirement in Europe (SHARE) since 2004, the Swiss Household Panel (SHP) in 2009/2010, 2012, and 2016 and the Swiss Statistics on Income and Living Conditions (CH-SILC) in 2011 and in 2015. These surveys face however several complications due to the sensitivity and the difficulty in answering questions on wealth. Consequently, these questions suffer from a relatively high item non-response rate. In addition to this, surveys usually undersample very wealthy individuals. Attrition and panel conditioning are additional issues for panel surveys such as the SHP and SHARE. Because wealth has been included only recently into population surveys, the consequences of these aspects on data quality remain largely unknown.

The fact that several Swiss population surveys have independently collected information on wealth using different approaches presents a unique opportunity to investigate data quality on wealth. This contribution focuses on housing wealth. Despite the relatively low home ownership rate in this country, housing wealth

represents the most important wealth component of total net worth. The correct estimation of this component is therefore crucial for the identification of a large part of total net worth.

Methods

In this analysis, we use the latest wave containing information on wealth of the following four surveys: the Swiss Household Panel (SHP 2016), the Swiss version of SILC (CH-SILC 2015), the Household Budget Survey (HBS 2015) and the sixth wave of the Survey of Health, Ageing and Retirement in Europe (SHARE 2015).

The OECD guidelines to measure quality of wealth data consist in seven criteria: 1. Institutional environment, 2. Relevance, 3. Coherence, 4. Timeliness, 5. Accessibility, 6. Comparability, and 7. Accuracy. Since our databases provide information on wealth for only one country, we intentionally neglect criteria based on cross-country comparability and we focus on three criteria that apply to data from a single country, namely relevance, coherence and accuracy. Relevance is defined by the OECD as the “degree to which statistics meet the needs of actual and potential users [...] thus it depends upon coverage of the required topics and the use of appropriate definitions or concepts”. Coherence, and particularly external coherence, is the consistency with external sources of information, such as national accounts or tax records. Finally, accuracy refers to the degree to which the data correctly allow estimation of the population characteristics they are designed to describe. In a first step, we study the determinants of item non-response and the relevance of imputations. In a second step, we address issues that arise with panel data. We analyse how item non-response predicts attrition and we give some estimates of the panel conditioning effect in SHARE and in the SHP.

Results

In terms of relevance, we remark that the four surveys collect information on housing wealth quite differently. Two surveys collect information on the value of the house and on mortgages separately (SILC and SHARE), whereas the other two surveys (the SHP and the HBS) have only one single question on net housing wealth or taxable wealth. Another difference resides in how the primary residence is considered. SILC and the SHP survey wealth on all real estate assets combined, whereas the HBS and SHARE collect separate information on the primary residence and other real estate. This difference has important implication for imputations because these surveys contain large information on the primary residence (e.g.: size, year of construction, environment), but fewer details on secondary residences. For this reason, house characteristics are not used in SILC data for the imputation of missing values. Differences concern not only the type of housing wealth, but also its values. The value of a house can be defined by different measures, such as the price at the time of purchase, estimated current market value, taxable value, insurance value and reallocation value. Respondents might indeed refer to different measures when asked to indicate the value of the house. Even if difficult to collect, the OECD suggests using current market values to estimate housing wealth. SILC allows respondents to choose the type of value they have in mind, whereas the SHP and SHARE ask about current market value. Because the HBS collects information on taxable values or historical values, but not on mortgages, this database cannot be used to estimate housing wealth. For this reason, we examine only the SHP, SHARE and SILC for the analysis on coherence and accuracy. It emerges that SHARE data is the most precise survey regarding questions on housing wealth. The comparison of descriptive statistics between the four surveys shows how the different question wordings affect results on housing wealth in particular and on total wealth more in general.

Results on coherence highlight to what extent the surveys comply with national accounts. In terms of accuracy, preliminary results on the determinants of item non-response show that younger respondents, men, employees, married individuals, people who live in small households, have a high level of social trust, are socially or physically active (particularly in volunteering and in sports) and benefit from good health conditions are more likely to answer to questions on housing wealth. In the sample frame of these surveys, richer individuals with large houses are also more likely to indicate their housing wealth. These last results differ for total net worth.

Participation patterns in longitudinal surveys: what can we learn from interviewers' evaluations?

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Introduction

Repeated participation of respondents is of central importance to longitudinal surveys. Only by collecting multiple observations of respondents over time can we accurately assess change. Hence, a large body of literature has examined the causes of attrition, how to prevent it and how to correct for it using survey weights (e.g. Couper & Ofstedal, 2009). Variables based on interviewers' evaluations of the interviews and the respondents are associated with future nonresponse (e.g. Plewis et al., 2017), but they are rarely used to calculate survey weights. Moreover, with increasing possibilities for responsive design procedures (Groves & Heeringa,

2006), being able to foresee which respondents are likely to drop out has great potential benefits in terms of making additional fieldwork efforts to keep these respondents in the study.

We assess the extent to which interviewer evaluations predict future participation in the Swiss Household Panel (SHP). We examine short and longer-term effects and distinguish between nonresponse due to noncontact and due to refusal. The following research questions are addressed:

1. To what extent do interviewer evaluations predict subsequent participation patterns in the panel?
2. To what extent do interviewer evaluations predict future participation above and beyond other predictors commonly used in nonresponse analyses?

Data and Measures

We use all waves of the second sample of the Swiss Household Panel (SHP_II, 2004-2015). The respondent's ability was measured with the question "Was the respondent's understanding of the questions...?" (Good, fair, poor). Reluctance was operationalized with the following three questions: "In general, what was the respondent's attitude toward the interview?" (Friendly and cooperative, cooperative but not particularly interested, impatient and restless, hostile); "How difficult was this case to get?" (Somewhat easy, somewhat difficult, very difficult); "Do you expect this respondent to participate in the next wave?" (Absolutely, probably yes, maybe, no).

Results

In a first step we applied sequence analysis to establish the most common participation patterns in the panel from 2005 onward and linked these to the interviewer evaluations in 2004. For this analysis we combined the evaluation questions into one indicator, which was coded 1 if the respondent was fully cooperative and able, and 0 otherwise. Table 1 presents the ten most common participation patterns by interviewer evaluation.

The main findings from Table 1 are the following:

- Longer term participation is not related to the interviewer evaluation in the first wave. There are only small differences between the predicted and observed frequencies of the two groups of respondents for the two long-term participation patterns (2005-2015 and 2005-2014). Whether the interviewer evaluated the respondent as cooperative and able does not predict longterm participation in the panel.
- The interviewer evaluations are most predictive of refusal in the next wave (2005) which has the largest chi2 contribution. In this pattern respondents with a less positive evaluation were overrepresented.
- Interviewer evaluations are not indicative of next-wave or later noncontact.
- Respondents who are evaluated as fully cooperative and able are more likely to leave the panel for reasons other than refusal or noncontact (i.e. to become ineligible).

In sum, interviewers are able to forecast short-term future behavior of respondents, and also distinguish between refusal and noncontacts. Over the longer term, however, interviewer's evaluations can no longer predict the respondent's behavior.

Table 1. Ten most common participation patterns by interviewer evaluation (SHP_II 2004-2015)

Participation patterns after 2004		less cooperative /able	fully cooperative /able	Chi2 contribution	Total
2005-2015	freq (expected)	287 (304)	462 (445)	1.6	749
	row %	38.3	61.7		100
2005-2014-ineligible in 2015	freq (expected)	99 (105)	159 (153)	0.5	258
	row %	38.4	61.6		100
2005-2007-ineligible in 2008	freq (expected)	32 (50)	92 (73)	11.2	124
	row %	25.8	74.2		100
2005-2006-ineligible in 2007	freq (expected)	42 (52)	87 (77)	3.5	129
	row %	32.6	67.4		100
2005-2006-refusal in 2007	freq (expected)	73 (65)	87 (95)	1.7	160
	row %	45.6	54.4		100
2005-ineligible in 2006	freq (expected)	47 (62)	105 (90)	5.9	152
	row %	30.9	69.1		100
2005-noncontact in 2006	freq (expected)	45 (47)	71 (69)	0.2	116
	row %	38.8	61.2		100
2005-refusal in 2006	Freq (expected)	102 (88)	114 (128)	3.9	216
	row %	47.2	52.8		100
Noncontact in 2005	freq (expected)	67 (65)	92 (92)	0.2	159
	row %	42.1	57.9		100
Refusal in 2005	freq (expected)	261 (218)	275 (318)	14.6	536
	row %	48.7	51.3		100
Total	Freq	1055	1544	43.2	2599
	row %	40.6	59.4		100

In additional multinomial random intercept models (logit link), with next wave response behavior as the dependent variable and the interviewer evaluations included as separate independent variables, we found that controlling for common predictors of nonresponse, the interviewer evaluation of the reluctance of the respondent contributed to the prediction of participation behaviour at the next wave. More specifically, whether the respondent was a “difficult case to get” and expected future participation were indicative of both next wave refusal and next wave noncontact. A respondent that was not “friendly and cooperative” was more likely to refuse the next wave. The effects of the interviewer evaluations found for refusal were generally stronger than for noncontact. Whether the respondent had difficulty understanding the questions (ability) was neither related to noncontact nor to refusal.

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Disentangling methodological issues and possible remedies in the measured decline in subjective well-being over time in Switzerland

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Background

Using the Swiss Household Panel (SHP, an ongoing longitudinal survey of households and people living in Switzerland) and measuring subjective well-being (SWB) through a global question of satisfaction with life, a significant decline in subjective well-being between 2000 and 2015 was found. The aim of this contribution is to examine to what extent this decline is a result of (1) a transition to lower levels of subjective well-being in Switzerland during the past fifteen years, (2) specific methodological artefacts or (3) both. We identified four possible methodological issues, namely non-random attrition (NRA), panel conditioning (PC), sample refreshment and aging of participants that potentially impact the study's results.

Method

SHP is an ongoing longitudinal survey of households and people living in Switzerland. This data, due to their structure, are particularly appropriate to challenge these above mentioned methodological issues. SHP has been administered annually since 1999. A first sample was randomly selected in 1999, a second sample in 2004 and a third sample in 2013. SWB is measured through a single question on life satisfaction ranking between 0 'not at all satisfied' and 10 'completely' satisfied.

We expected that NRA would be selective in the predictors of SWB (and not only on the variables used to compute the available weights of SHP) and that participants leaving the panel earlier would be more represented in the modalities predicting a lower level of SWB. In order to test this hypothesis, we created four groups of participation. The first group corresponds to the interviewed persons who remained during the whole study (17 waves for SHPI and 12 waves for SHPII). The second group corresponds to those who participated only to one (first) wave. In between, we created two groups: "short-time participation" (2 to 5 waves) and "long-time participation" (6 to 9 waves). For SHPIII (two waves available), we compared participation to the first wave only to participation to two waves. Then, we compared socio-demographic characteristics, income variables, and health and social support variables (variables define as good predictors of SWB (Dolan, 2008) between groups of participation by computing (transversal) weighted crossed tables. Analyses were run in parallel for the three SHP samples.

We expected a systematic increase or decrease in the mean score of SWB in the first waves, reflecting a PC effect. In order to test our expectation, we computed the mean score of satisfaction questions over time for the all-waves participants for SHPI and SHPII separately. As these two groups represent less than a quarter of the individuals interviewed in SHPI and SHPII, we also computed mean scores for those who fulfilled 6 consecutive waves once they were eligible.

Refreshment sample is mostly used to examine NRA effect on data. On the one hand, we expected that the new sample would have a lower mean score of SWB than the old sample, due to NRA; and on the other hand, due to PC in the new sample, we expected a higher mean score of SWB than in the old sample.

In order to test the impact of refreshment, we computed (transversal) weighted means and standard deviations for all the respondents in 2000, 2004 and 2014 separately by SHP samples.

We expected that aging would impact SWB with two effects: firstly, the mean score of SWB would increase over time (as SWB increases in the middle-aged and the old), and secondly, it would stabilize due to the maturation process. The mean score of SWB over time for all-waves participants for SHPI and SHPII separately was already computed to test PC. In addition, in order to understand the increase of SWB, we highlighted the impact of aging on the predictors of SWB. We illustrated the evolution of the percentage of each variable over time for all-waves participants of SHPI and SHPII separately.

The SWB over time was analyzed using linear mixed-effects models, with participants as random effect and time as fixed effect. Several models were run. The first three ones do not take into account potential methodological problems and were run 1) on the whole available sample of SHP (SHPI, II and III); 2) on the whole available sample of SHPI; and 3) on the whole available sample of SHPII. The fourth and fifth ones, taking into account the NRA problem, were run on the all-waves participants of SHPI and SHPII separately. In order to cope with PC, the five models, based on our findings on PC, were rerun. But the first four measures of SWB for each participant were deleted. All the analyses were run with and without longitudinal weights (except when working on the whole sample on the whole period).

Results

First, NRA was found to be selective in the predictors of SWB, not only between those who fulfilled only the first wave and the other participants, but all along the waves. Those leaving the panel (even after 6 to 9 waves) are more represented in the modalities of the predictors associated with lower SWB.

Second, we found a PC effect on SWB on the first five waves: SWB rapidly decreased during the first three waves, then more slowly during the next two waves. These results are similar to those found in SOEP or in SHP

(with a shorter period of only three waves with decreasing SWB) (Van Landeghem, 2012). Thus, PC clearly affects life satisfaction measure and impacts longitudinal analyses of SWB.

Third, we found higher SWB mean score in new samples than in old ones. These results are contradictory to those expected when considering the impact of NRA. This is clearly due to PC. Then, even if refreshment is seen as a solution to compensate NRA, PC counteracts its benefits.

Fourth, when following the same persons for more than one decade, aging modifies the characteristics of the sample with an increase of inactive persons (retirement), of couples with grown-up children outside home, and a decrease of persons with a low education (the youngest achieved upper education). This potentially increases SWB. In the same time, aging impacts health (slight decrease of persons in good health and high decrease of persons living without impediment). Accordingly, SWB should decrease. Aging impact predictors of SWB in different ways, what could probably compensate its effect. Nevertheless, what we observe in SWB with time/aging is a significant decrease on the first five waves and then a stabilization around 8.0. This description is nothing else than what has been described for the PC effect. Thus, it is completely impossible to dissociate aging from PC.

In order to reduce the impact of these methodological issues, we ran analyses excluding the first four responses and examined if SWB kept declining. This helped to suppress the strongest PC and NRA effects. Once these issues controlled, SWB does not decline anymore in Switzerland, while before controlling there was a significant decrease over time (b between -0.022 and -0.011), consistent with Van Landeghem (2012) findings (b=0.016 between 2000 and 2010). However, by suppressing the first four measures, we lose almost half of the participants (40% of SHPI and 47% for SHPII) with lower levels of SWB. What the results would be if we did not lose them? Maybe those who dropped out would also have a stable SWB over time, but with a lower level of SWB; or maybe they would have a decreasing level of SWB over time. Unfortunately, we are not able to answer these questions.

Concerning the respondents remaining in the analyses, can we conclude that the decline of SWB is a methodological artefact? If PC affects positively the estimation of SWB by reaching closer to the “true evaluation” and being more reliable, we can conclude so. Otherwise, if PC affects estimations negatively, we are facing a stable biased level of SWB. Analyzing the evolution of SWB with cross-sectional samples, Van Landeghem (2012) found a flat or slightly increasing trend in life satisfaction over time. NRA does not affect these results and PC is expected to affect samples similarly and therefore biases only the mean score of SWB but not the differences over time. If the result is flat with cross-sectional data, we can suppose that we have a positive PC effect in our longitudinal data. But if it is increasing, we should wonder if the stability found over time is not just an artefact of negative PC with a biased strengthening and crystallization of preferences on life attitude. However, it can also be a positive PC effect with an increase of SWB by those participants having the higher risk of low SWB.

Finally, it was difficult or impossible to disentangle the four methodological issues, as well as to propose methodological “remedies” to them.

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