

Transitionen von der Erstausbildung ins Erwerbsleben Transitions de l'Ecole à l'Emploi Transitions from Education to Employment

> D UNIVERSITÄT BERN

Two decades of longitudinal research with TREE: lessons (yet to be) learnt

Prof Dr Irene Kriesi Swiss Federal University of Vocational Education and Training (SFUVET)

Dr Thomas Meyer University of Bern, TREE

11 November 2021 TREE Conference "Life Course in the Making"



EIDGENÖSSISCHE HOCHSCHULE FÜR BERUFSBILDUNG

Schweizer Exzellenz in Berufsbildung







Outline

- Have a look at TREE in a research context which has changed dramatically over the past two decades
- Explore important insights of research on educational and occupational trajectories based on TREE
- Identify open questions and research gaps that should be addressed in the future
- > Outlook on TREE's near and medium- to long-term future







Data/research situation 20 years ago (general)

- > Swiss Labour Force Survey SLFS (1991)
- Swiss Household Panel SHP (1999)
- Swiss Centre of Expertise in the Social Sciences FORS (2008)
- German National Education Panel Survey NEPS (2011)







Data/research situation 20 years ago (s-t-w transitions)

^b UNIVERSITÄT BERN

Status quo	Gaps / desiderata
Temporal dimension: cross sectional	prospective, longitudinal
Spatial dimension: cantonal / regional	national
Sampling dimension: particular learners (sub-)groups	Comprehensive age cohort(s)
Disciplinary dimension: mono-disciplinary, fragmented	Multi-disciplinary





Windows of opportunity



The Voyager missions which started in the late 1970s were made possible by the "Grand Tour" alignment of Jupiter, Saturn, Uranus and Neptune. A similar alignment will not occur again until the middle of the 22nd century.

Animation of Voyager 2's trajectory from 20 August 1977 to 30 December 2000

Voyager 2 · Earth · Jupiter · Saturn · Uranus · Neptune · Sun





TREE: Launch & early phase

Thematic review of the transition from initial education to working life (TIEW), OECD, 1999 (p. 53)

"[T]he opportunity should not be missed to equip Switzerland with a longitudinal survey of transitions at national level [...]. Transition pathways to employment are becoming increasingly complex. To understand young people's decisions and options, and to take them into account in policy decisions, appropriate analytical instruments are needed."

Switzerland's 1st time participation in PISA (2000): Sample, literacy test & baseline survey

Initial funding by the Swiss National Research Programme 43 "Education & Employment" (2000-2004)







Further «significant life events» of TREE

- 2008: Funding as a (social science) research infrastructure by the Swiss National Science Foundation (SNF)
- > 2011: Data distribution by FORS data archive
- > 2014: SNF grants funding for the launch of a second school leavers' cohort (TREE2)
- > 2016: Launch of TREE2 / extension to multi-cohort survey





b UNIVERSITÄT BERN

h

Multi-cohort panel design (to date)









Guiding principles of survey instrumentation

Both cohorts

- Baseline measure of standardised skills (PISA, AES)
- Detailed (month-by-month) capture of pathways/trajectories (educational, employment & other activities)
- Extensive, multi-dimensional and multi-disciplinary contextualisation of (baseline) skills and pathway data
- > Conceptual relevance in theories that relate to our fields of research
- > Preference for established measures having proved their value in previous research
- > Well-established influence on important outcome dimensions
- Good measurement and/or scale quality
- Widespread use in other relevant surveys of our research fields in order to enhance cross-survey comparability

2nd TREE cohort (TREE2)

 Basically replication design, searching a balance between new instruments and instruments previously used in TREE1, allowing for cohort comparison





b UNIVERSITÄT BERN

Development of TREE data use 2011-2021









TREE data use by institution, discipline and type of use









b UNIVERSITÄT BERN

Output (scientific publications)





TREE:





TREE: Life Course Perspective

Life Course Cube of Bernardi, Huinink & Settersten (2019:4) SOCIETAL SUBSYSTEMS RAJECTORIE SUPRA-INDIVIDUAL L 3 Strong (but not exclusive) focus on interdependencies LIFE DOMAINS LEVEL AXIS INDIVIDUAL ACTION L 2 Τ3 between inner-individual level, individual action and TIMEANS supra-individual opportunity FIELDS OF DISPOSITIONS AND PSYCHO-PHYSICAL FUNCTIONINGS structures in the domains INNER INDIVIDUAL L1 T1 education and work D 2 D3 D1 LIFE DOMAIN AXIS

Fig. 1. The Life Course Cube: Time, Domain, and Level Interdependencies.





b UNIVERSITÄT BERN

What have we learnt? Main Focus

Research on individual action in the domains of education and work and its interaction with opportunity structures (education, labour market) from adolescence to adulthood

> Question:

How do structural characteristics of the educational system, the labour market and gender impact young people's life courses at different stages?

> Assumption:

Individual life courses are inherently social: Processes of social inequality are not (only) the result of initial individual differences but of systemic structures (Dannefer 2020)





b UNIVERSITÄT BERN

How does the structure of the educational system and the labour market shape individual life courses?



Main insight

Allocation to lower- and upper-secondary education decisive for educational and occupational attainment





Relationship between skills and lower-secondary track allocation

AES Benchmark* 40 30 % students % 10-0 -5 0 5 AES maths test scores (weighted likelihood estimates) basic requirements extended requirements high requirements

Figure 4: Distribution of mathematics skills scores by type of lower-secondary track attended

Source: Gomensoro & Meyer 2021:20

- Average math skills at end of compulsory school differ between lower-secondary tracks
- > However: considerable overlap
 - Allocation not purely meritocratic and somewhat arbitrary (e.g., Gomensoro & Meyer 2021; Buchmann et al. 2019)





D UNIVERSITÄT BERN

Lower-secondary track allocation and transition to uppersecondary education

- Track with basic requirements increases risk of NEET and interim solutions
- Lower chance for FVB and general education
- Youth from tracks with basic requirements are channelled into VET with low requirements and high occup. specificity (Meyer & Sacchi 2020; Buchmann et al. 2019)



Source: Gomensoro & Meyer 2021:21





Heterogeneity of IVET



Training programmes differ regarding:

- > Duration (2-4 years)
- > Intellectual requirement level



- Proportion of general vs. occupation-specific education;
- Proportion of vocational school vs. time in the firm





Consequences of allocation to upper-secondary education

D UNIVERSITÄT BERN

- Transition to IVET rather than general education reduces probability for tertiary-level education (Kriesi & Leemann 2020; Buchmann et al. 2019)
- > Lack of tertiary-level education leads to lower wages (Gomensoro et al. 2017)
- IVET programmes with low requirements/high specificity hamper:
 - transition to baccalaureate school (Meyer & Sacchi 2020; Trede et al. 2020; Buchmann et al. 2019)
 - transition to professional education and UAS (Meyer & Sacchi 2020; Sander & Kriesi 2021; Buchmann et al. 2019)

IVET training programme and vocational baccalaureate (see Trede et al. 2020; Meyer 2018):

- 240 different training occupations
- 15 training occupations supply ³/₄ of all vocational baccalaureate holders (8 training occupations supply ³/₄ of all FVB1 holders)





Consequences of allocation to upper-secondary education

D UNIVERSITÄT BERN

IVET programmes with large proportions of general education foster occupational upward mobility in the early career (Grønning 2021; Kriesi & Grønning 2021) Job at the Age of 30







Summary: Cumulative (dis-)advantages of structural allocation (e.g., Dannefer 2020; DiPrete & Eirich 2006)

⁶ UNIVERSITÄT BERN

- > Main message: an individual's allocation in the social system impacts life trajectories independently of individual characteristics (Dannefer 2020; Heckhausen & Buchmann 2019)
- Tracking and labelling strengthens interindividual differences by triggering developmental path dependencies, thus affecting:
 - individual performance
 - development of aspirations, motivation, self-esteem, self-efficacy
 - development of abilities and skills (human capital)
- Allocation within the (educational) system triggers institutionalised path dependencies by determining objective opportunities for further education, further learning and career options (e.g., Heckhausen & Buchmann 2019; Stinebrickner et al. 2019)
- > Track allocation affects signalling value of credentials: Queuing disadvantage and crowding out of individuals with lower-status credentials (e.g., Meyer & Sacchi 2020)





Gender



Transition to upper-secondary education triggers gendered careers due to developmental and institutionalised path dependencies





Gendered choices of occupations/fields of study



Entry into academic universities (%), 2019

UNIVERSITÄT BERN



Source: FSO, own calculations





Consequences of gendered choices

- Female-dominated occupations (on average) pay lower wages, have lower status and offer less opportunities for mobility (Schwiter et al. 2014; Bertschy et al. 2015; Combet & Oesch 2020)
- However: Apart from occupational choice, little differences in educational and occupational outcomes beetween men and women before family formation (Combet & Oesch 2020)!

What happens during the early career?





Early Career: Mechanisms of gender inequality

^b UNIVERSITÄT BERN

- Female- and male-dominated occupations are linked with traditional gender roles and facilitate gendered patterns of paid and unpaid work (part-time opportunities, wage levels) (Bertschy et al. 2014; Schwiter et al. 2014; Baumgarten et al. 2016)
- Atypical occupational choices: Reversal due to anticipated difficulties in reconciling work with gendered family obligations (Schwiter et al. 2014)
- Different career «choices» due to anticipation of traditional gender roles and perception of structural constraints (Kanji & Hupka-Brunner 2015; Schwiter et al. 2014; Baumgarten et al. 2017)
- Cultural ideals of motherhood, coupled with perceived structural constraints, lead to weakend career orientation and strongly reduced working hours of women (Baumgarten et al. 2017)



Early Career: Mechanisms of gender inequality

UNIVERSITÄT BERN

Female- and male-do > gender roles and facili (part-time opportunities, Baumgarten et al. 2016)

«Wenn man weiss, man erwartet ein Kind, (...), kann man nicht mehr auf dem Bau arbeiten. Also (...), steht man vor einer grossen Entscheidung. Und dann muss man dann entscheiden, wie weiter, also eben, genau so weiter gehen, wenn Kinder da sind, kann es nicht. Weil ist nicht möglich. (...) eben vielleicht dann irgendwie noch Teilzeit was machen, vielleicht im Lager oder irgendwie im Büro oder irgendwas. (Schwiter et al 2014:419)»

Atypical occur > reconcil

Diff > and Baumga

>

- to anticipated difficulties in «Also der Beruf hat jetzt einen sehr hohen Stellenwert auch einfach, weil er viel von meiner Identifikation und von meinem Selbst ausmacht. Wird er aber sehr schnell verlieren, habe ich das Gefühl, wenn Kinder da sind. Also für mich kommt das an erster Stelle. Punkt. Sonst muss ich keine

Transitions de l'Ecole à l'Emploi insitions from Education to Employment

Familie machen.» (Baumgarten et al. 2017:59) Cultural

(Schwiter et al. 2014)

ditional gender roles

er 2015; Schwiter et al. 2014;

aceived structural mentation and strongly reduced

constraints, le working hours of women (Baumgarten et al. 2017)







Summary on gender inequalities

- Gender inequalities accumulate over time
- Complex interplay of intra- and supraindividual factors trigger gendered choices and allocation in education and the labour market (socialisation processes, gatekeeping)
- Early allocation (training occupation/field of study) and subsequent «institutionalised path dependency» (Heckhausen & Buchmann 2019) strengthen gendered career decisions
- Perception of life course as an individual project masks role of institutional and societal constraints (Baumgartner et al. 2016; 2017)







Outlook

- > Future research should focus on cohort comparisons
- To what extent and regarding which dimensions do the life courses of the two cohorts differ?
- What role do changes of the educational system in the early years of 2000 play in explaining cohort differences?
- How do societal changes in attitudes and values (e.g., gender equity, individualisation, work values etc.) impact adolescents' lifes?
- > Do system and societal changes affect dominant processes of social inequality?





Outlook



TREE1

- Data preparation & publication of completed wave 10/ cohort age 35
- Further survey waves at 5-year intervals (next waves t11 & t12: 2024/25 and 2029/30

TREE2

- Data preparation & publication of completed waves 3-5
- 5 further survey waves until 2030/ cohort age 30





h

TREE2 «Lego» design







The end of (youth) panel survey research as we know it?







Next cohort(s): TREE3?

- > Launch at which interval from previous cohorts?
- > At which cohort age?
- Drawing on what kind of baseline survey? (PISA, national LSA, other?)
- New survey designs needed in light of deteriorating panel attrition and increasing cost:
- > A priori combination of survey and register data or big data?





b

Thank you for your attention!

www.tree.unibe.ch