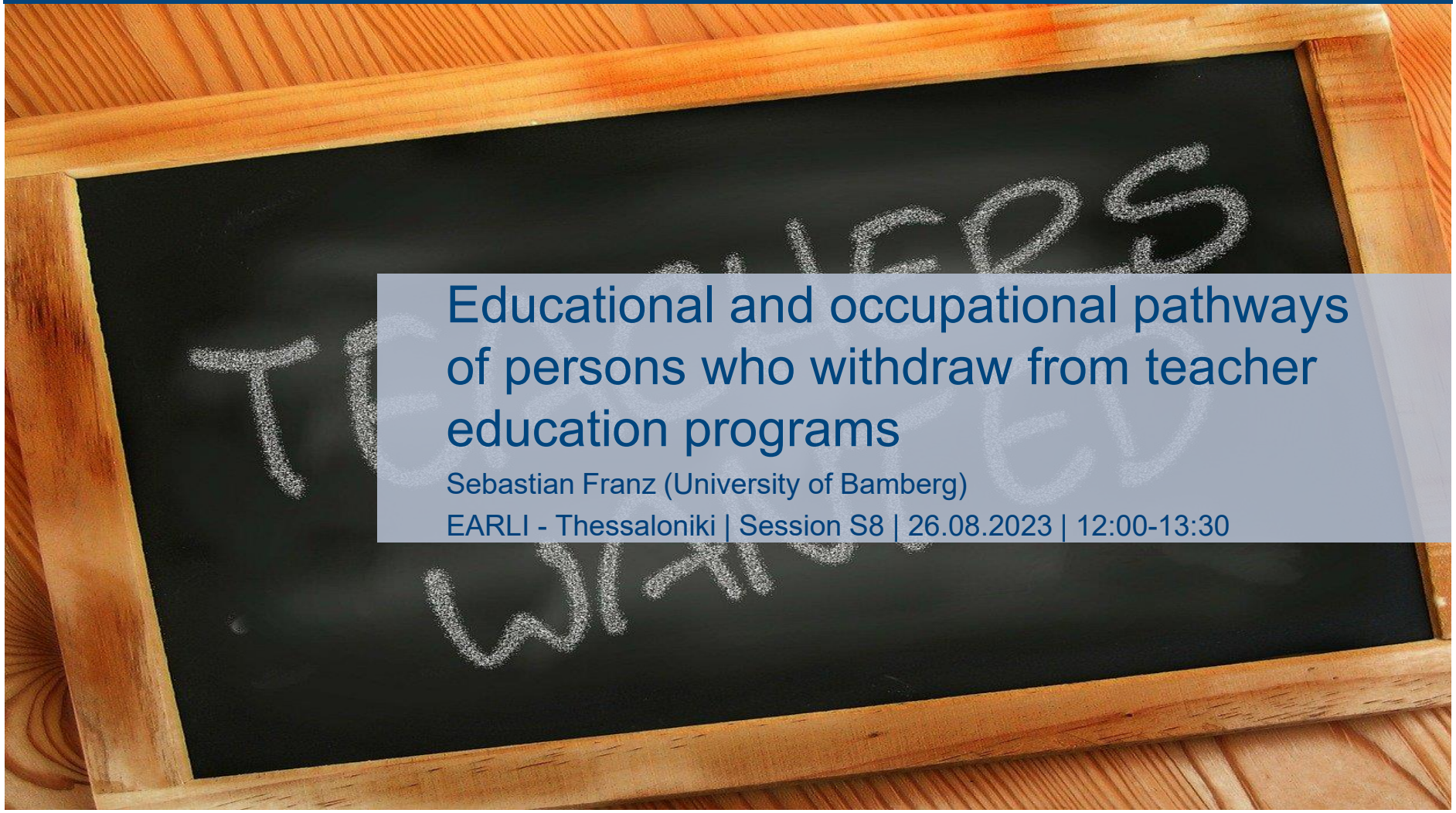
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Educational and occupational pathways of persons who withdraw from teacher education programs

Sebastian Franz (University of Bamberg)

EARLI - Thessaloniki | Session S8 | 26.08.2023 | 12:00-13:30

Motivation



- Teacher shortage a widespread problem
- Prevention:
  a) Increase the number of persons who want to become a teacher
  b) Decrease the number of persons who leave teaching profession

Teacher Education in Germany



Teacher Education Program

- At University
- About **5 years**

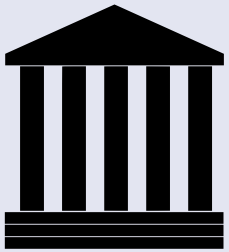


Preparatory Service

- At Schools and Seminars
- About 1-2 years



Teaching Profession





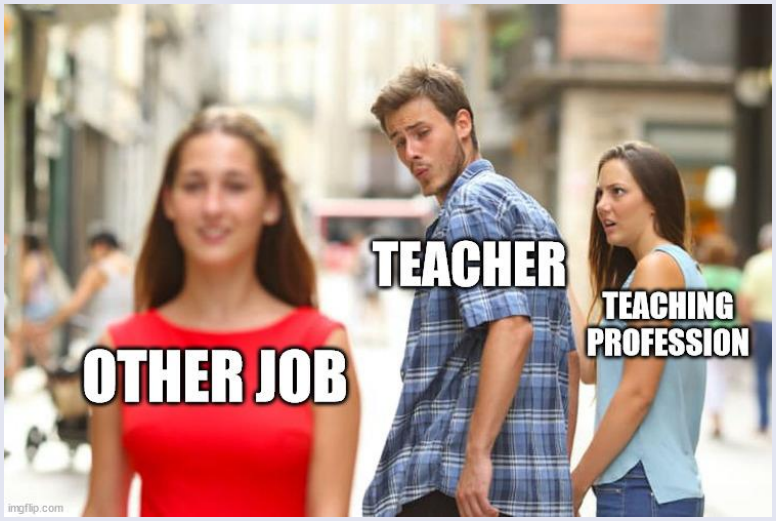
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Research Questions

1) Which career pathways do withdrawals from teacher education choose?

2) Why do they choose which alternative pathway?





Research object

- **Voluntary non-completion of a teacher education program**
  - *Switch* to another study program
    a) Another study program with teacher degree
    b) Study program without teacher degree
  - *Dropout* from university/higher education

Reasons for non-completion



- Lack of commitment to the study program
- Poor academic performance
- Lack/decline of motivation (especially intrinsic motivation)
- Dissatisfaction with study program, e.g. content and qulity of teaching
- Social support and sense of belonging
- Mismatch between personal interests and study content

Allen et al., 2018; Bargmann et al., 2022; Behr et al., 2020; Heublein, 2014; Heublein et al., 2017; Larsen et al., 2013; Rump et al., 2017; Suhre et al., 2007

Dropout vs. Switch



	Dropout	Change
Commitment to studying	Low	High
Academic performance	Low	Low (international) High (for Germany)
Study Motivation		High
Social support	Low	Low
Match		Low

Astorne-Figare & Speer, 2019; Bäulke et al., 2022; Belloc et al., 2010; Bernardo et al., 2017; Diem, 2016; Etzel & Nagy, 2016; Hovdhaugen, 2009; Hovdhaugen & Aamodt, 2009; Ishitani & Flood, 2018; King, 2015; Larsen et al., 2013; McMillan, 2005; Meyer et al., 2022; Ost, 2010

Non-completion in teacher education programs



- Similiar predictors and reasons such as academic achievement, commitment, sense of belonging
- Unique reasons:
  - Mismatch between content and expectations
  - Unpleasant teaching experience
  - Perception of insufficient knowledge of teaching
  - Different career other than teaching

Basit et al., 2006, Chambers er al., 2002, 2010; Chambers & Roper, 200; Franz et al., 2022; Franz & Paetsch, 2023; Hartl et al., 2022; Herfter et al., 2015; Hobson et al., 2009; Meens & Bakx, 2019; Roberts 2012

Theoretical considerations

- Voluntary non-completion as the revision of the initial study coice based as …
  - … the inititial decision was based on false information
  - … the circumstances have changed
- Decision based on the trade-off between remaining in the teacher education program and choosing an alternative

Theoretical approach: Expectancy-value model by Wigfield and Eccles (2000)

Intrinsic value

How much personal interest or pleasure is connected with the alternative?

Utility value

How much is the alternative in line with current or future goals?

Attainment value

How much is the alternative in line with personal value beliefs, self-perception, identity, and attitude?

Costs

How much is the alternative connected with negative consequences?

Probability for success

How likely is it that the tasks connected with the alternative can be successfully completed?

Theoretical approach: Student integration model (Tinto, 1975)

Higher education describes both an academic and a social system

Academic integration

- whether a student meets the performance standards and can keep up with the intellectual development required in the study program

Social integration

- the degree to which students perceive social support through contact with peers or interaction with lecturers

Hypotheses

CONCEPT	DIMENSIONS	PREDICTORS FOR
INTRINSIC VALUE	satisfaction with study content	low → switch field/dropout
ATTAINMENT VALUE	value of higher education graduation	high → no dropout
	identification with study program	low → switch/dropout
UTILITY VALUE	labor market prospects	bad → switch/dropout
COSTS	monetary costs	high → dropout
	social costs	high → dropout
	study conditions	bad → switch
PROBABILITY OF SUCCESS	success in teacher education	low → switch/dropout
	success higher education	bad → switch

Hypotheses

	DIMENSIONS	PREDICTORS FOR
ACADEMIC INTEGRATION	academic norms	low → dropout
SOCIAL INTEGRATION	instructors/faculty	low → dropout (/switch fos)
	fellow students	low → dropout
INFORMATION	Information about study	low → switch/dropout
	Alternative to studying	yes → dropout
	Desired study	no → switch/dropout

Data and sample description

Panel of Teacher Education Students and Student Cohort (SC 5) of the National Educational Panel Study in Germany

- Beginning teacher education students (n = 5824) in winter term 2010/2011
  - 75 % female
  - 4 % not born in Germany
  - 57 % first-gen students
  - 20.5 years old
- 53 % Gymnasium, 16 % primary, 16 % lower secondary, 6 % special school, 5 % vocational school, 4% no differentiation or specification

Blossfeld & Roßbach, 2019; Brachem et al., 2019; Schaeper et al., 2023

Analytical aim and approach





Gain descriptive insights into the subsequent careers of student teachers who do not complete their studies with a degree

- Descriptives of study programs, vocational training, jobs, etc.
- Sequence analysis and sequence plots



Identify decision factors that contribute to the choice of specific alternatives to teacher education

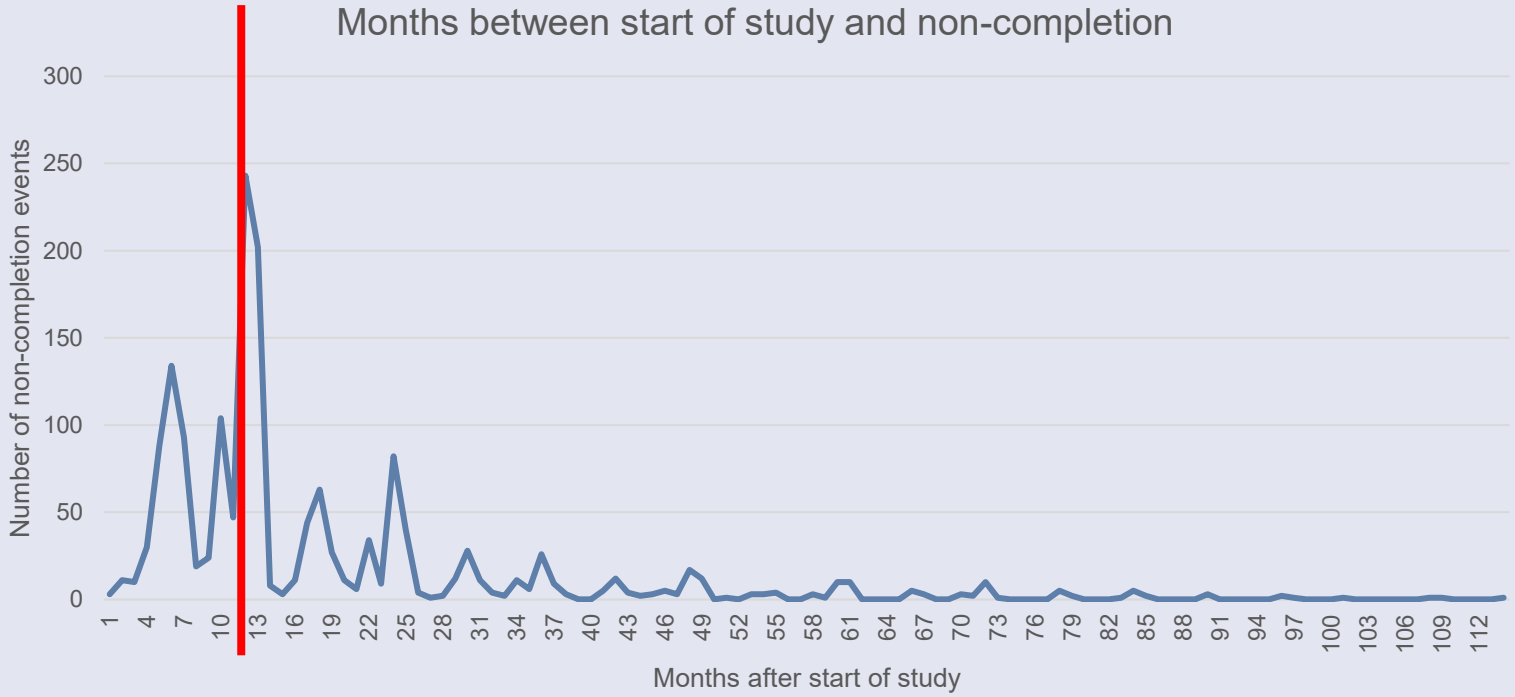
- Time-discrete survival analysis considering time-variant variables and right-censored episodes



Missing values: Replaced by last valid value (Multiple imputation still pending)

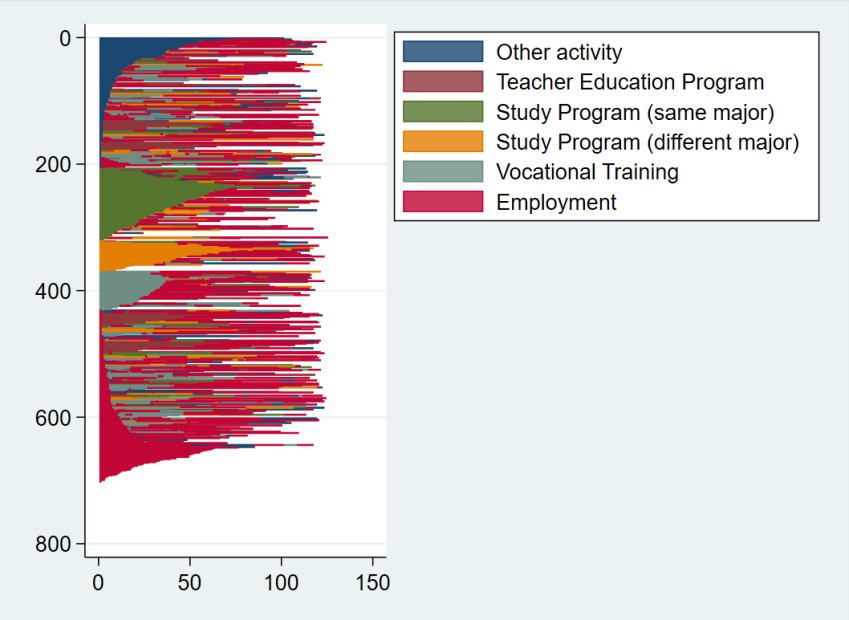
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Months until non-completion

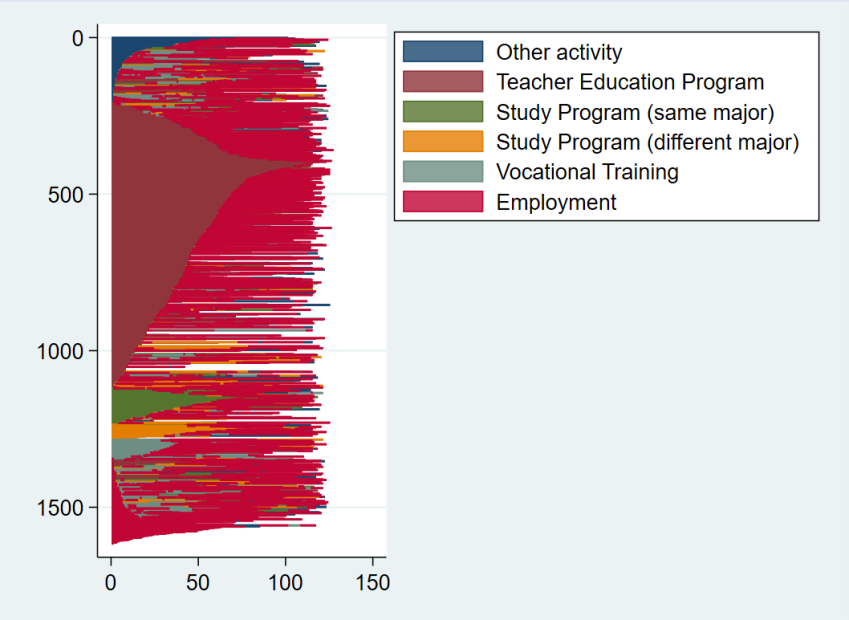


Sequences after leaving the teacher education program

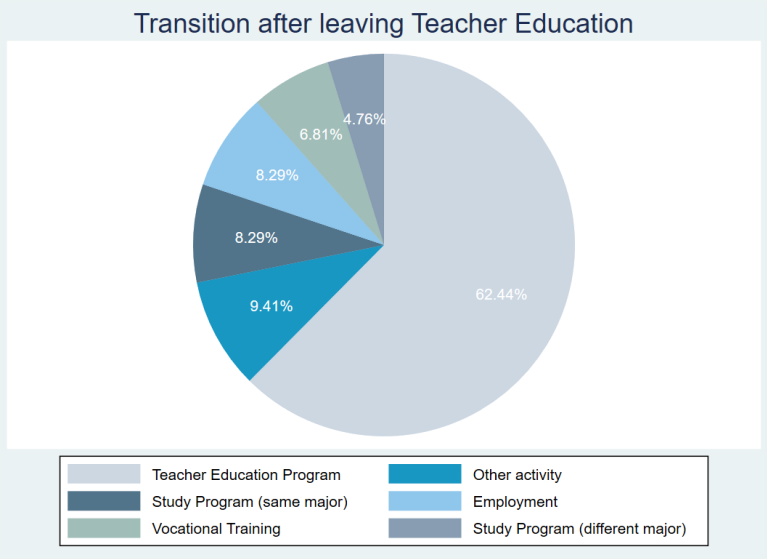
Excluding direct re-entry into teacher education program

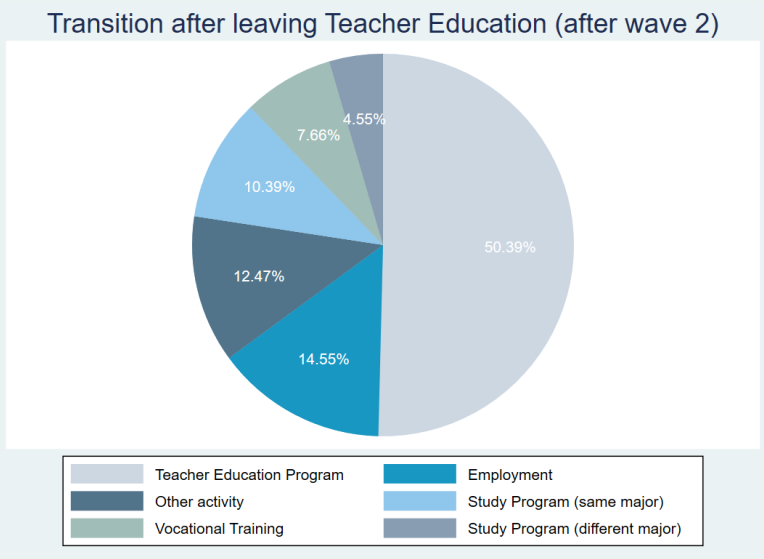


Including direct re-entry into teacher education program



Transition after leaving the teacher education program





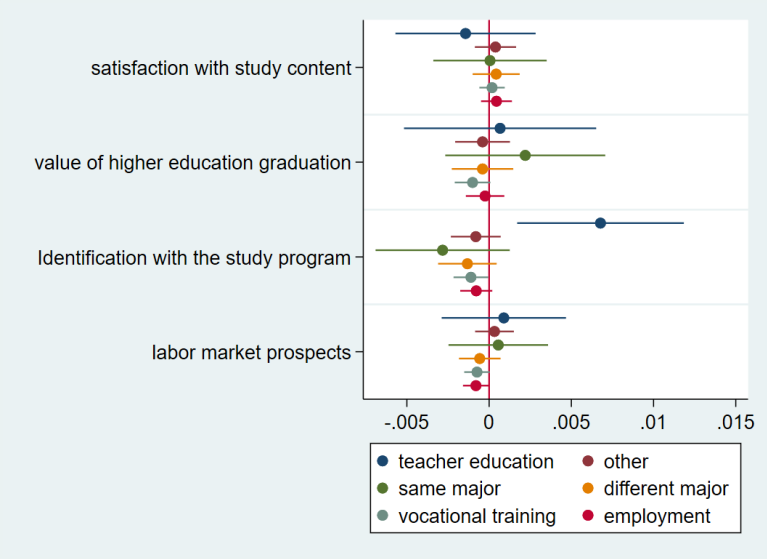
Predictors

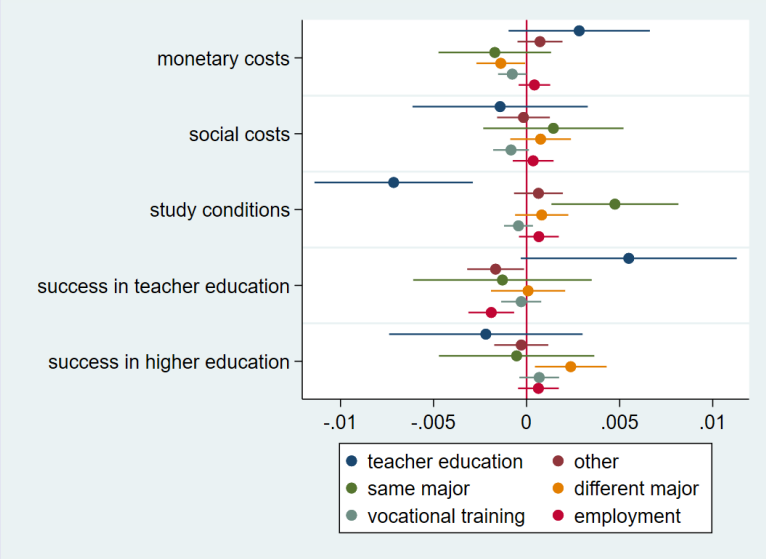
Concept	Dimension	Item	Min/Max	Wave
Intrinsic value	*Satisfaction with study content*	Frankly, my degree program is not really all that fun.	1/5	2, 4, 6, 8
Attainment value	*Value of higher education graduation*	My degree is an important step to achieving my goals in life.	1/4	2, 4, 6, 8
	Identification with the study program	I can fully identify with my degree program.	1/4	2, 4, 6, 8
Utility value	*Occupational aspiration*	How do you generally assess the job market opportunities for graduates of your degree program in Germany?	1/5	2, 4, 6, 8
Costs	*Monetary costs*	How well do you get by with the money you have in an average month?	1/5	2, 4, 6, 8
	Social costs	I have had to give up things that are very important to me so that I can be in this degree program (such as maintaining existing social contacts, early economic independence).	1/5	2, 4, 6, 8
	Study conditions	The individual courses/study materials are well coordinated in terms of content.	1/5	2, 6, 8
Probability of success	*Success in teacher education*	How likely is it for you to successfully complete a course of study? Is it very unlikely, rather unlikely, approx. 50:50, rather likely or very likely?	1/5	2, 4, 6, 8
	Success in higher education	I think my talent for studying is …	1/7	2, 6

Predictors

Concept	Dimension	Item	Min/Max	Wave
Academic Integration	*Academic norms*	When it comes to achievements in my course of study, I set the highest standards for myself.	1/5	2, 4, 6, 8
Social Integration	*Instructors/faculty*	I feel accepted by the instructors.	1/4	2, 4, 6, 8
	Peers	I have been successful in building contacts with other students during my studies up to now.	1/4	2, 4, 6, 8
Information	*Information about studying*	How well informed do you feel about the possibilities, restrictions and generally the regulations for studying	1/5	1
	Alternative to studying	Instead of a degree, would you rather have started other?	0/1	1
	Desired study program	I have enrolled in the subject of my choice/subjects of my choice.	0/1	1

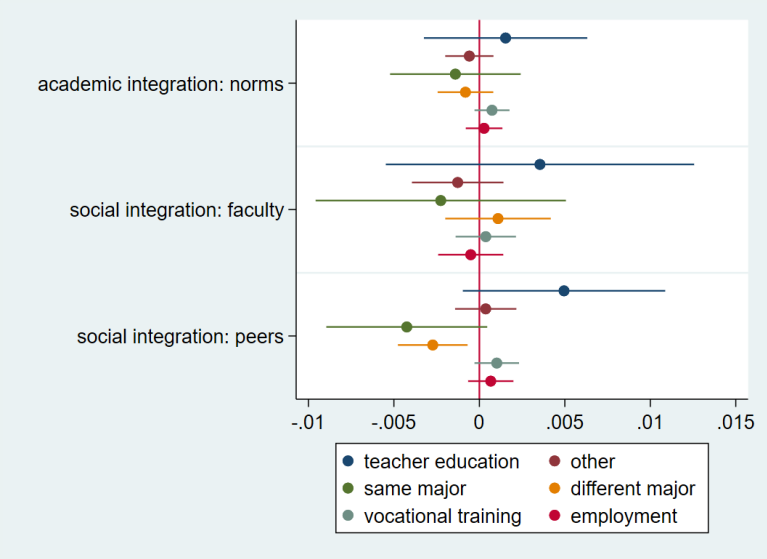
Results discrete-time survival analysis (AME)

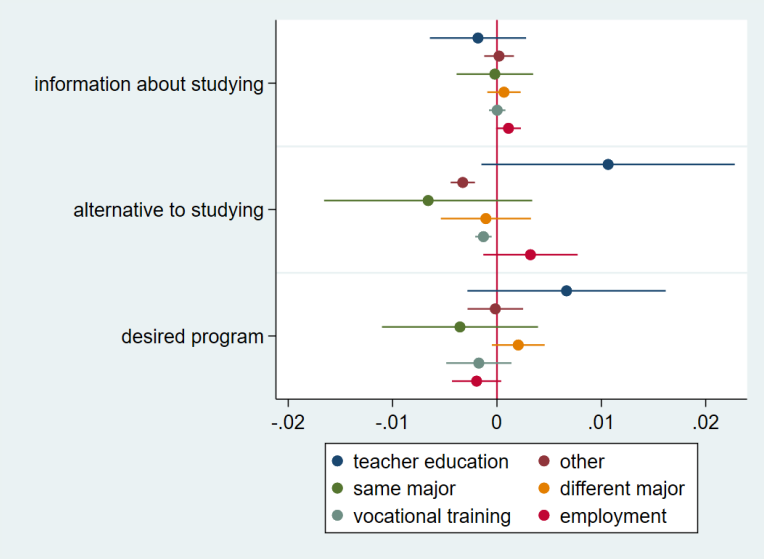




N = 9,984; pseudo-R^2 = 0.1089
Controlled for wave, sex, age, migration background, educational background, gpa

Results discrete-time survival analysis (AME)

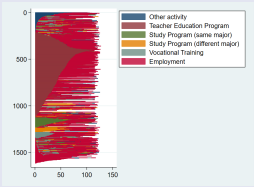


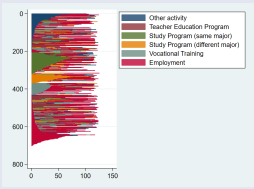


N = 9,984; pseudo-R^2 = 0.1089
Controlled for wave, sex, age, migration background, educational background, gpa

Summary

- After non-completion the majority of teacher education students remain in teacher education
- If not in teacher education, people start employment or continue studying in higher education
- low predictive validity of the push factors measured for differences between alternatives to teacher education.







Limitations and future steps

- Predictors measured after wave 2
- Panel attrition
- Small effects
- Imputation

Discussion

- Many teacher education students revise their decision by firstly switch within teacher education
- The decision for the alternatives might not mainly be driven by push factors but pull factors
- Qualitative studies could provide deeper information on the decision process to investigate what alternatives seem to be attractive

Thank you!

Sebastian Franz
University of Bamberg
sebastian.franz@uni-bamberg.de



PANEL OF TEACHER EDUCATION STUDENTS

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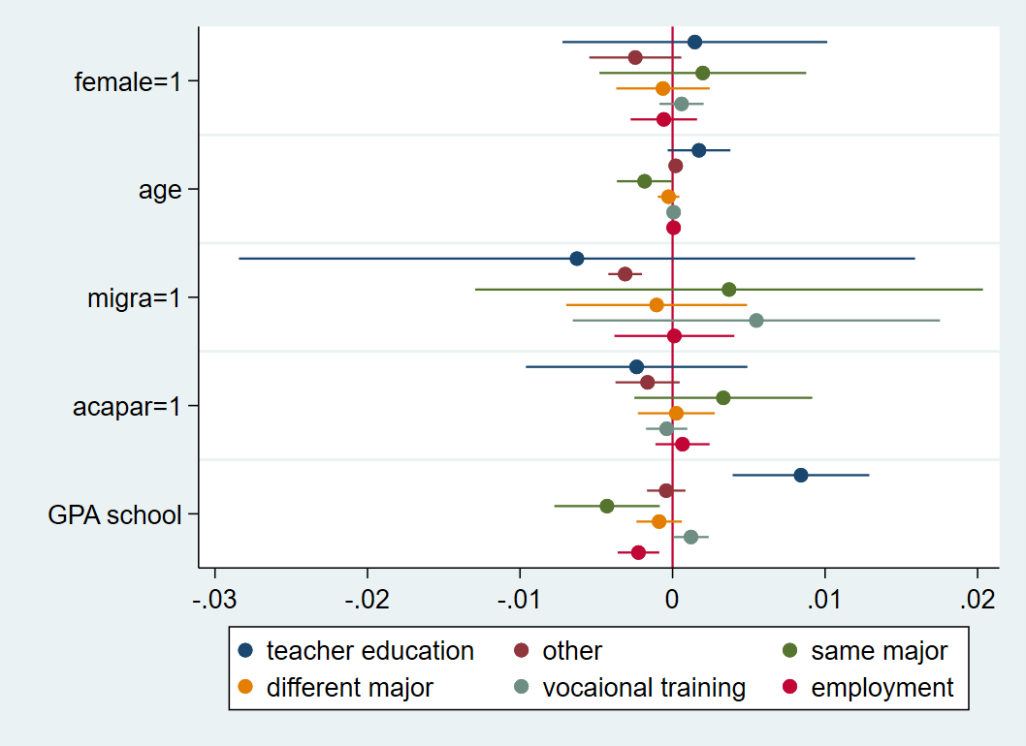
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age
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GPA school
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teacher education
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