

The value of the TREE dataset for exploring gender inequality

Dr. Benita Combet
LMU München
Institut für Soziologie
benita.combet@lmu.de
www.benitacombet.net

Wieder mehr Lohnungleichheit

Männer verdienen im Durchschnitt knapp 20 Prozent mehr

Donnerstag, 31.01.2019, 10:17 Uhr
Aktualisiert um 11:40 Uhr



Diesen Artikel als erste Person teilen.

- 2016 haben Frauen im privaten Sektor im Durchschnitt 19.6 Prozent weniger verdient als Männer – erstmals seit 2014 ist der Lohnunterschied wieder gestiegen.
- Bei den Medianlöhnen liegt der Unterschied über privaten und öffentlichen Sektor gerechnet bei 12 Prozent.
- 42.9 Prozent dieser Lohnunterschiede sind unerklärt.

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How can we explain this difference?

öffentlichen Sektor gerechnet bei 12 Prozent.

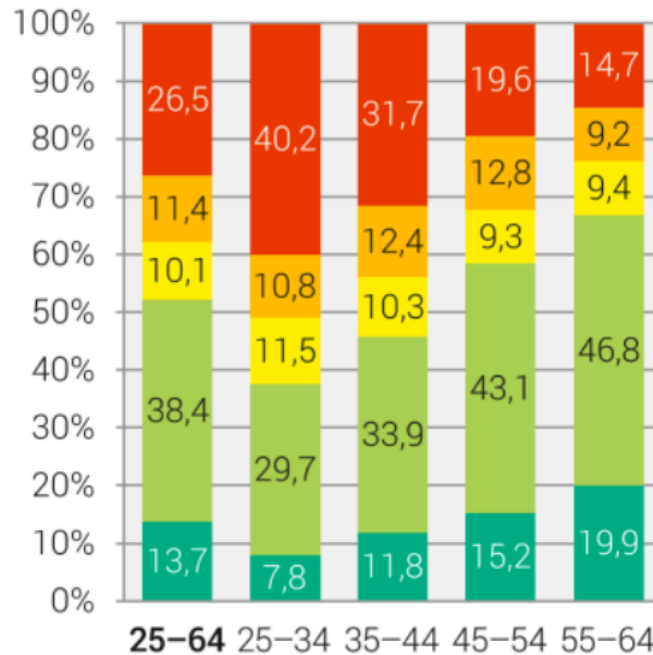
- 42.9 Prozent dieser Lohnunterschiede sind unerklärt.

Possible explanations

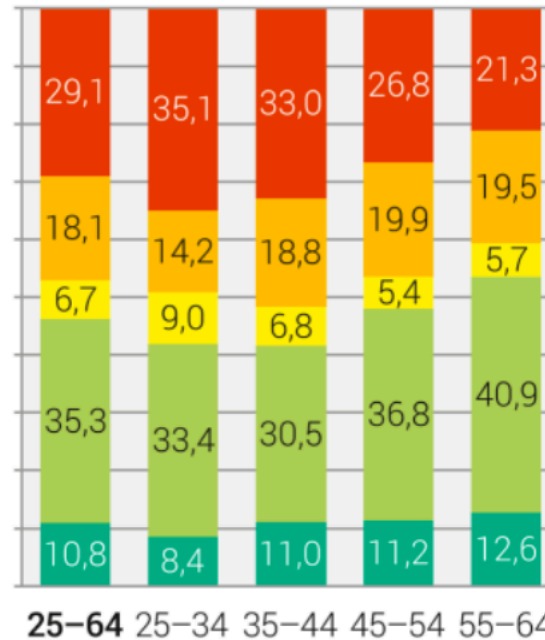
1. **Human capital theory** (*Becker 1964*)
 - Men and women differ in their endowments (e.g. educational credentials)

Bildungsstand der ständigen Wohnbevölkerung nach Altersgruppen, 2017

Frauen



Männer



- Tertiärstufe:
universitäre Hochschulen,
Fachhochschulen
- Tertiärstufe:
höhere Berufsbildung
- Sekundarstufe II:
Allgemeinbildung
- Sekundarstufe II:
Berufsbildung
- obligatorische Schule

Possible explanations

1. Human capital theory (*Becker 1964*)

- Men and women differ in their endowments (e.g. educational credentials)

2. Division of labour within household (*Becker 1985*)

- ♂: specialize in paid work, continue to invest in job-specific skills
- ♀: specialize in child care, choose family-friendly jobs

Roger Harris → Edmund Blackadder

73 

"End the gender pay gap"

Then you social engineer stopping women having the choice to put lifestyle and family before a career.

Equal opportunities do not guarantee equal outcomes.

Why is there no concern for the fact that up to the age of 30, women earn more than men.

Stop cherry picking your concern.

 **Share**

Report

Source: Comments on the Guardian article: I'm beyond anger – why the great pay gap reveal is an explosive moment for gender equality. Published 28.2.2018

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The Gender Wage Gap Opens Long before Motherhood. Panel Evidence on Early Careers in Switzerland

Benita Combet^{1,2,*} and Daniel Oesch ^{1,3,*}

¹Swiss National Centre of Competence in Research LIVES, University of Lausanne, ²Department of Sociology, LMU University of Munich, 80801 Munich, Germany and ³Life Course and Inequality Research Centre LINES, University of Lausanne, 1005 Lausanne, Switzerland

*Corresponding author. Email: daniel.oesch@unil.ch; benita.combet@lmu.de

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Lay summary:

Die Lohnungleichheit zwischen Männern und Frauen beginnt lange vor der Familiengründung
/ L'inégalité salariale entre hommes et femmes commence bien avant la fondation d'une famille.
Social Change in Switzerland, Number 18, June 2019.

Media: Tagesanzeiger, Der Bund, Le Temps, Swissinfo, La Liberté, Tribune de Genève, Le Nouvelliste, 24heures, RTN, Radio Lac, Reiso

Previous research

Gender wage gap in the beginning of the career:

- Germany: 6% (*Ochsenfeld 2014*)
- Finland: 10% (*Napari 2009*)
- Switzerland: 7% (*Bertschy et al 2014*)
- U.K.: 8% (*Manning/Swaffield 2014*)
- U.S.: 10% (*Goldin 2014*), 14% (*Fortin 2008*)

Contra-arguments:

- Behaviour differs because parenthood is anticipated

Our contribution

- **Focus on the wage development in early career.**
 - Gender wage gap
 - Gender gap in wage growth
- **Difference to previous research:**
 - Controlling for parenthood anticipation
 - Values (towards work and family)
 - Behaviour (by restraining the sample)
 - Knowledge about intellectual capacities (PISA), extensive knowledge of education and job characteristics

Dataset & Approach

- Longitudinal dataset TREE
 - following a school-leaver cohort (mostly born 1984/1985) from 2000 to 2014
 - emphasis on school-to-work transition
- Dependent variable:
 - gross monthly wage in Swiss Francs (CHF),
 - standardized for a full-time job (40 hours per week)
 - adjusted to inflation
 - logarithm
- Focus on 3 channels
 1. Initial potential of respondents
 2. Labour market behaviour
 3. Parenthood anticipation / Family formation

Three channels affecting pay gap

1. Initial potential:

Matching with entropy balancing (*Hainmueller 2012*)

- socio-demographic characteristics
- general educational ability
- educational certificates achieved before entering the labour market
 - Number of educational certificates
 - 1st / 2nd educational credential on upper secondary / tertiary level
 - Field of study / fields of vocational education

Three channels affecting pay gap

2. Labour market

Adding independent variables:

a) Job related human capital:

- Number of jobs (squared)
- Additionally acquired educational certificates

b) Characteristics of current job

- Occupation (ISCO 1-digit), sector (NOGA), canton of the firm, size of the firm, working hours per week, number of subordinates, permanent or fixed-term contract, work situation (night shifts, week-end shifts, strains in job, variety of tasks, autonomy in job)

Three channels affecting pay gap

3. Parenthood anticipation / Family formation

Independent variables

- Marriage status
- Pre-labour market values concerning work motivation (intrinsic and extrinsic) and partnership / family

Restriction on observations min. 3 years prior parenthood
=> differing behaviour b/c of parenthood anticipation

Methods

Sample:

- Individuals after they completed their education.
- Observations min. 3 years prior parenthood

Analyses:

- Random-Effect Models:
 - Overall gender wage gap and wage growth
- Blinder-Oaxaca decomposition
 - Differences in endowments and factors contributing to it in first 1.5 years

Results – I

Table 1. The effect of gender on (log) monthly earnings for the three channels (random-effects model with matching)

Dataset	TREE														Swiss Graduate Survey
	Baseline model		Channel 1: initial potential					Channel 2: labour market			Channel 3: anticipation			Final model	Final model
Model	0.1	0.2	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	3.1	3.2	3.3	4	4
Matched on	–	–	Social origin	Ability	Education prior to employ.	Field of study / VET	All	All	All	All	All	All	All	All	All
Independent variables	–	–	–	–	–	–	–	Job related human capital	Job characteristics	All labour market variables	Marriage	Values	Marriage and values	All	All
Female	–0.054*** (0.012)	–0.047*** (0.014)	–0.072** (0.023)	–0.088*** (0.024)	–0.088*** (0.026)	–0.045 (0.026)	–0.040 (0.026)	–0.046* (0.018)	–0.044* (0.019)	–0.048** (0.015)	–0.040 (0.026)	–0.032 (0.028)	–0.032 (0.028)	–0.036* (0.015)	–0.048* (0.023)
Experience in years		0.052*** (0.002)	0.050*** (0.003)	0.051*** (0.003)	0.052*** (0.003)	0.043*** (0.006)	0.043*** (0.006)	0.035*** (0.004)	0.038*** (0.004)	0.030*** (0.003)	0.044*** (0.006)	0.045*** (0.005)	0.046*** (0.005)	0.032*** (0.003)	0.028*** (0.008)
Female x Experience		–0.004 (0.003)	0.003 (0.004)	0.001 (0.004)	0.001 (0.004)	0.010 (0.006)	0.009 (0.007)	0.006 (0.005)	0.005 (0.005)	0.006 (0.004)	0.009 (0.007)	0.007 (0.006)	0.006 (0.006)	0.005 (0.004)	–0.012 (0.009)
Constant	8.457*** (0.010)	8.334*** (0.011)	8.315*** (0.020)	8.330*** (0.022)	8.330*** (0.025)	8.294*** (0.021)	8.290*** (0.022)	7.963*** (0.011)	8.561*** (0.122)	8.433*** (0.139)	8.290*** (0.022)	8.589*** (0.117)	8.598*** (0.118)	8.510*** (0.145)	8.774*** (0.141)

Standard errors in parentheses, * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$.

TREE: $N_{\text{individuals}} = 1,781$, $N_{\text{observations}} = 3,524$.

Swiss Graduate Survey 2009 and 2013: $N_{\text{individuals}} = 840$, $N_{\text{observations}} = 1,169$.

Social origin: age in months, country of birth, language spoken at home, years of residence in Switzerland, family structure, ISEI of parents, cultural capital.

Ability: PISA reading literacy, type of lower-secondary school.

Job related human capital: experience before labour market entry, highest educational credential in a given wave, number of jobs (squared), month, and year labour market entry.

Job characteristics: ISCO 1-digit, sector, working hours per week, number of subordinates, permanent/fixed-term contract, paid hourly/monthly, night shifts and week-end shifts, strain in work environment, variety of tasks, work autonomy, canton of the firm, and size of the firm.

Values: attitudes towards family and partnership, intrinsic and extrinsic work orientation.

Results – I

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Dataset	TREE		Swiss Graduate Survey Final model
Model	Baseline model		4
Matched on	–		All
Independent variables	–		All
Female	–0.054** (0.012)	Pay gap without controlling for endowments: 5.4%	–0.048* (0.023)
Experience in years		Pay gap with controlling: Around 4%	0.028*** (0.008)
Female x Experience			–0.012 (0.009)
Constant	8.457*** (0.010)		8.774*** (0.141)

Standard errors in parentheses, * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$.

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Results – II

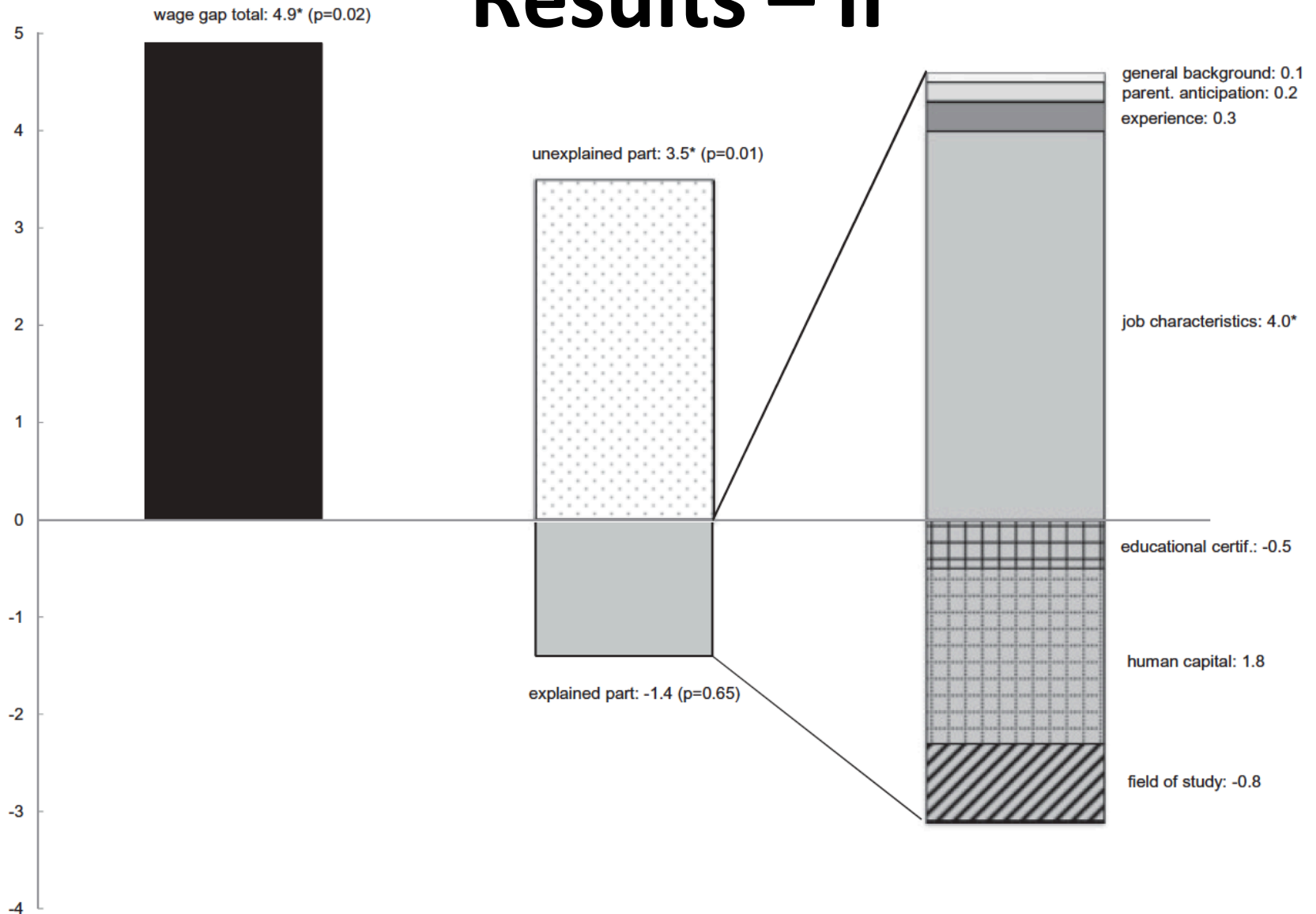


Figure 2. Blinder-Oaxaca decomposition of the gender wage gap (in percentage points)

Results – II

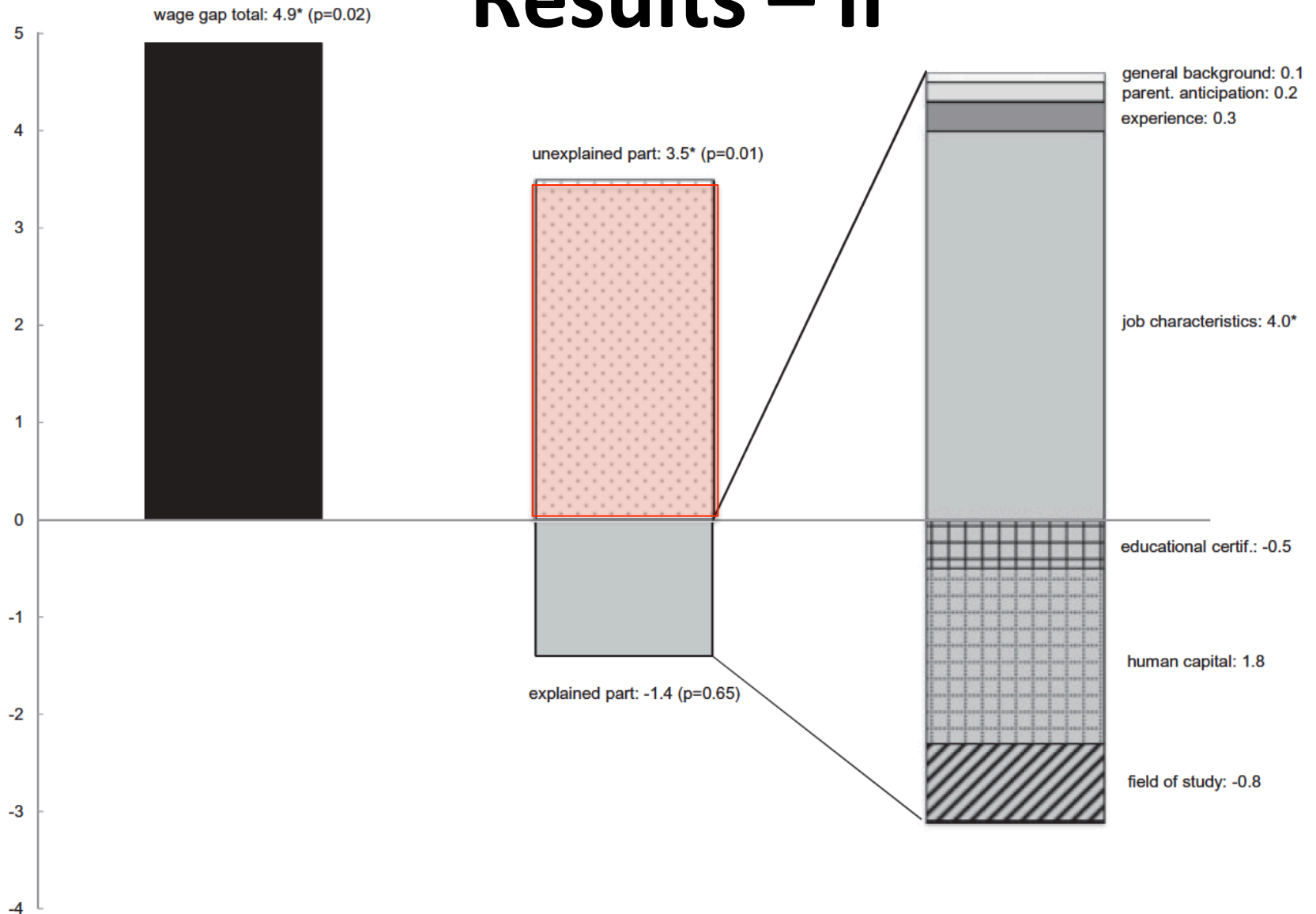


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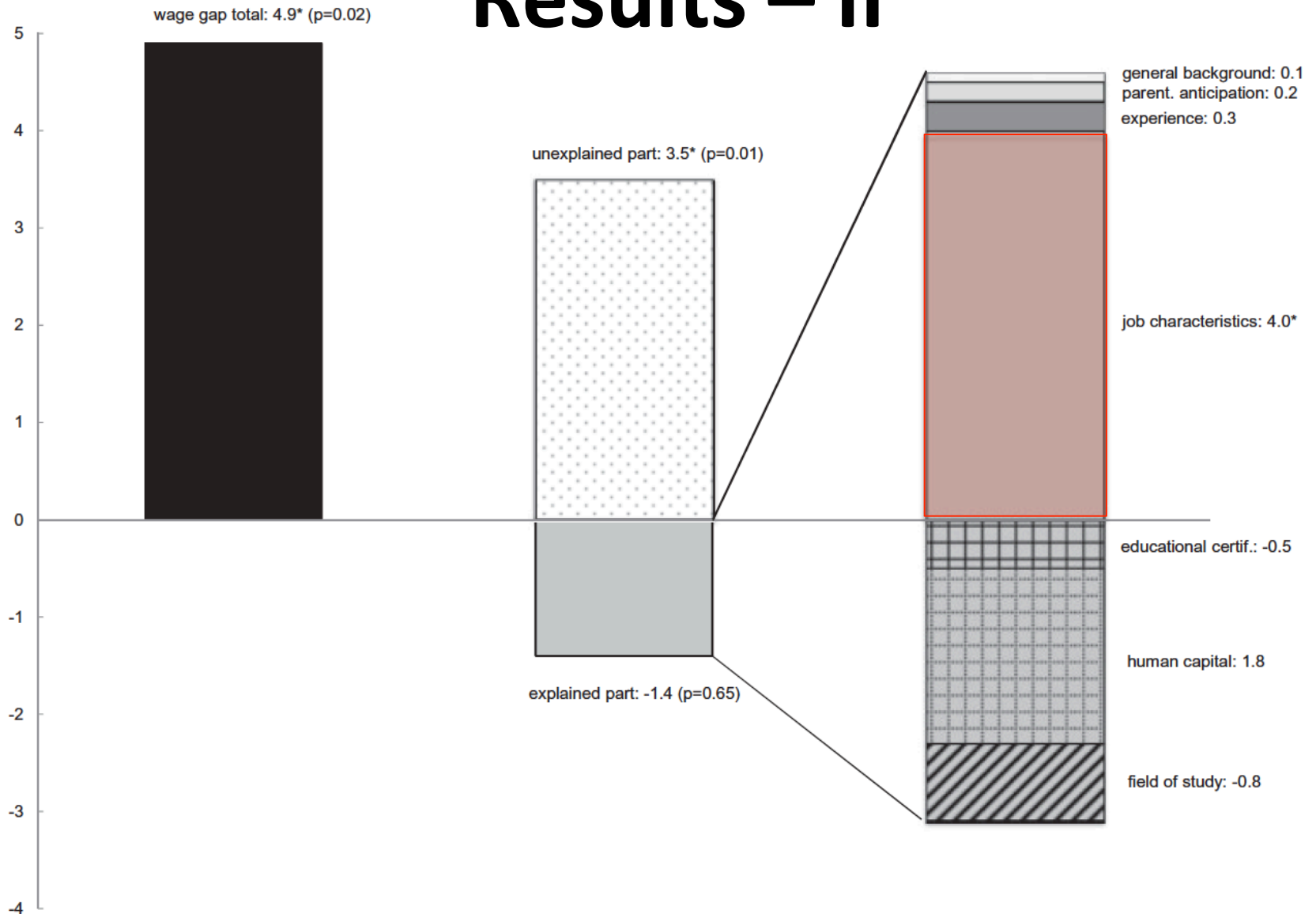


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Summary

Can the gender wage gap be explained by preferences for family formation?

If yes: No gender wage gap before family formation sets in and anticipatory behaviour / character traits are controlled

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If yes: No gender wage gap before family formation sets in and anticipatory behaviour / character traits are controlled

Results:

- Gender wage gap already at labour market entry:
around 4% in favour of men
=> Life-style preferences are not to blame
- Mostly caused by unexplained / unobserved factors
=> Not explained by human capital differences

JeanClawedBrexit 28 Feb 2018 16:10

31 

Women are just less aggressive & more agreeable when it comes to negotiating individual pay deals at the top end. They are then outraged when they find they don't earn as much as men in the 1%. Go fig.

Source: Comments on the Guardian article: I'm beyond anger – why the great pay gap reveal is an explosive moment for gender equality. Published 28.2.2018

Possible explanations

1. Human capital theory (*Becker 1964*)

- Men and women differ in their endowments (e.g. educational credentials)

2. Division of labour within household (*Becker 1985*)

- ♂: specialize in paid work, continue to invest in job-specific skills
- ♀: specialize in child care, choose family-friendly jobs

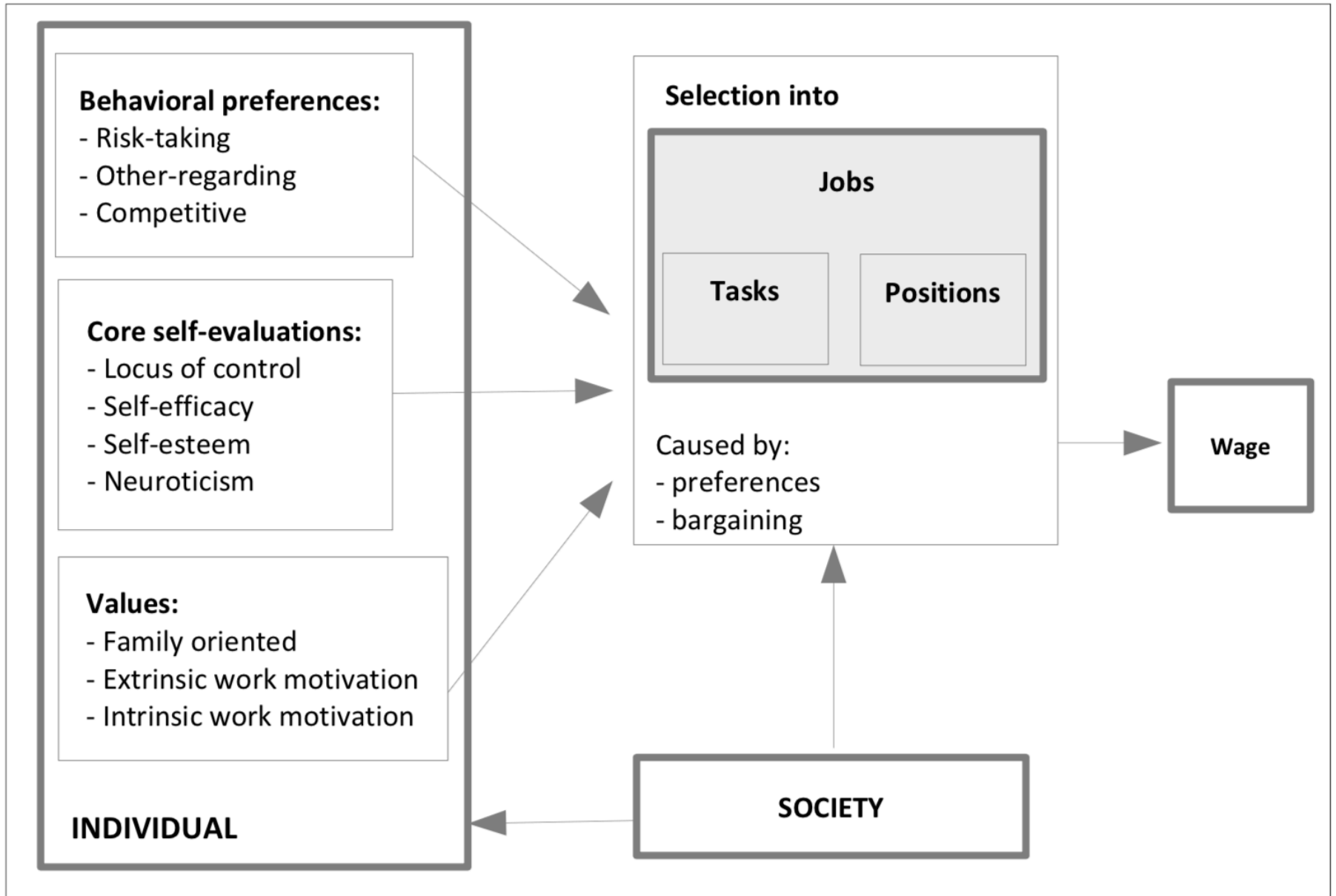
3. Personality

- Behavioral preferences (risk, competition, cooperation) (*e.g. Croson / Gneezy 2009*)
- Core Self-Evaluations (self-efficacy, self-esteem, neuroticism) (*e.g. Judge/ Bono 2001*)
- Values (*Hakim 1998, 2002*)

Project #2

The influence of personality traits on the gender wage gap at career entry

(with Anja Ghetta and Barbara Zimmermann, University of Bern)



Previous research

Explained % of gender wage gap by personality traits:

- Germany: 3% (*Müller/Plug 2006*), 4.9-13.6% (*Braakmann 2009*)
- Netherlands: 12.5% (*Nyhus/Pons 2012*)
- Russia: 8% (*Semykina/Linz 2007*)
- U.K.: 2.5 – 27.6% (*Manning/Swaffield 2008*)
- U.S.: 5.4 – 14.5 % (*Cattan 2014*), 10% (*Fortin 2008*)

♂: + value money, + self-esteem, + risk seeking, + competitive,
+ self- confident, + internal locus of control , – agreeable

♀: + conscientious, + interpersonal skills, + agreeable

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Personality traits and environment

Societally prescribed behaviour of men and women:

♀ – **Communal characteristics:** affectionate, helpful, kind, sympathetic, interpersonally sensitive, nurturant, gentle

♂ – **Agentic characteristics:** assertive, controlling, confident, aggressive, ambitious, dominant, forceful, independent, self-sufficient, self-confident, prone to act as a leader

Role congruity theory (*Eagly/Karau 2002; Eagly/Sczesny 2008*)

- Individuals face prejudice / punishment in their interactions because of incongruency between
 - prescribed characteristics due to their gender and associated attributes with a certain role thought to require
 - => Women in leadership positions

Our approach

Decreasing unobserved heterogeneity as much as possible

1. Career entry => controlled for experience and different career progression
 - Whole working population – e.g. *Braakmann 2010; Heineck/Anger 2010*
2. Focusing on VET (60% of a cohort in CH)
 - => high linkage between education and skills in labour market (dual VET)
 - => less room for pay negotiation
 - Cohort dataset – e.g. *Fortin 2008; Manning/Swaffield 2008*
 - University students – e.g. *Abele/Spurk 2009; Grove et al. 2011*

Dataset & Methods

- **Longitudinal dataset TREE:**
 - following a school-leaver cohort (mostly born 1984/1985) from 2000 to 2014 in Switzerland, emphasis on school-to-work transition
- **Sample restriction:**
 - Respondents whose first education is a VET
 - Restriction to observations max. 3 years prior parenthood => differing behaviour b/c of parenthood anticipation
- **Method:**
 - OLS models
 - Kitagawa / Blinder-Oaxaca decomposition
 - OLS models for both gender separately, comparison of coefficients with seemingly unrelated estimation (*Zellner 1962*)

Variables

- **Dependent variable:**

gross monthly wage in Swiss Francs (CHF), earned in their first year in the labour market

- standardized for a full-time job (40 hours per week)
- adjusted to inflation
- logarithm

- **Independent variables:**

1. Potential of respondents before entering VET (cognitive skills and socio-demographic characteristics)
2. Personality traits (averaged over waves before respondents entered labour market)
3. Characteristics of education and VET formation
4. Job characteristics of current job and experience

Results

Our interests:

a) **Is there a gender wage gap?**

=> analysis of effect of gender on salary conditional on various characteristics of the person and his/her job

b) **Do personality traits affect salary? Does the effect differ between men and women?**

=> for male/female subpopulation separately:

analysis of effect of personality trait variables conditional on various characteristics

=> comparison of estimates across subpopulations

Results – I

Table 1: OLS-regression and Kitagawa/Blinder-Oaxaca Decomposition. DV: Log. salary

	(1)	(2)	(3)	(4)	(5)
Sex	-0.049*** (0.014)	-0.051*** (0.014)	-0.046** (0.017)	-0.041* (0.020)	-0.045* (0.019)
Cooperative learning			0.027 ⁺ (0.012)	0.025 ⁺ (0.012)	0.021 ⁺ (0.011)
Constant	8.201*** (0.011)	8.238*** (0.213)	8.251*** (0.252)	8.322*** (0.260)	8.736*** (0.324)
Explained		-0.002 (0.004)	0.001 (0.010)	0.011 (0.016)	0.005 (0.017)
Unexplained		0.051*** (0.014)	0.047** (0.018)	0.037 ⁺ (0.021)	0.044** (0.018)
Controlled for					
Background	x	x	x	x	x
Cognitive skills	x	x	x	x	x
VET characteristics				x	x
Education				x	x
Experience					x
Job characteristics					x
<i>N</i>	478	478	478	478	478
<i>R</i> ²	0.025	0.067	0.091	0.185	0.447

Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

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+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Results – II

Table 2: OLS-Regression, Seemingly Unrelated Estimation. DV: Log. salary

	(1)		(2)		(3)	
	M	F	M	F	M	F
Cooperation	0.045* (0.019)	0.012 (0.015)	0.037+ (0.019)	0.010 (0.015)	0.012 (0.021)	0.022 (0.014)
Self-Efficacy	0.076+ (0.041)	-0.028 (0.031)	0.072 (0.046)	-0.047 (0.030)	0.008 (0.046)	-0.024 (0.029)
Self-Esteem	-0.051 (0.036)	0.031 (0.024)	-0.045 (0.038)	0.039 (0.024)	-0.021 (0.040)	0.028 (0.022)
Family Values	0.005 (0.016)	-0.004 (0.013)	0.009 (0.017)	-0.012 (0.013)	-0.005 (0.018)	-0.028* (0.013)
Imp. work with people / care	-0.054* (0.022)	0.002 (0.018)	-0.056* (0.025)	0.013 (0.020)	-0.048+ (0.027)	0.007 (0.018)
Constant	8.367*** (0.369)	8.138*** (0.346)	8.462*** (0.429)	8.205*** (0.335)	8.704*** (0.605)	7.979*** (0.359)
Controlled for						
Background	x	x	x	x	x	x
Cognitive skills	x	x	x	x	x	x
VET characteristics			x	x	x	x
Education			x	x	x	x
Experience					x	x
Job characteristics					x	x
<i>N</i>	201	277	201	277	201	277
<i>R</i> ²	0.163	0.073	0.257	0.281	0.547	0.577

Red: significant difference between male and female coefficients

Results – II

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Imp. work with people						
Constant						
Controlled for						
Background	x	x	x	x	x	x
Cognitive skills	x	x	x	x	x	x
VET characteristics			x	x	x	x
Education			x	x	x	x
Experience					x	x
Job characteristics					x	x
<i>N</i>	201	277	201	277	201	277
<i>R</i> ²	0.163	0.073	0.257	0.281	0.547	0.577

We are interested in those effects that

a) are significant for one either male and/or female participants => ***

AND

b) are significantly different from each other => red

Red: significant difference between male and female coefficients

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Self-Efficacy	0.076+ (0.041)	-0.028 (0.031)	0.072 (0.046)	-0.047 (0.030)	0.008 (0.046)	-0.024 (0.029)
Self-Esteem	0.051 (0.036)	0.031 (0.024)	-0.045 (0.038)	0.039 (0.024)	-0.021 (0.040)	0.028 (0.022)
Family Values	0.005 (0.016)	-0.004 (0.013)	0.009 (0.017)	-0.012 (0.013)	-0.005 (0.018)	-0.028* (0.013)
Imp. work with people / care	-0.054* (0.022)	0.002 (0.018)	-0.056* (0.025)	0.013 (0.020)	-0.048+ (0.027)	0.007 (0.018)
Constant	8.367*** (0.369)	8.138*** (0.346)	8.462*** (0.429)	8.205*** (0.335)	8.704*** (0.605)	7.979*** (0.359)
Controlled for						
Background	x	x	x	x	x	x
Cognitive skills	x	x	x	x	x	x
VET characteristics			x	x	x	x
Education			x	x	x	x
Experience					x	x
Job characteristics					x	x
N	201	277	201	277	201	277
R ²	0.163	0.073	0.257	0.281	0.547	0.577

Red: significant difference between male and female coefficients

Results – II

Table 2: OLS-Regression, Seemingly Unrelated Estimation. DV: Log. salary

	(1)		(2)		(3)	
	M	F	M	F	M	F
Cooperation	0.045* (0.019)	0.012 (0.015)	0.037+ (0.019)	0.010 (0.015)	0.012 (0.021)	0.022 (0.014)
Self-Efficacy	0.076+ (0.041)	-0.028 (0.031)	0.072 (0.046)	-0.047 (0.030)	0.008 (0.046)	-0.024 (0.029)
Self-Esteem	-0.051 (0.036)	0.031 (0.024)	-0.045 (0.038)	0.039 (0.024)	-0.021 (0.040)	0.028 (0.022)
Family Values	0.005 (0.016)	-0.004 (0.013)	0.009 (0.017)	-0.012 (0.013)	-0.005 (0.018)	-0.028* (0.013)
Imp. work with people / care	-0.054* (0.022)	0.002 (0.018)	-0.056* (0.025)	0.013 (0.020)	-0.048+ (0.027)	0.007 (0.018)
Constant	8.367*** (0.369)	8.158*** (0.346)	8.462*** (0.429)	8.205*** (0.335)	8.704*** (0.605)	7.979*** (0.359)
Controlled for						
Background	x	x	x	x	x	x
Cognitive skills	x	x	x	x	x	x
VET characteristics			x	x	x	x
Education			x	x	x	x
Experience					x	x
Job characteristics					x	x
N	201	277	201	277	201	277
R ²	0.163	0.073	0.257	0.281	0.547	0.577

Red: significant difference between male and female coefficients

Summary

Can gender wage gap be explained by personality traits?

Result: Not really

- Even conditional on personality traits:
Gender wage gap of around **4-5%**
- Explanatory value of personality traits is rather limited
- Heterogeneous effects:
 - Self-efficacy ($\sigma^{\text{♂}}$: + $\sigma^{\text{♀}}$: 0)
 - Importance to work with people/care ($\sigma^{\text{♂}}$: – $\sigma^{\text{♀}}$: 0)

Other explanations?

Most likely statistical discrimination:

- Experiments show that HR recruiters discriminate against young women with small children (e.g. Correll et al. 2007; Oesch et al. 2017)

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Most likely statistical discrimination:

- Experiments show that HR recruiters discriminate against young women with small children (e.g. Correll et al. 2007; Oesch et al. 2017)

It seems as if unobserved gender wage gap cannot be changed by individual's behaviour.

How about the endowments?

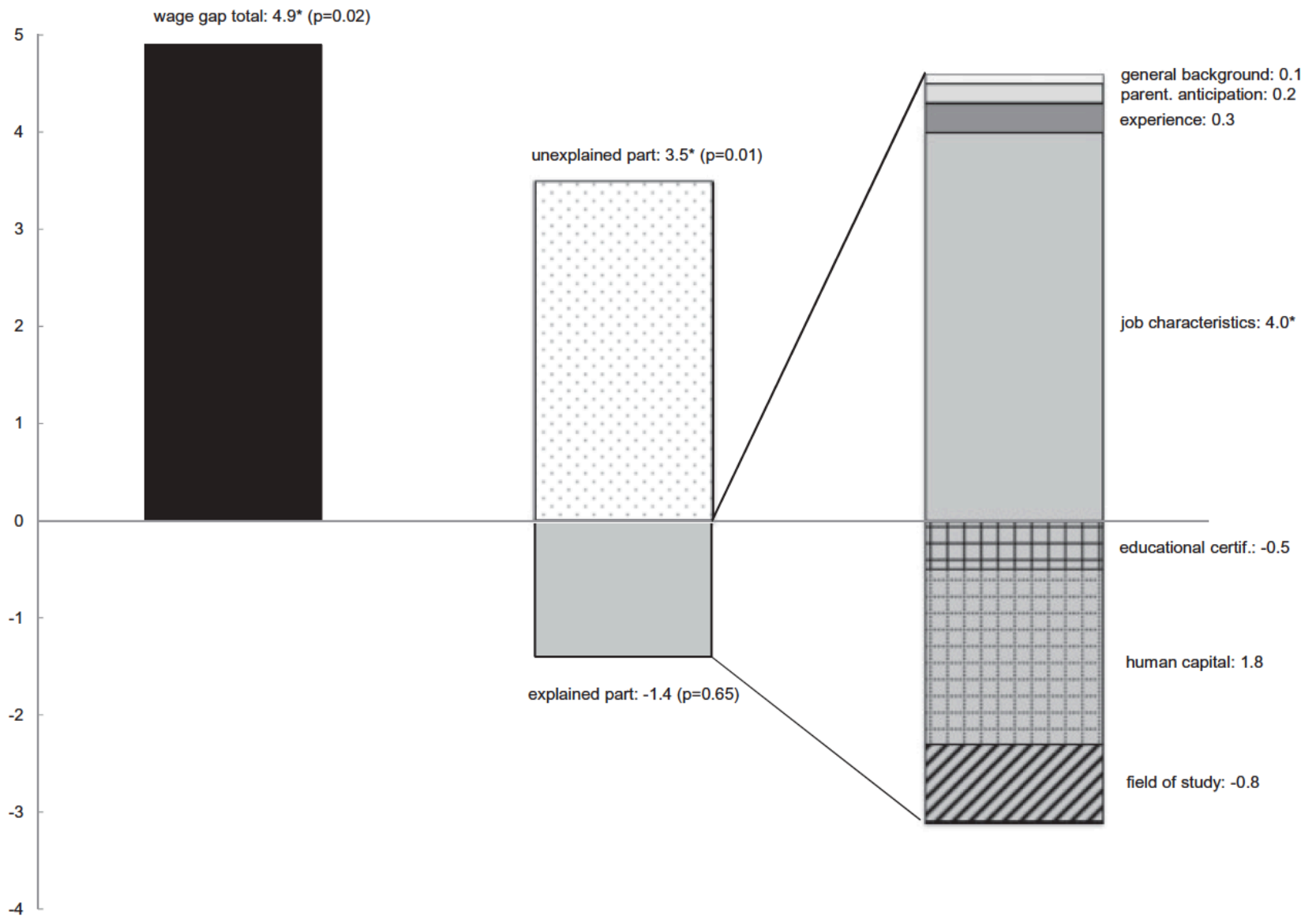


Figure 2. Blinder-Oaxaca decomposition of the gender wage gap (in percentage points)

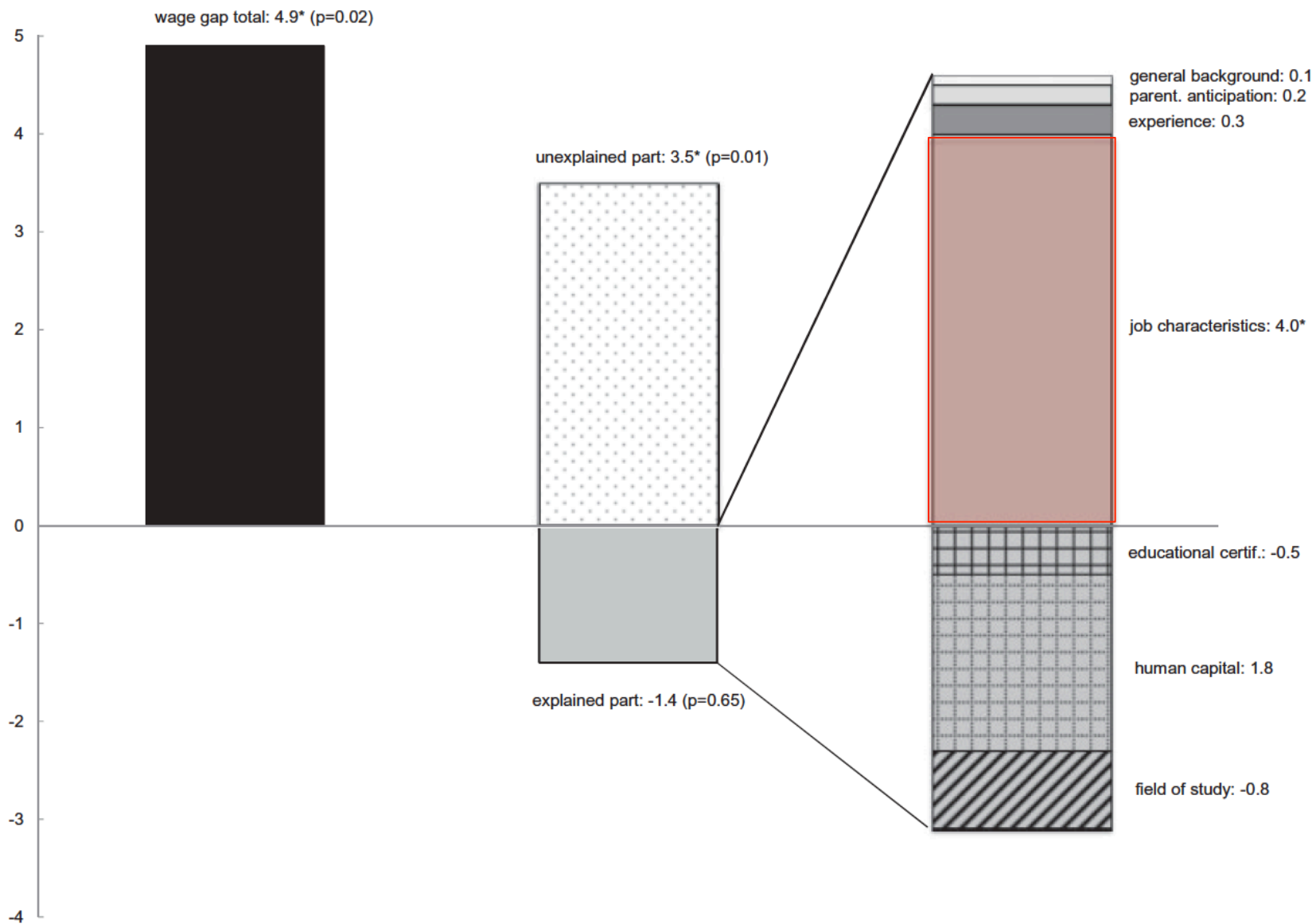


Figure 2. Blinder-Oaxaca decomposition of the gender wage gap (in percentage points)

Gender distribution in fields of study at Swiss universities

Female dominated		Male dominated		Mixed	
Areas	% female	Areas	% female	Areas	% female
Languages	72.5%	Engineering	14.2%	Medicine (M.D., vet., pharmacy)	60.7%
Social Sciences	70.5%	Exact science (math, physics, IT)	20.5%	Law	57.1%
Humanities	64.4%	Technical science	24.7%	Natural science	48.4%
		Economics	34.2%		

STEM fields = Science, technology, engineering, mathematics

Advantages studying a STEM field:

- Shortage of individuals with STEM credentials
- Low unemployment chances
- Very good career prospects
- High income

Project 3

New project with TREE2

Which preferences cause horizontal gender segregation in fields of studies?

Main conclusions of previous research

- Observed preferences or skills do not really explain gendered field of study choice
- Main explanatory factor of field of study choice in regressions: Respondents' gender

E.g. Charles/Bradley 2009, Ochsenfeld 2015, Wiswall/Zafar 2014, Xie/Shalaman 2003

Problem of previous research approach

We do not know which preferences are important for field of study choice.

Main problem: Impossible to discriminate between subjects' preferences

Relevant characteristics of fields are confounded

e.g. primary school teacher => part-time work, high social skills, math skills are not required, no competition

e.g. mechanical engineer => math skills important, technical skills important, high salary, high competition, full-time work

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Solution: Survey-based choice experiments with students before they transition to university => TREE 2

Enables us to discriminate between several possibly influential factors

Choice Experiment – Design

I'm sure you've already thought about what you'd like to do after graduating from high school. Below you will find two descriptions of possible fields of study.

Which of these subjects would you be more interested in, A or B?

	Subject A	Subject B
Characteristics of the subject		
Mathematics is an important part of the subject	rather no	rather yes
The subject primarily requires ...	associative and creative thinking	analytical and systematic thinking
Competition among students is ...	low	high
Characteristics of the profession the subject is preparing for:		
The risk of not finding a suitable entry job within one year is ...	average	low
Important professional skills are ...	compassion and social skills	flair for technology and engineering
The monthly salary is in comparison to other subjects	average	high
The reputation of the profession in Switzerland is	average	high
Workloads below 60% are ...	most of the time	hardly possible

Preference for:

Mathematics

Thinking style

Competition

Risk

Gender-typical associated skills

Income

Prestige

Part-time work

Which of these subjects would you be more interested in?

A

B

Choice Experiment – Design

I'm sure you've already thought about what you'd like to do after graduating from high school. Below you will find two descriptions of possible fields of study.

Which of these subjects would you be more interested in, A or B?

Typical STEM field

	Subject A	Subject B
Characteristics of the subject		
Mathematics is an important part of the subject	rather no	rather yes
The subject primarily requires ...	associative and creative thinking	analytical and systematic thinking
Competition among students is ...	low	high
Characteristics of the profession the subject is preparing for:		
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Mathematics

Thinking style

Competition

Risk

Gender-typical associated skills

Income

Prestige

Part-time work

Which of these subjects would you be more interested in?

A

B

Choice Experiment – Basic idea

	Choice set 1		Choice set 2		Choice set 3		Choice set 4	
	Subject A	Subject B	Subject A	Subject B	Subject A	Subject B	Subject A	Subject B
Mathematics is an important part of the subject	rather no	rather yes	rather no	rather yes	rather yes	rather no	rather no	rather yes
The subject primarily requires ...	associative and creative thinking	analytical and systematic thinking	associative and creative thinking	analytical and systematic thinking	associative and creative thinking	analytical and systematic thinking	analytical and systematic thinking	associative and creative thinking
Competition among students is ...	low	high	high	low	low	high	low	high

Test for: „Baseline“ Competition Mathematics Thinking style

Choice set	1		2		3		4		5		6	
	A	B	A	B	A	B	A	B	A	B	A	B
Math	1	0	1	0	0	1	1	0	0	1	0	1
Thinking style	1	0	0	1	1	0	0	1	0	1	0	1
Competition	0	1	1	0	0	1	1	0	0	1	1	0
Risk	1	0	0	1	1	0	1	0	0	1	0	1
Skills	0	1	0	1	0	1	1	0	1	0	1	0
Salary	0	1	0	1	0	1	0	1	0	1	0	1
Prestige	1	0	1	0	0	1	0	1	1	0	1	0
Part-time	0	1	1	0	1	0	0	1	1	0	0	1

6 choice sets out of 24

Choice Experiment – Basic idea

1	Important professional skills are ...	flair for technology and engineering	compassion and social skills
2	Important professional skills are ...	compassion and social skills	flair for technology and engineering
3	Important professional skills are ...	compassion and social skills	flair for technology and engineering
4	Important professional skills are ...	flair for technology and engineering	compassion and social skills
5	Important professional skills are ...	flair for technology and engineering	compassion and social skills

Female subjects

=> strong preference for social skills

Male subjects

=> strong preference for technological skills

1	Important professional skills are ...	flair for technology and engineering	compassion and social skills
2	Important professional skills are ...	compassion and social skills	flair for technology and engineering
3	Important professional skills are ...	compassion and social skills	flair for technology and engineering
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Choice Experiment – Basic idea

1	Important professional skills are ...	flair for technology and engineering	compassion and social skills
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4	Important professional skills are ...	flair for technology and engineering	compassion and social skills
5	Important professional skills are ...		

Female subjects

=> strong preference for social skills

Knowledge of preferences on group level

Male subjects

=> strong preference for technological skills

	skills are ...	social skills	compassion and social skills
3	Important professional skills are ...	compassion and social skills	flair for technology and engineering
4	Important professional skills are ...	flair for technology and engineering	compassion and social skills
5	Important professional skills are ...	flair for technology and engineering	compassion and social skills

Advantages of TREE for research on gender inequality

- A) Panel data that observes individuals at important transitions in their lives
 - => **inequalities in gender often consequence of accumulation of decisions**
 - => **investigation of mechanism**

- B) Variety of variables that allow **interdisciplinary research**
 - standardized ability test (PISA)
 - personality traits
 - educational history
 - job market behaviour

Consequence: Ideal data source for research questions on gender inequality

Outlook

The potential of TREE for questions on gender inequality

Main advantage of TREE: Longitudinal character
=> allows a life course perspective

Questions that can be examined in the future

⇒ Evolution of gender wage gap

⇒ Effect of maternity leave

Wish list

- Continuation of TREE's openness to include experiments that are relevant for other researchers as well
- Information on partner (e.g. salary)
=> maternity leave dependent on relative share on couple's income
- Information on values of respondent's social network
- Heretical suggestion: Considering to collect DNA data for future use (polygenic scores)

Thanks a lot for your attention!

Dr. Benita Combet
LMU München
Institut für Soziologie
benita.combet@lmu.de
www.benitacombet.net