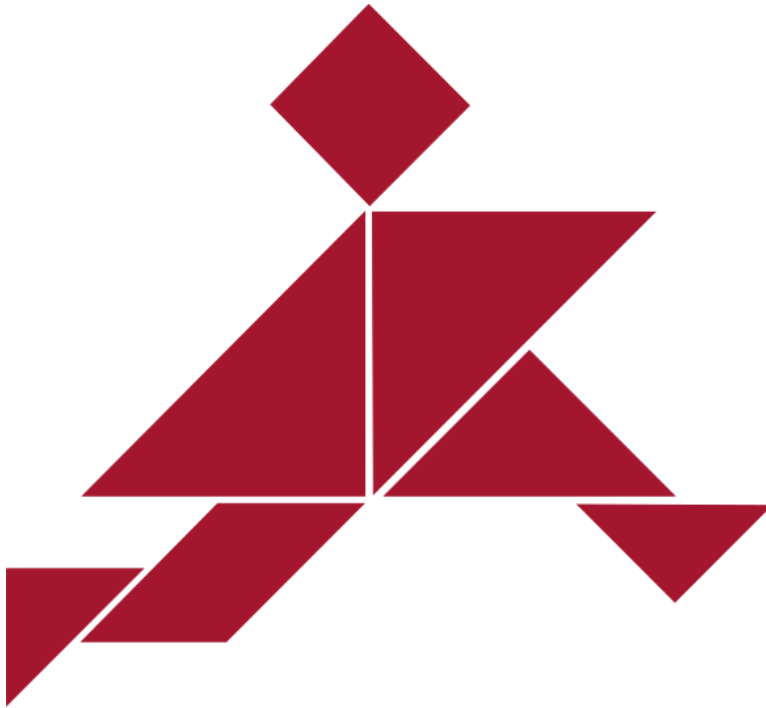


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# VULNERABILITY AND LIFE COURSE REGULATION: A PSYCHOSOCIAL APPROACH

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Swiss National Centre of Competence in Research

OVERCOMING VULNERABILITY: LIFE COURSE PERSPECTIVES

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# COLLABORATORS, IP 9, LIVES

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# A HOLISTIC APPROACH TO EARLY LIFE COURSE REGULATION

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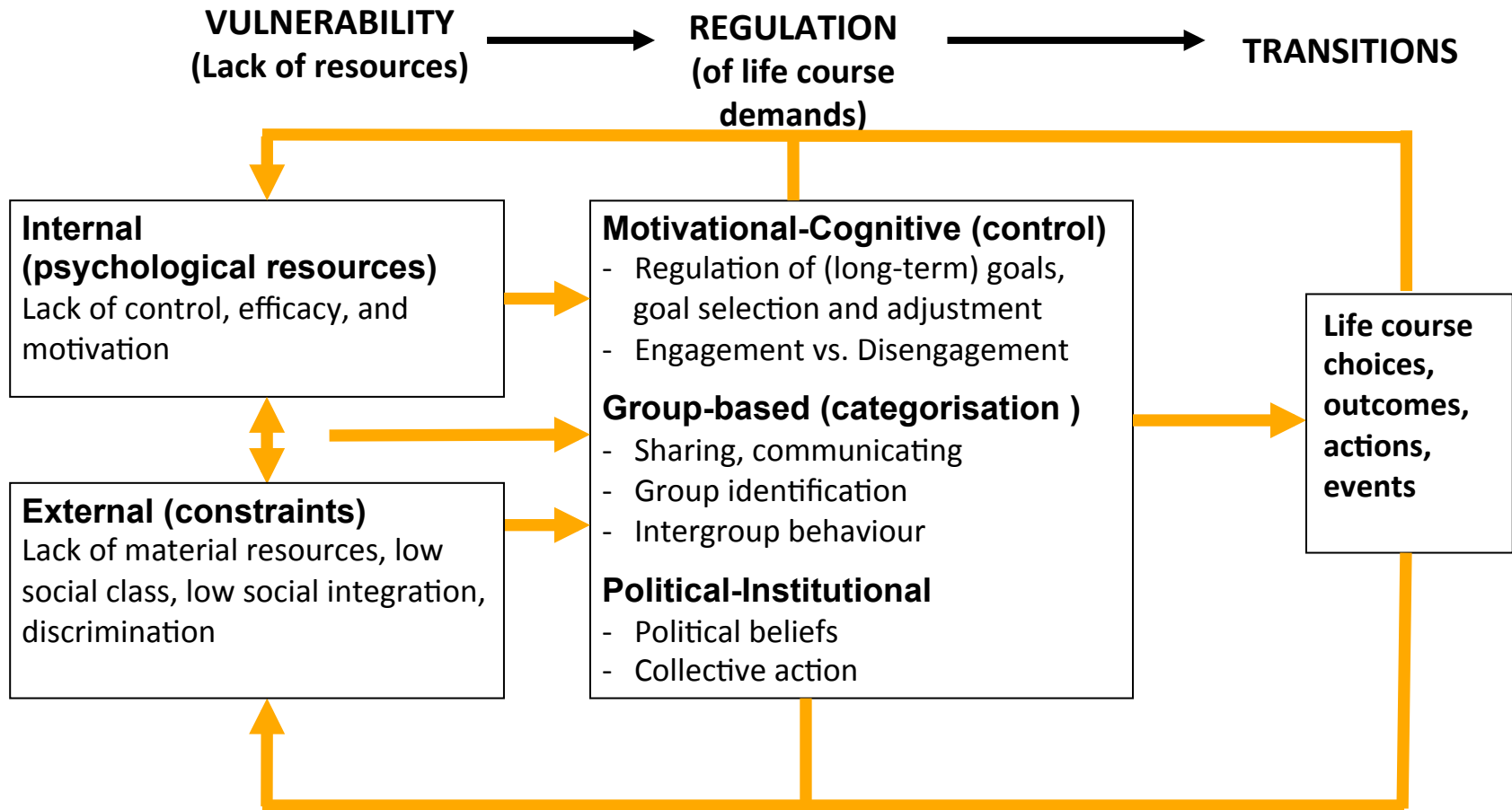
- Human development is jointly and interactively analysed through the lenses of **motivational agency** and **contextual structure** (Eccles, 1994, 2009)
- “... little is known about how young people’s engagement is complemented and affected by the behavior of **significant others** and shaped by **structural constraints** and **opportunities**.” (Dietrich, Parker & Salmela-Aro, 2012, p. 1575)

# YOUTH AND LIFE COURSE REGULATION

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- **Life-span model of motivation** (*Heckhausen et al., 2010; Salmela-Aro, 2009; Wrosch & Freund, 2001*)
  - Motivational regulation of life course demands and opportunities, choices and decisions
  - Psychological resources as key motivational dimensions in positive life course regulation
    - Engagement, motivation, controllability, efficacy
    - Personal goal setting, life projects
  
- **Social-psychological approach** (*Haslam & Reicher, 2006*)
  - Group-based processes in life course regulation (“co-regulation”)
    - Sharing and communicating
    - Group identification, social identity
    - Social support
  - Discrimination and perceived discrimination
  - Ideological beliefs (e.g., conservatism, system justification)

# VULNERABILITY – REGULATION MODEL OF LIFE COURSE TRANSITIONS



# INTERNAL AND EXTERNAL VULNERABILITY

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- **Internal vulnerability: Psychological resources**
  - Hampers ability for successful regulatory activity and weakening the psychological resources to appropriately deal with transitions
  - Lack of motivational agency (engagement, motivation, self-efficacy, self-determination, control)
- **External vulnerability: Structural constraints**
  - Increase likelihood of negative, unplanned events and unsuccessful transitions
  - Decrease choice availability
  - Low status group membership (e.g., migrants, women), discrimination

# RELATIONSHIP BETWEEN INTERNAL AND EXTERNAL VULNERABILITY

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## 1. Internal vulnerability **outcome of external vulnerability**

- Material life conditions, socialisation shape psychological resources; internalisation of group norms

## 2. Internal vulnerability gives **meaning to the subjective experience of external vulnerability**

- Perceptions of external conditions (own material situation, discrimination, barriers to one's life projects)

**→ When and how does external vulnerability translate into internal vulnerability?**

# OVERVIEW OF STUDIES

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1. Motivational regulation as a function of **external vulnerability**
2. Motivational regulation as a function of **internal vulnerabilities**
3. **Longitudinal analysis** of negative regulation as a function of internal vulnerabilities
4. **Group-based regulatory processes**

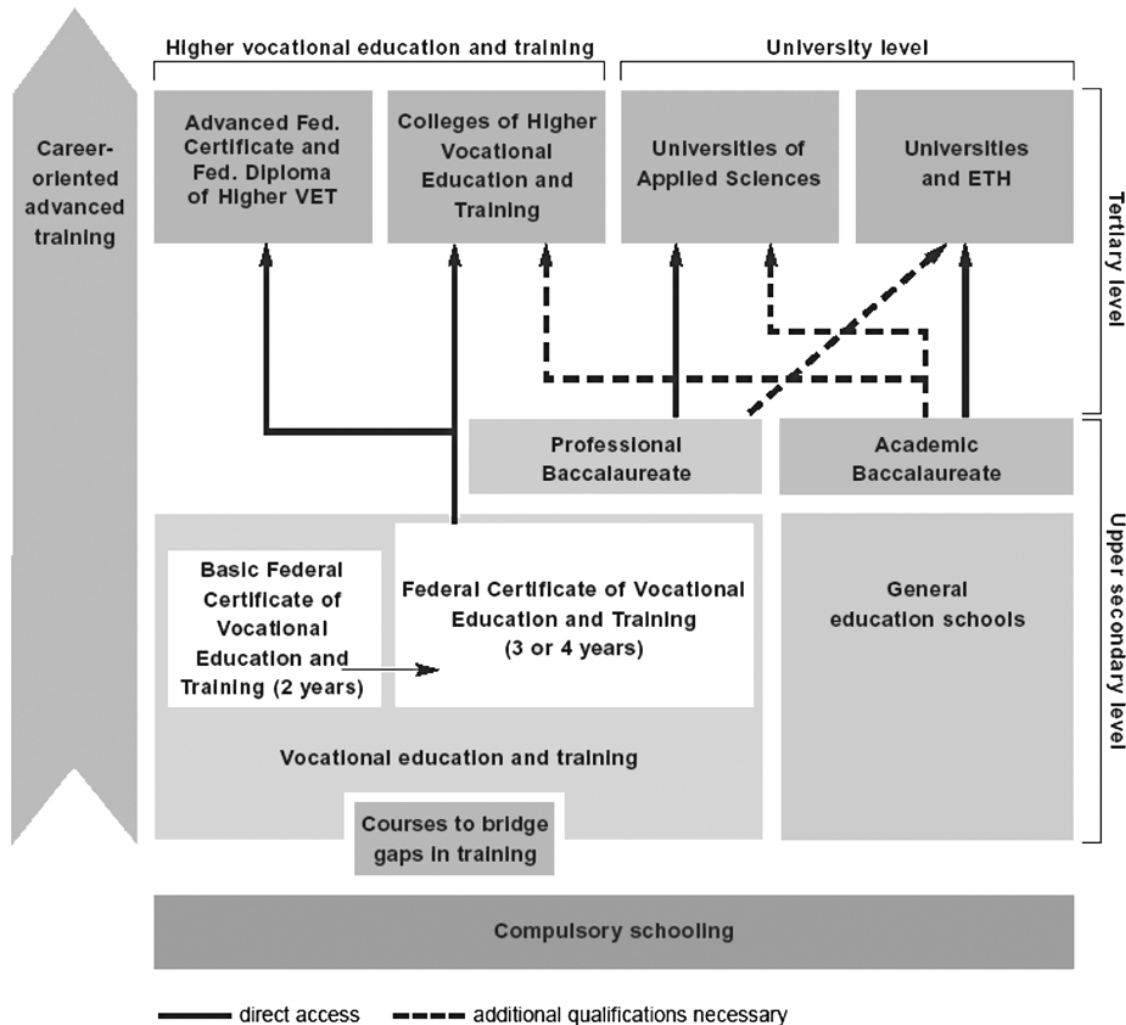


# THE SWISS EDUCATION SYSTEM

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- Two main tracks after compulsory schooling
  - Vocational education and training (Apprenticeship), approx. 70% in 2011 (including transitional education)
  - College track (Baccalaureate schools), approx. 25% in 2011

# THE SWISS EDUCATION SYSTEM



Source: Federal Office for Professional Education and Technology (OPET), 2008

# THE LONGITUDINAL LAUSANNE YOUTH STUDY (LOLYS)

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- **COFOP** (*Centre d'Orientation et de Formation Professionnelle, Lausanne*) (N = 137)
  - Transitional education (Preparatory school)
    - 58 Pre-Apprentices (mean age = 16.7)
    - 79 Apprentices (mean age = 19.3)
  
- **Collège St-Maurice** (N = 340, mean age = 18.0)
  - High school giving access to university
  
- **Municipality of Lausanne** (N = 230)
  - 55 Apprentices (mean age = 19.1)
  - 173 Employees (mean age = 26.4)
  
- Data collection between May and October 2012

# AGENCY ATTITUDES

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- Capacity to plan and implement goals
  - Key motivational dimensions in successful life course regulation
- 
- Educational / Professional **motivation** and **demotivation**
    - Indicators of (work-related) agency that increase chances for successful regulation (apprenticeship, tertiary education, labour market entry)(*Salmela-Aro, 2009*)
- 
- Concrete goal **engagement** and **disengagement**
    - Goal selection and optimisation (*Freund & Baltes, 2002*)

# MEASURES

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## ■ Educational / Professional motivation *(Salmela-Aro et al., 2012)*

(4 items, alpha = .90, N = 706)

- *I have a lot of energy for my courses / job.*
- *I attend courses / do my job with a lot of enthusiasm.*

## ■ Educational / Professional demotivation

(4 items, alpha = .70, N = 701)

- *I am not motivated and think of abandoning my education.*
- *I am overwhelmed by my courses / job.*

## ■ **Concrete goal engagement** *(Nurmi et al., 2002)*

(2 items, alpha = .65, N = 698)

- « *We are interested in your projects for the future. What are the projects you wish to carry out in the years to come? »*
- [list of three projects, choose most important one]
- *I will probably be able to carry out this project.*
- *I know what I have to do to carry out this project.*

## ■ **Concrete goal disengagement**

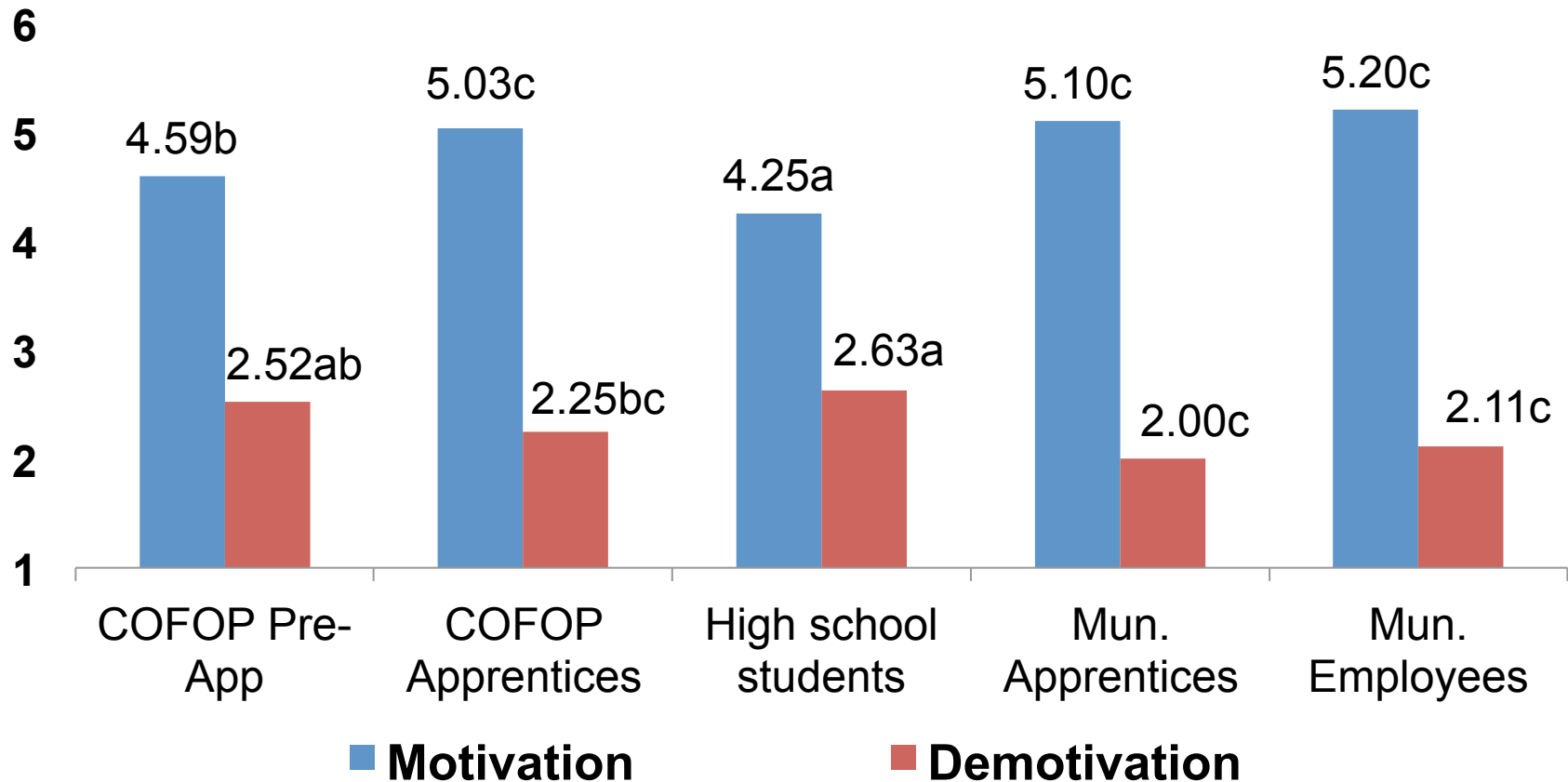
(2 items, alpha = .68, N = 689)

- *I feel stressed by this project.*
- *This project is difficult to carry out.*

Apprentices, students, employees

# **1. MOTIVATIONAL REGULATION AS A FUNCTION OF EXTERNAL VULNERABILITY**

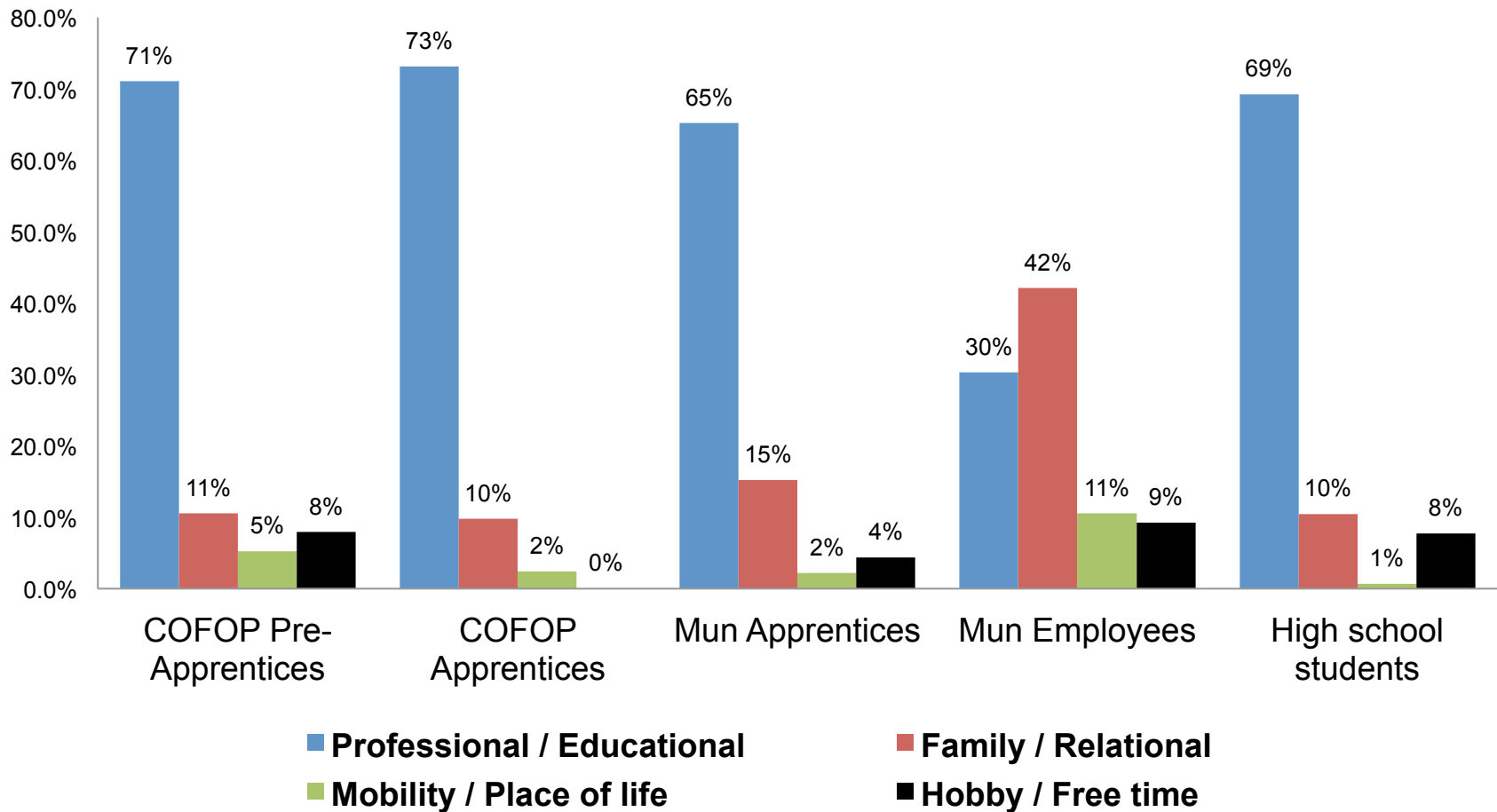
# SCHOOL AND PROFESSIONAL MOTIVATION AND DEMOTIVATION AS A FUNCTION OF STATUS



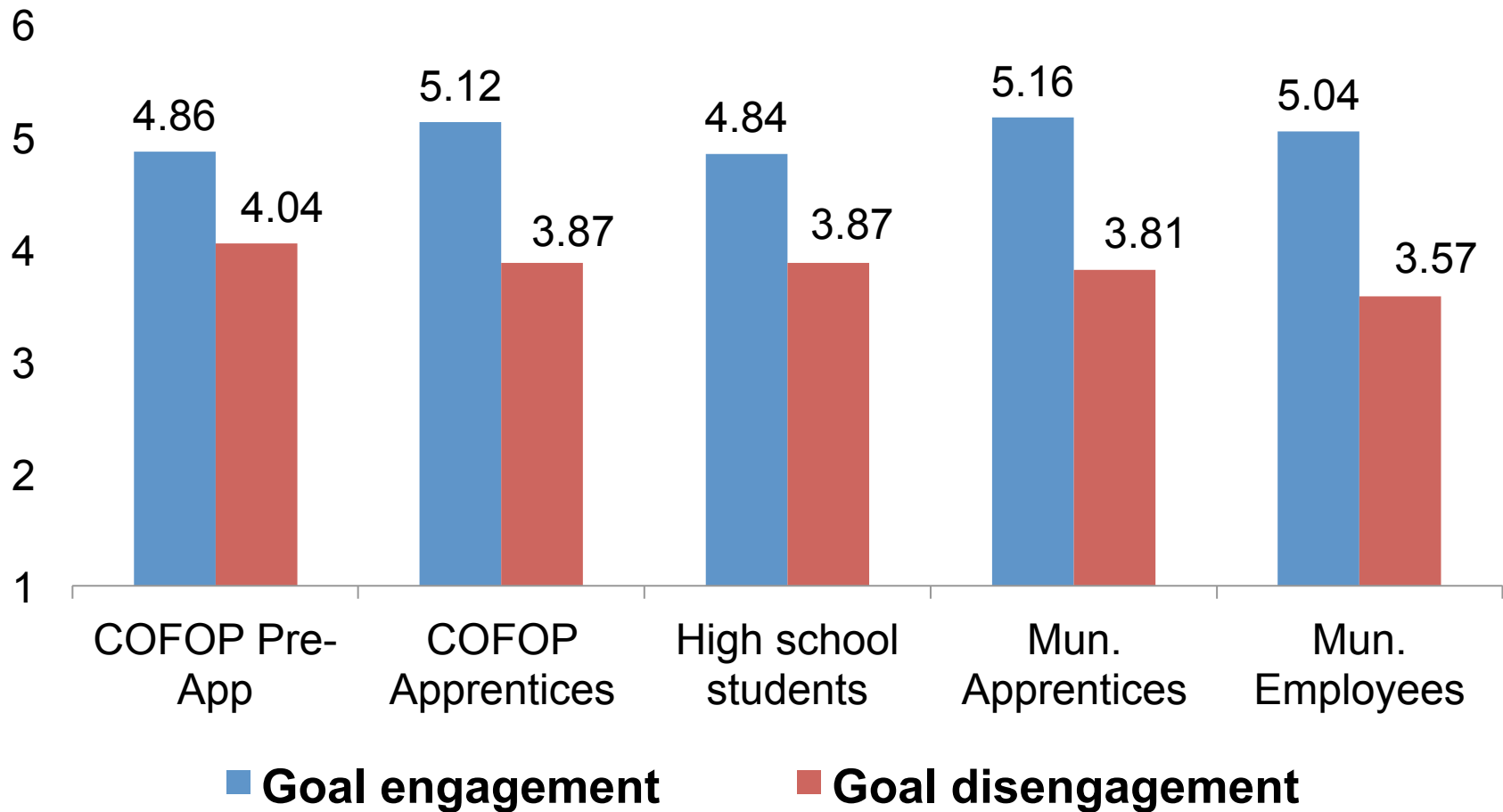
Means with different subscripts are different à  $p < .05$  (Tukey's B)



# TYPES OF GOALS BY INSTITUTION / STATUS



# CONCRETE GOAL ENGAGEMENT AND DISENGAGEMENT

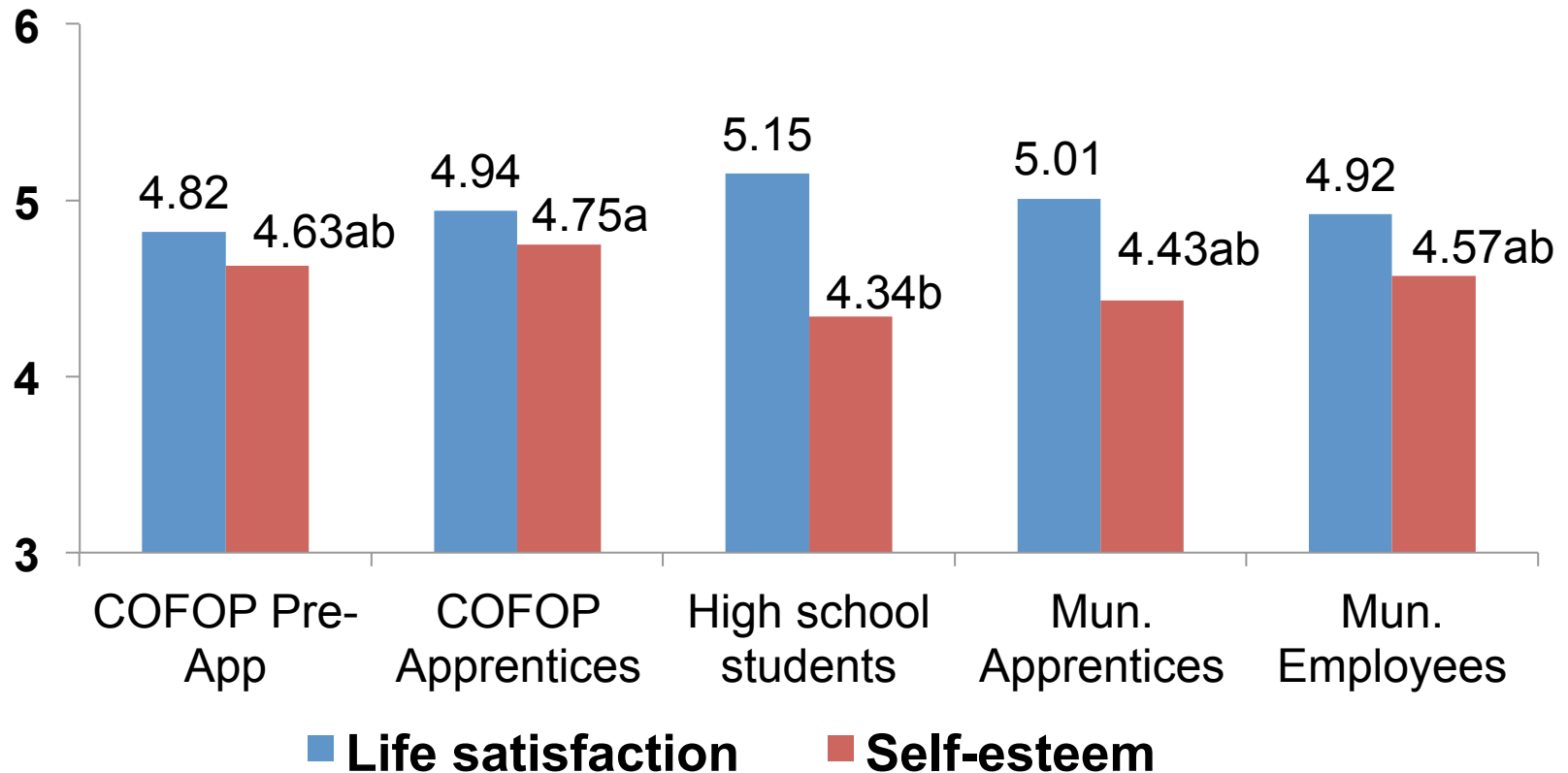


# DISCUSSION

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- Youth integrated in **labour market** (apprentices, employees) with higher motivation than youth in **educational settings** (pre-apprentices, high school students)
  
- Professional status effects on **motivation**, but no differences on **domain-specific goal engagement**

# LIFE SATISFACTION AND SELF-ESTEEM



*Means with different subscripts are different à  $p < .05$  (Tukey's B)*

- 
- No effects of immigrant status on motivation, engagement, life satisfaction, self-esteem (COFOP only)

# CONCLUSION

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- Effects of external vulnerability on motivational regulation (agency) limited and often inexistent.
- Integration in labour market increases motivation
- Selection pressures and competitiveness at the Baccalaureate level may be responsible for lower educational motivation, higher demotivation and lower self-esteem

Control, self-esteem, life satisfaction

## **2. MOTIVATIONAL REGULATION AS A FUNCTION OF INTERNAL VULNERABILITY**

# INTERNAL VULNERABILITIES

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## ■ Perceived vulnerabilities

### ■ Material vulnerability

(risk of averse material conditions; 2 items, alpha = .73)

### ■ Relational vulnerability

(conflict, solitude, health, aggression; 4 items, alpha = .74)

## ■ Social integration

(sum of activities such as sports, music, associations)

## ■ Psychological resources

### ■ Lack of control (“No control over important aspects of my life”)

### ■ Self-esteem (5 items, alpha = .83)

### ■ Life satisfaction



# PREDICTORS OF MOTIVATIONAL REGULATION

	Educational motivation	Educational demotivation	Concrete goal engagement	Concrete goal disengagement
Gender (M+)	-.04	.02	.01	.01
Age	.07	.00	-.04	-.07
COFOP	-.06	.08	-.01	.04
High School	-.44***	.29***	-.19**	.04
<b>SOCIAL INTEGRATION</b>	.07*	.04	-.01	-.02
<b>VULNERABILITIES</b>				
Material vulnerability	-.03	.17***	-.02	.09*
Relational vulnerability	.06	.00	.02	.04
<b>PSYCHOLOGICAL RESOURCES</b>				
Lack of control	-.09*	.25***	-.12*	.17***
Self-esteem	.10*	-.14**	.03	-.03
Life satisfaction	.17***	-.10*	.21***	-.08+
$R^2$ adj.	.28	.26	.10	.08
N	702	702	694	693

Note: Standardised regression coefficients; \*\*\* =  $p < .001$ , \*\* =  $p < .01$ , \* =  $p < .05$ , + =  $p < .10$

# DISCUSSION

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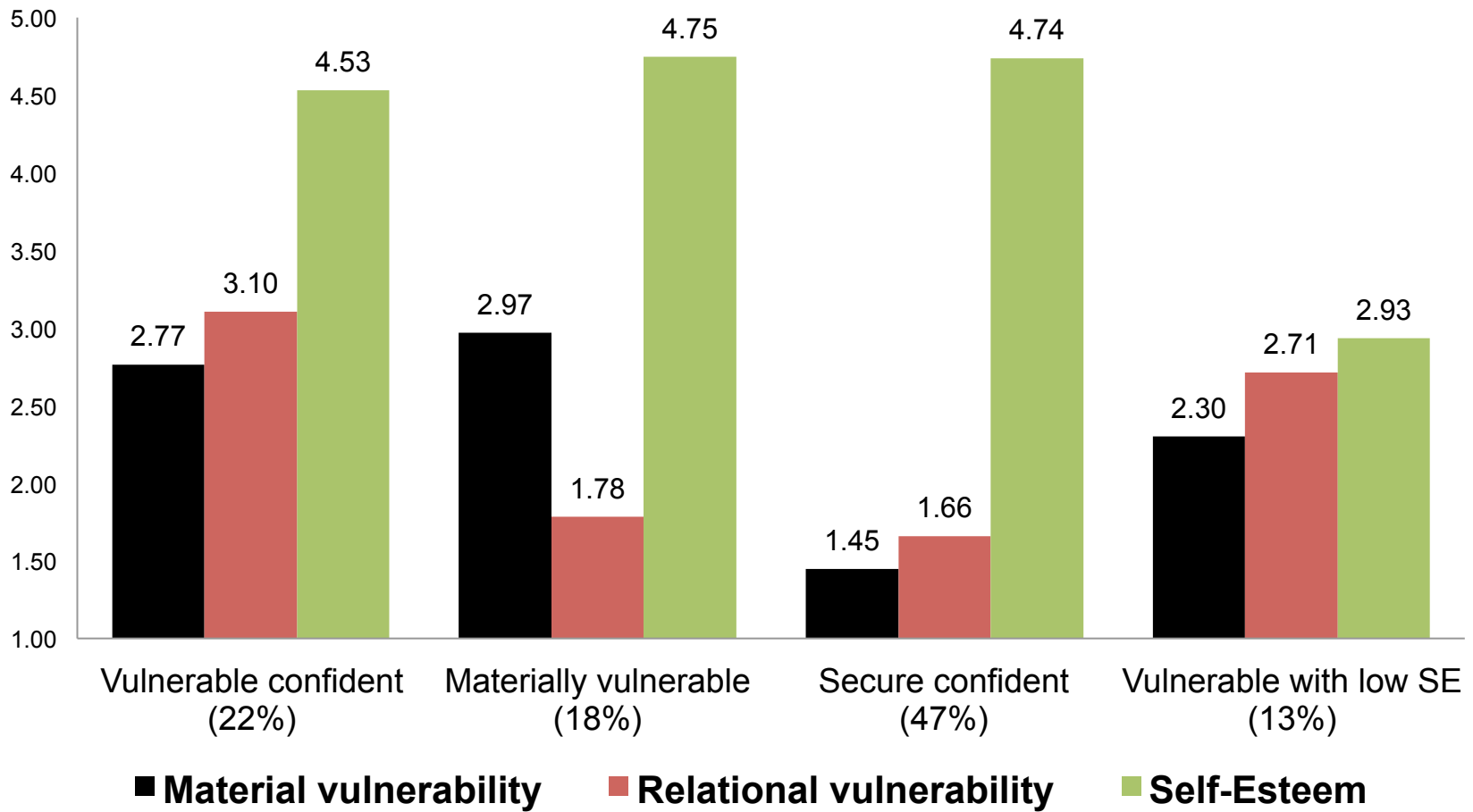
- **Material vulnerability** associated with negative regulation
  
- Strong and consistent link between **psychological resources** and motivational regulation

# A TYPOLOGICAL ANALYSIS

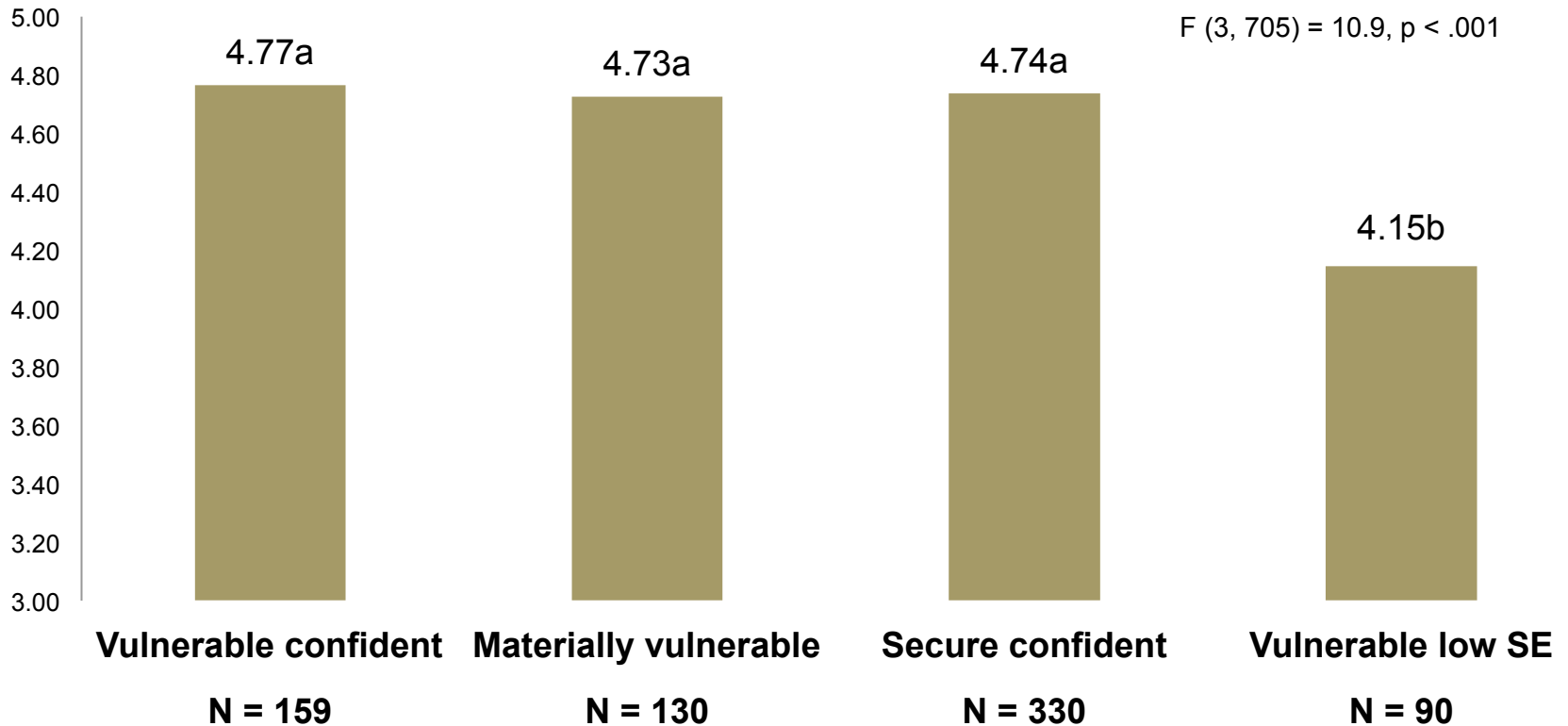
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- **Interactive effects** of vulnerabilities and psychological resources?
- **K-Means Cluster**
  - Regrouping of respondents on the basis of similarity of response patterns towards material and relational **vulnerability** and **self-esteem**

# TYPOLOGY: VULNERABILITIES \* SELF-ESTEEM

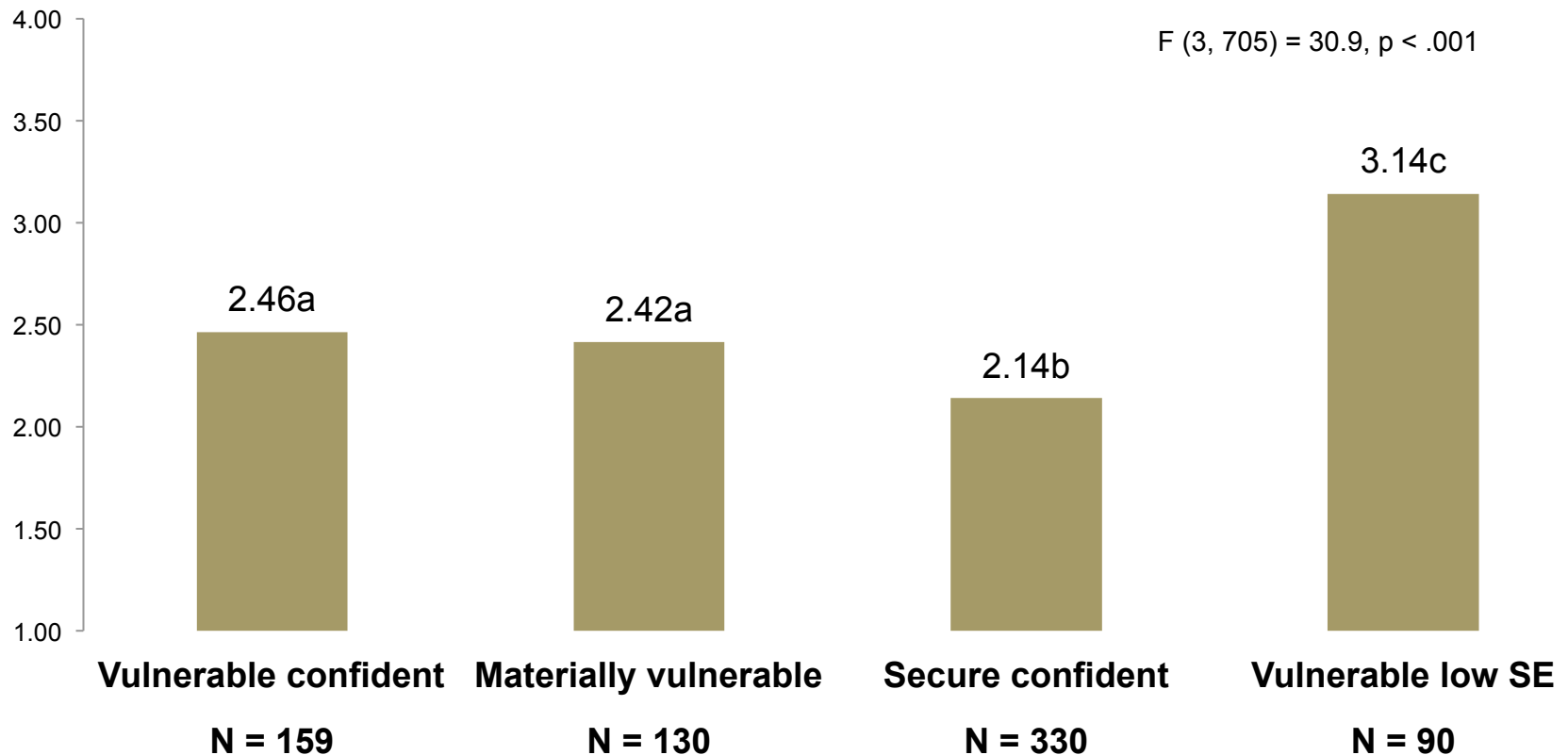


# EDUCATIONAL MOTIVATION



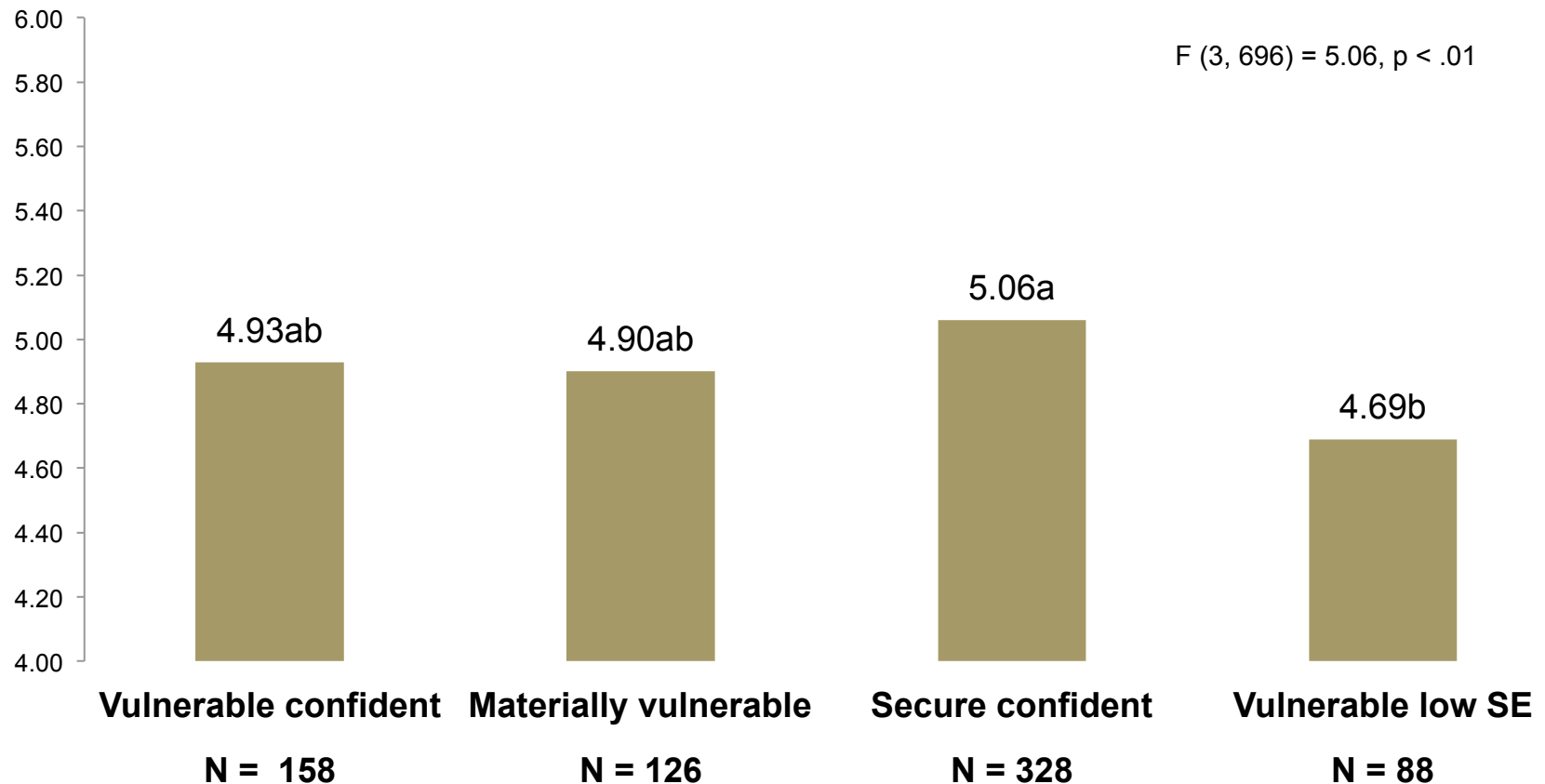
Means with different subscripts are different à  $p < .05$  (Tukey's B)

# EDUCATIONAL DEMOTIVATION



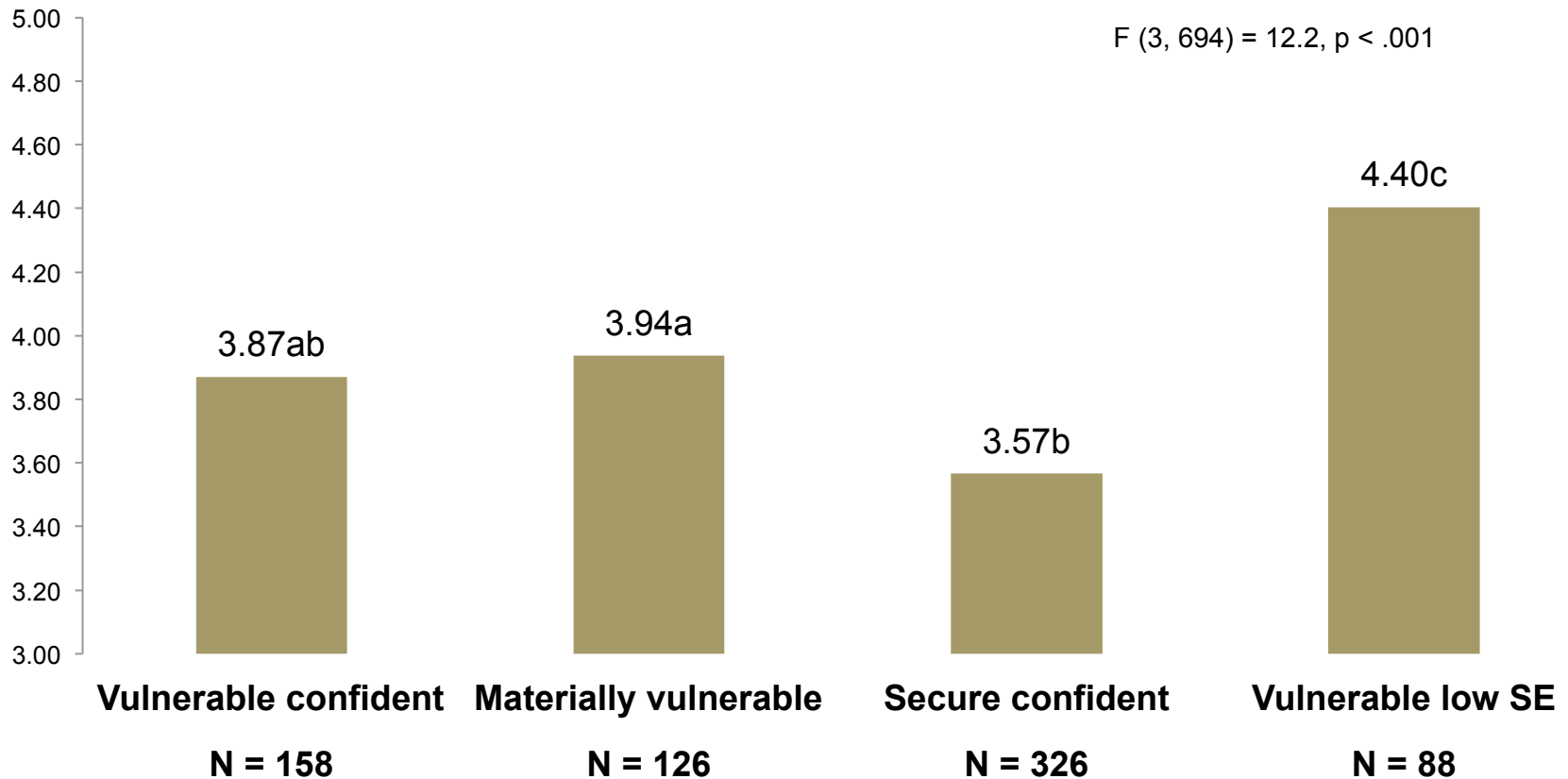
Means with different subscripts are different à  $p < .05$  (Tukey's B)

# CONCRETE GOAL ENGAGEMENT



Means with different subscripts are different à  $p < .05$  (Tukey's B)

# CONCRETE GOAL DISENGAGEMENT



Means with different subscripts are different à p < .05 (Tukey's B)



# DISCUSSION: VULNERABILITY \* SELF-ESTEEM

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- **Interactive accumulation of vulnerabilities**
- The combined effect of high (relational) vulnerability and low self-esteem clearly **increases the likelihood of negative regulation** and disengagement, and, to a lesser extent, **decreases the likelihood of positive regulation**

School abandonment intentions

### **3. LONGITUDINAL ANALYSIS OF NEGATIVE REGULATION AS A FUNCTION OF INTERNAL VULNERABILITY**

# SCHOOL ABANDONMENT INTENTIONS OVER TIME *(EICHER, STAERKLÉ & CLÉMENCE, 2013)*

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## ■ Development of intentions to abandon over time

### Research questions

- How are abandonment intentions related to **psychological resources** (optimism, motivation and stress)?
- Do members of **low status groups** anticipate school abandonment more frequently than those from high status groups?

# TREE DATA

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- TREE panel study (*T*Ransitions from Education to Employment in Switzerland)
- Data from four waves (2001 - 2004)
- Transition from compulsory schooling to upper secondary education
- Vocational or college-track education for at least three out of the four years.
- 4312 participants (55.9% women, 89.3 % Swiss)
- Mean age in the first survey year (2001) = 16.5

# MEASURES

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## ■ **Abandonment intention (DV)**

- *As soon as I find something better I will change my education/ apprenticeship (scale 1-7)*

## **Psychological resources**

### ■ **School motivation** (three items, alphas .59 - .68)

- *I can always learn something new at school*

### ■ **Educational stress** (five items, alphas .78 - .82)

- *E.g., I hardly manage the amount of homework.*

### ■ **Optimism** (five items, alphas .82 - .85)

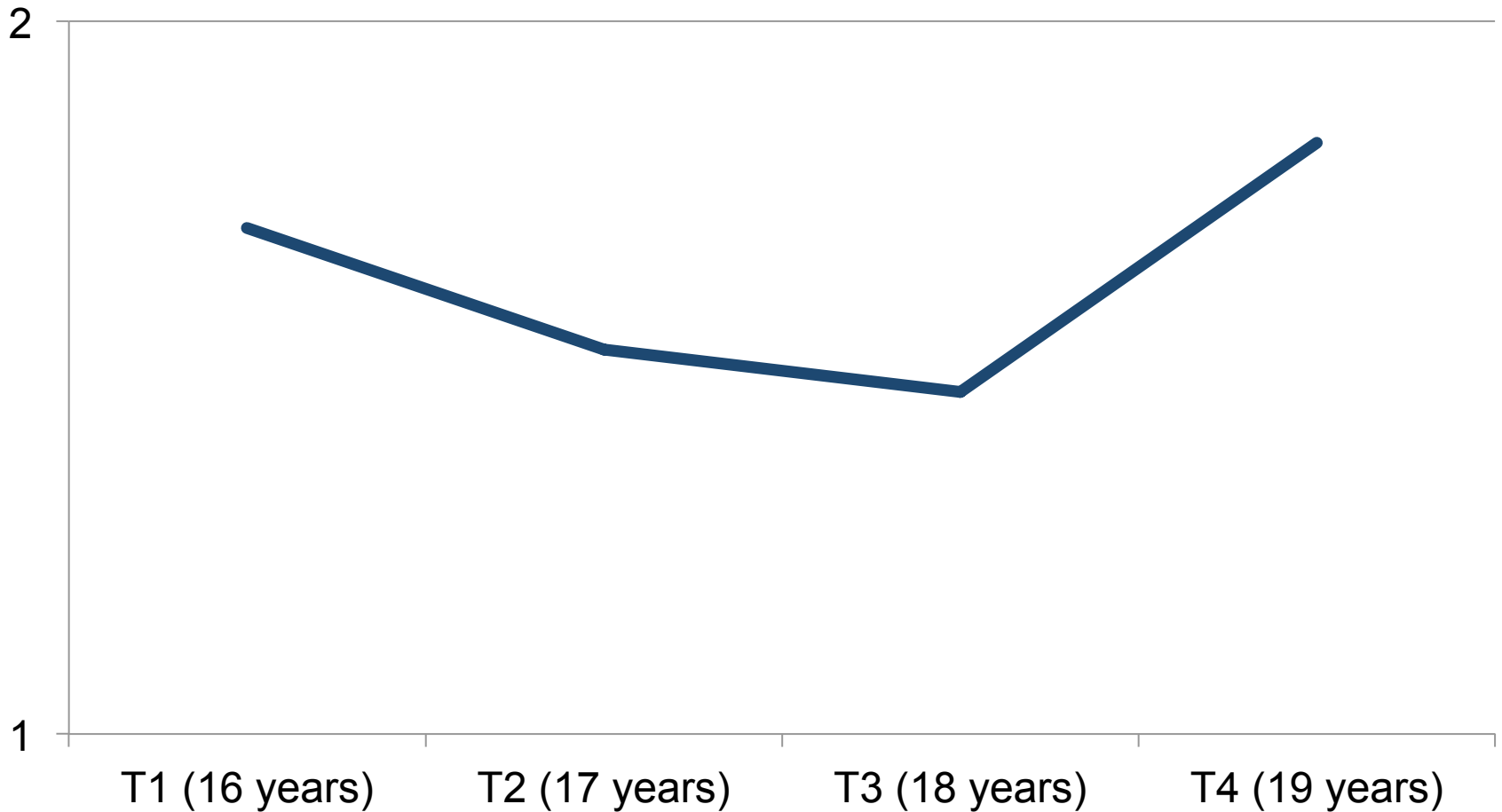
- *Whatever happens, I can see the positive side of it*

# MULTILEVEL LONGITUDINAL ANALYSIS

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- **Four time points (level-1)** measured for 4312 **participants (level-2)**
  - **Level-1** assesses **annual variation** of abandonment intentions and psychological resources
  - **Level-2** measures **overall level** of these variables (mean over 4 years)
- The model differentiates **effects of stable and annually varying levels of psychological resources** on abandonment intention
- **ICC** for abandonment intention = .22 (22% of between-person variation)

# ABANDONMENT INTENTION OVER TIME



# PREDICTING SCHOOL ABANDONMENT INTENTION: LINEAR MULTILEVEL MODEL (MODEL 1: TIME AND STATUS)

	<b>Est</b>	<b>SD</b>	<b>Z</b>	
(Intercept)	1.51	.02	63.7***	
<b>Time</b>	-.05	.01	-4.74***	Ab decreases over time
<b>Time quadratic</b>	.06	.01	6.53***	Ab decreases and then increases
<b>Gender (Male)</b>	.16	.03	6.01***	Ab higher for males
<b>Non Swiss</b>	.11	.04	2.40*	Ab higher for Non Swiss
<b>Track Baccalaureate</b>	-.23	.03	-8.36***	Ab higher for vocational track
<b>SES Parents</b>	.00	.00	-2.37*	Ab higher for low parental status

\*\*\* =  $p < .001$ , \*\* =  $p < .01$ , \* =  $p < .05$

- Abandonment attitudes higher at the beginning and in the end of educational period
- Abandonment attitudes higher for low status categories (exception: males)



# PREDICTING SCHOOL ABANDONMENT ATTITUDES: LINEAR MULTILEVEL MODEL (MODEL 1: RESOURCES)

	<b>Est</b>	<b>SD</b>	<b>Z</b>	
<b>Stress</b> Mean	.14	.02	6.42***	Mean stress increases Ab
<b>Optimism</b> Mean	-.29	.02	-13.71***	Mean optimism decreases Ab
<b>Motivation</b> Mean	-.13	.03	-5.04***	Mean motivation decreases Ab
<b>Stress</b> Annual Variation	.18	.02	8.16***	Higher than usual stress increases Ab
<b>Optimism</b> Annual Variation	-.25	.02	-10.48***	Lower than usual optimism decreases Ab
<b>Motivation</b> Annual Variation	-.15	.03	-5.77***	Lower than usual motivation decreases Ab

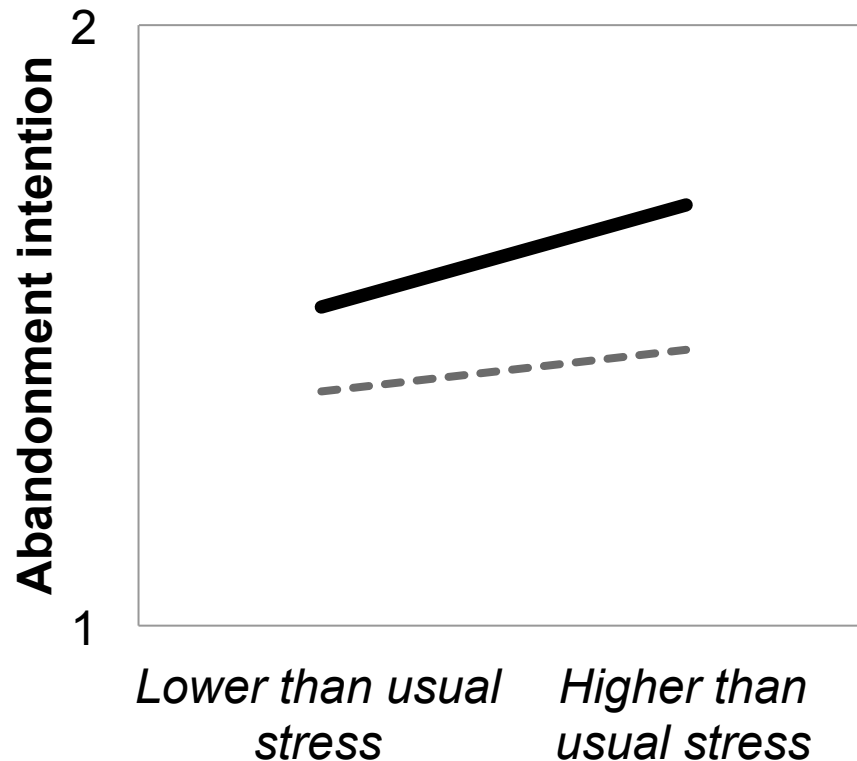
\*\*\* =  $p < .001$ , \*\* =  $p < .01$ , \* =  $p < .05$

# DISCUSSION

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- High **educational stress** over whole period increases abandonment intention
- **Psychological protection** against abandonment intentions: positive outlook (optimism) and educational motivation
- Annual variation considerably increases explained variance
  - Higher than usual stress and lower than usual optimism and motivation increase abandonment intentions

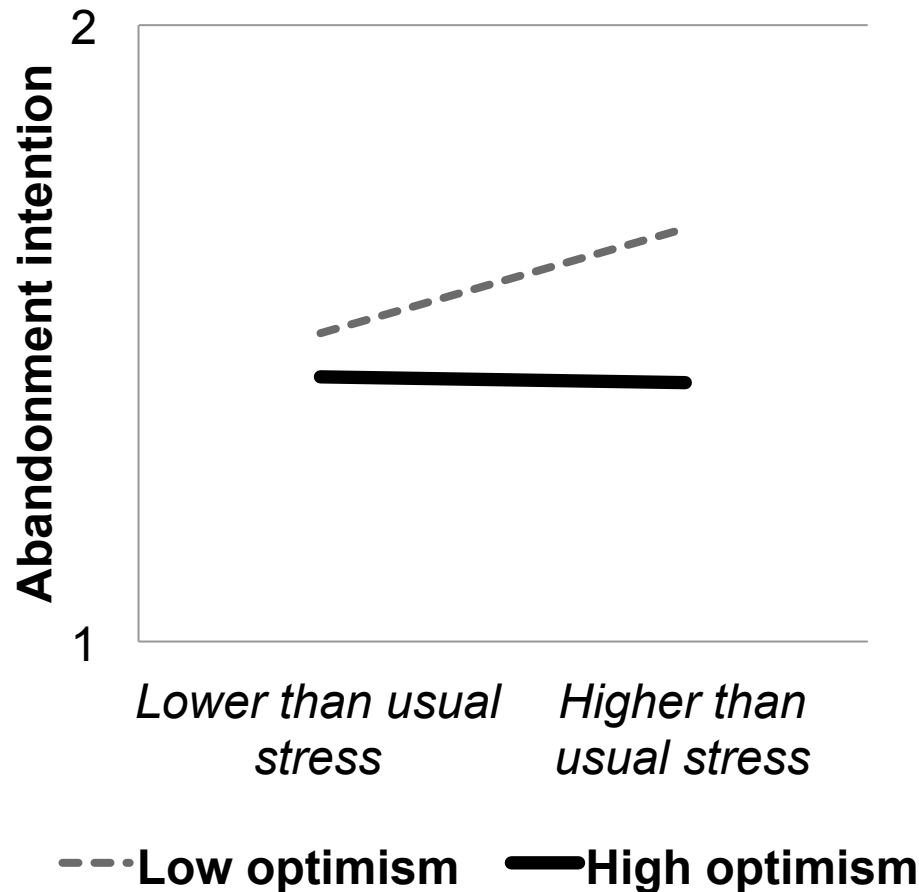
# INTERACTION BETWEEN OVERALL STRESS AND ANNUAL STRESS VARIATION



- **Cumulative effect:** Young people who experience greater overall stress are more sensitive to annual stress variations

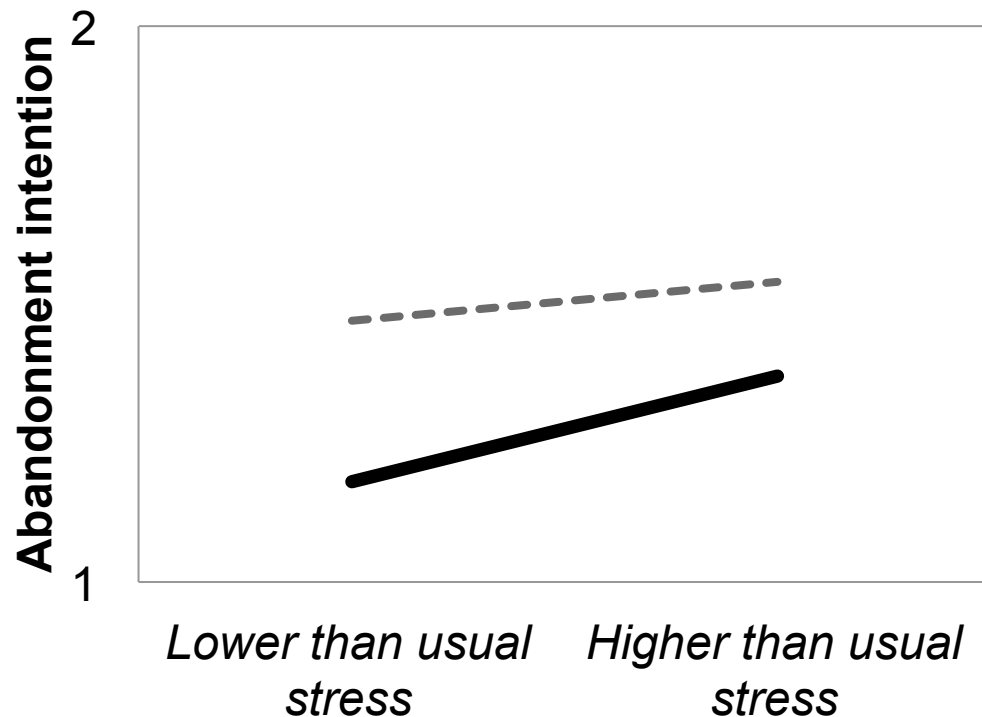
--- Low overall stress — High overall stress

# INTERACTION BETWEEN OVERALL OPTIMISM AND ANNUAL STRESS



- Lower overall optimism increases sensitivity to stress variations
- Overall optimism protects from negative consequences of stress variations

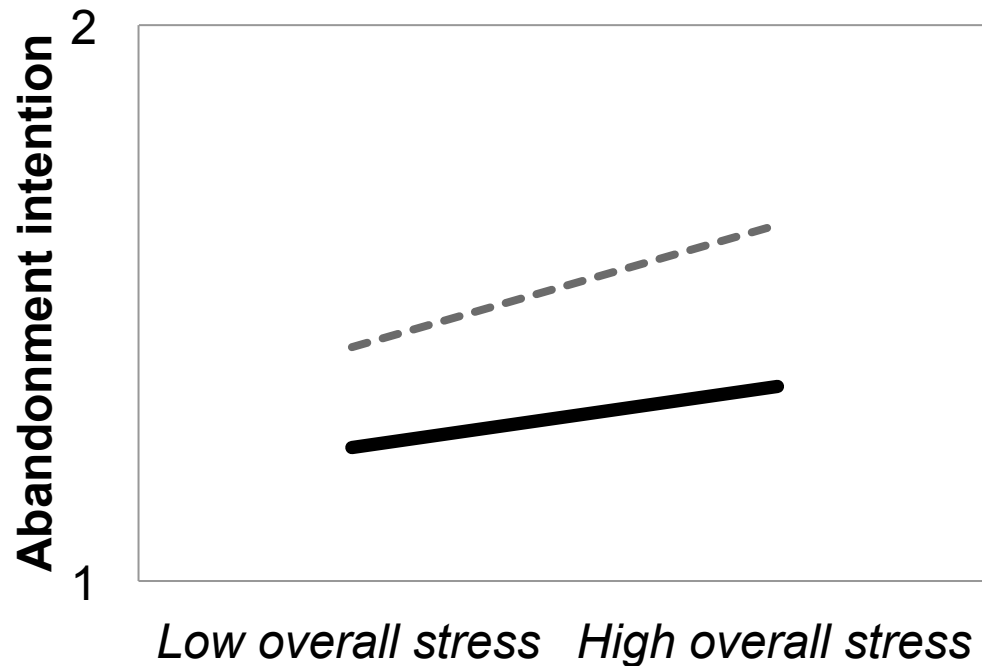
# EDUCATIONAL TRACK AND STRESS VARIATION



- Abandonment intentions vary more strongly as a function of annual stress variations in the (high status) Baccalaureate track

--- Vocational track (Apprenticeship)  
— Baccalaureate track (High school)

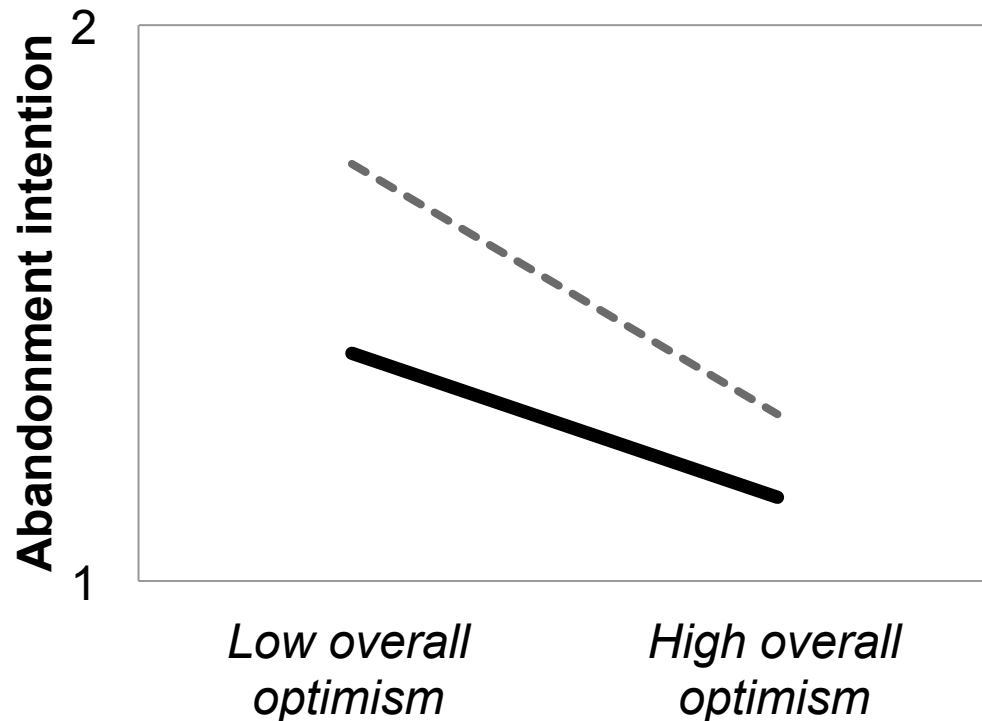
# EDUCATIONAL TRACK AND MEAN STRESS



- BUT:  
Overall stress over 4 years predicts abandonment intentions more strongly in the (low status) vocational track

--- Vocational track (Apprenticeship)  
— Baccalaureate track (High school)

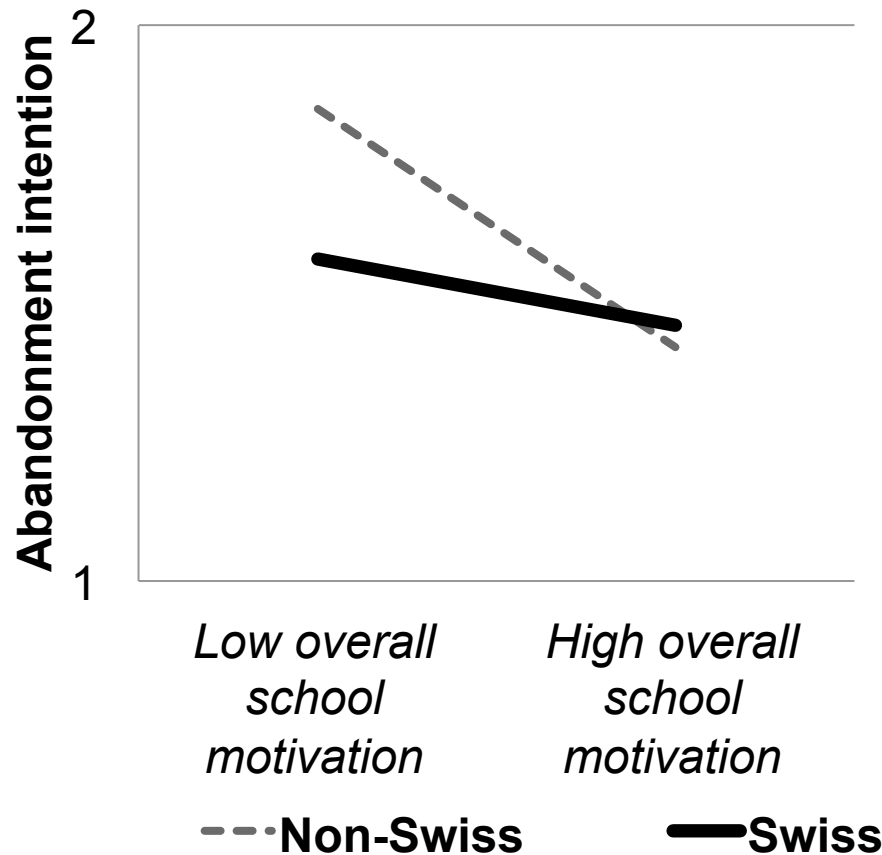
# EDUCATIONAL TRACK AND MEAN OPTIMISM



- **Cumulative effect:** Low overall optimism predicts abandonment intentions more strongly in the (low status) vocational track

--- Vocational track (Apprenticeship)  
— Baccalaureate track (High school)

# NATIONALITY AND MEAN SCHOOL MOTIVATION



- **Cumulative effect:** Low overall school motivation predicts abandonment intentions more strongly for (low status) Non-Swiss than for Swiss



# ACCUMULATION OF VULNERABILITIES

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- Effects of **overall level of psychological resources** (but not annual variation!) on abandonment intentions **stronger for low status groups**
- For low status groups, negative regulation is more costly (i.e., risk of abandonment higher)

**→ Low status groups thereby cumulate vulnerabilities, a process that may account for continuing disadvantage and inequality**

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Perceived discrimination, social identification and collective selves

## **4. GROUP-BASED REGULATORY PROCESSES**

# PERCEIVED DISCRIMINATION

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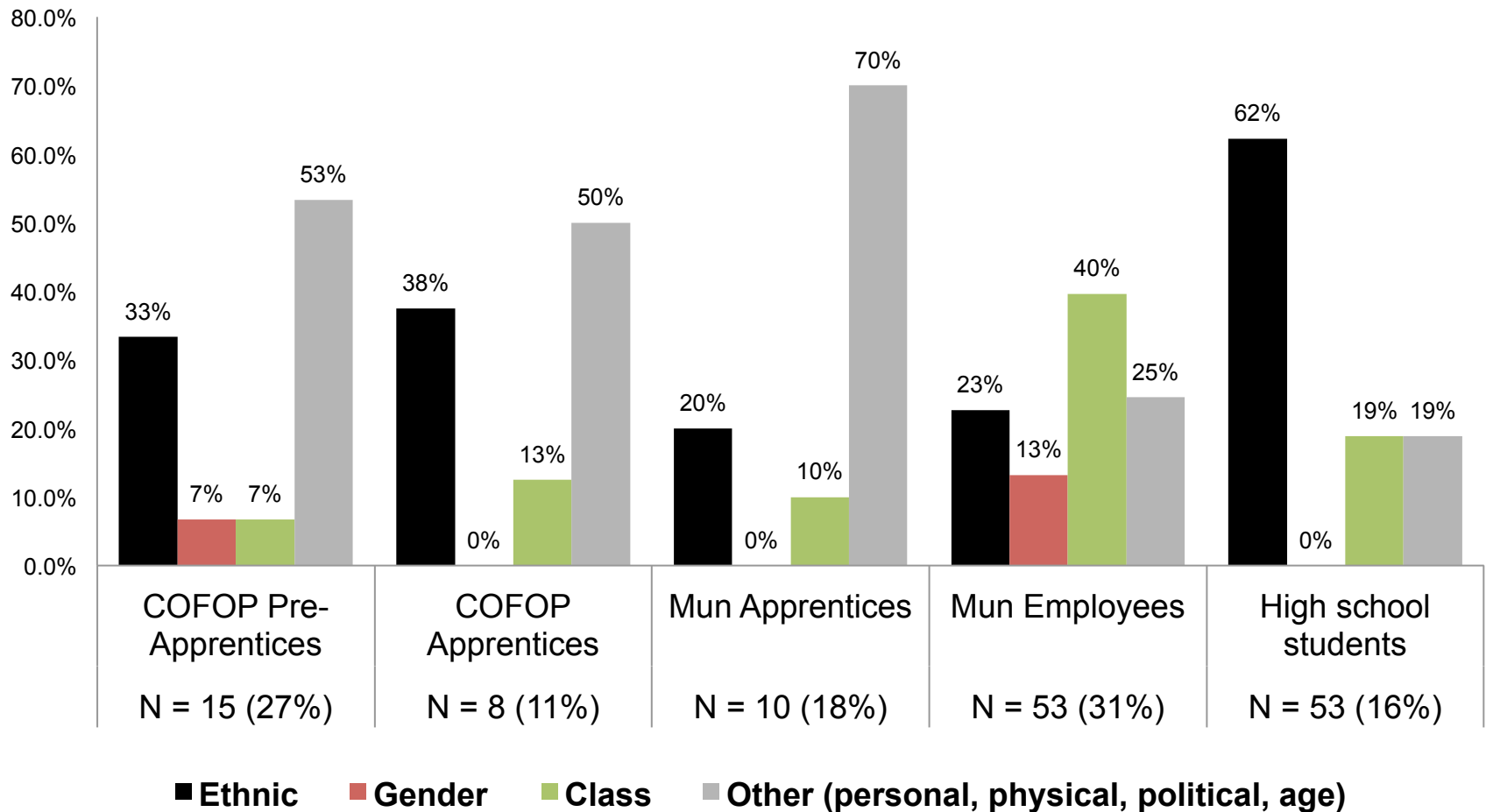
- **Discrimination** as external vulnerability
- **Perceived discrimination** as the link between external and internal vulnerability
- Perceived discrimination on the basis of ethnicity, gender, class, physical appearance etc. as a **powerful life course stressor**

# AGENCY ATTITUDES AS A FUNCTION OF PERCEIVED DISCRIMINATION

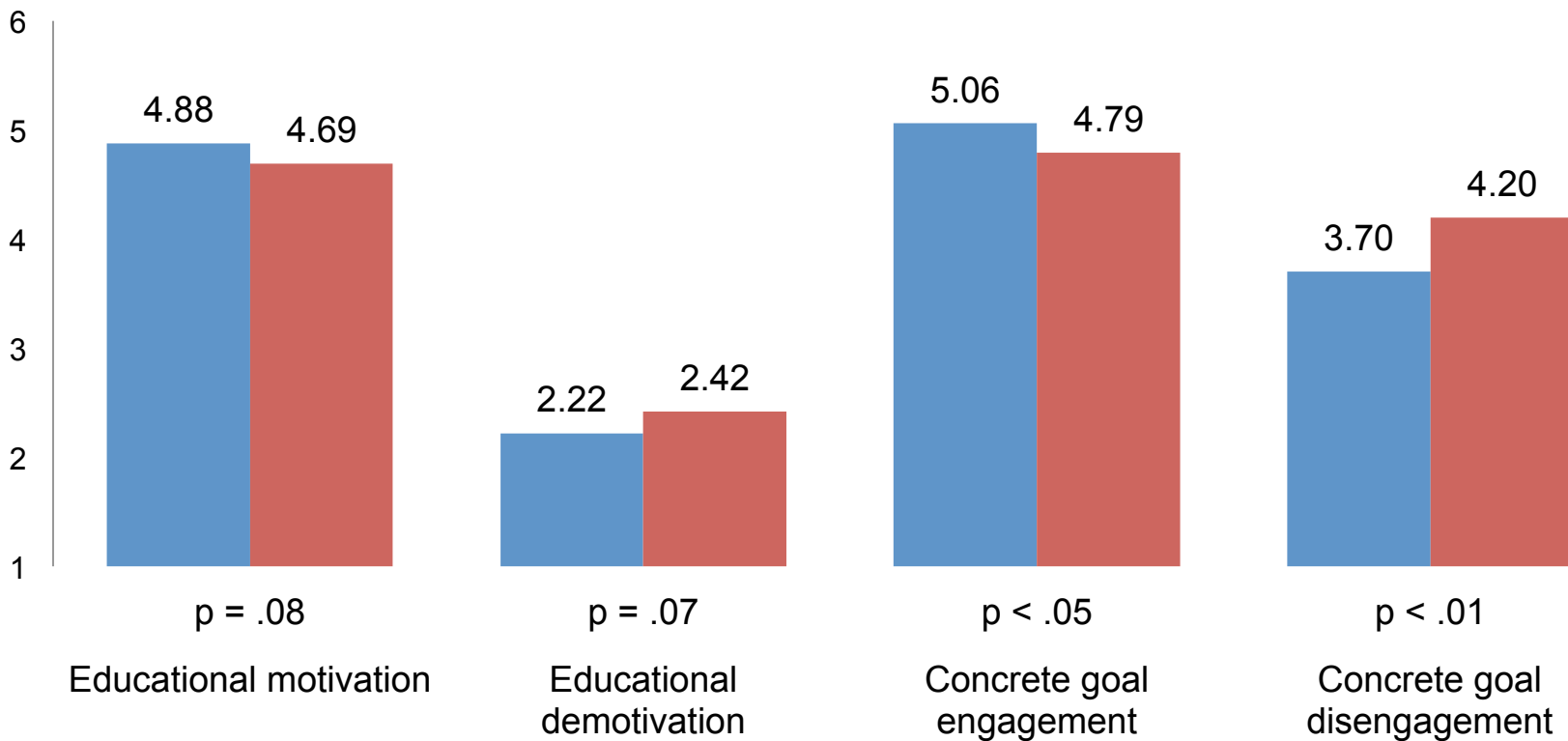
Analysis of covariance (N = 671), F values

	Educational motivation	Educational demotivation	Goal engagement	Goal disengagement
	F	F	F	F
<b>Perceived discrimination (no / yes)</b>	<b>3.2+</b>	<b>3.3+</b>	<b>6.6*</b>	<b>10.3**</b>
Gender (M+)	3.4+	.9	.6	.5
Institution / Status	11.1***	5.0***	2.5*	2.1+
Age	.2	.8	3.2+	.3
Discrimination * Gender	2.4	1.3	.5	.5
<b>Discrimination * Status</b>	<b>2.2+</b>	1.9	.9	<b>4.3**</b>

# TARGETS OF DISCRIMINATION BY INSTITUTION (N = 138, 20.6%)



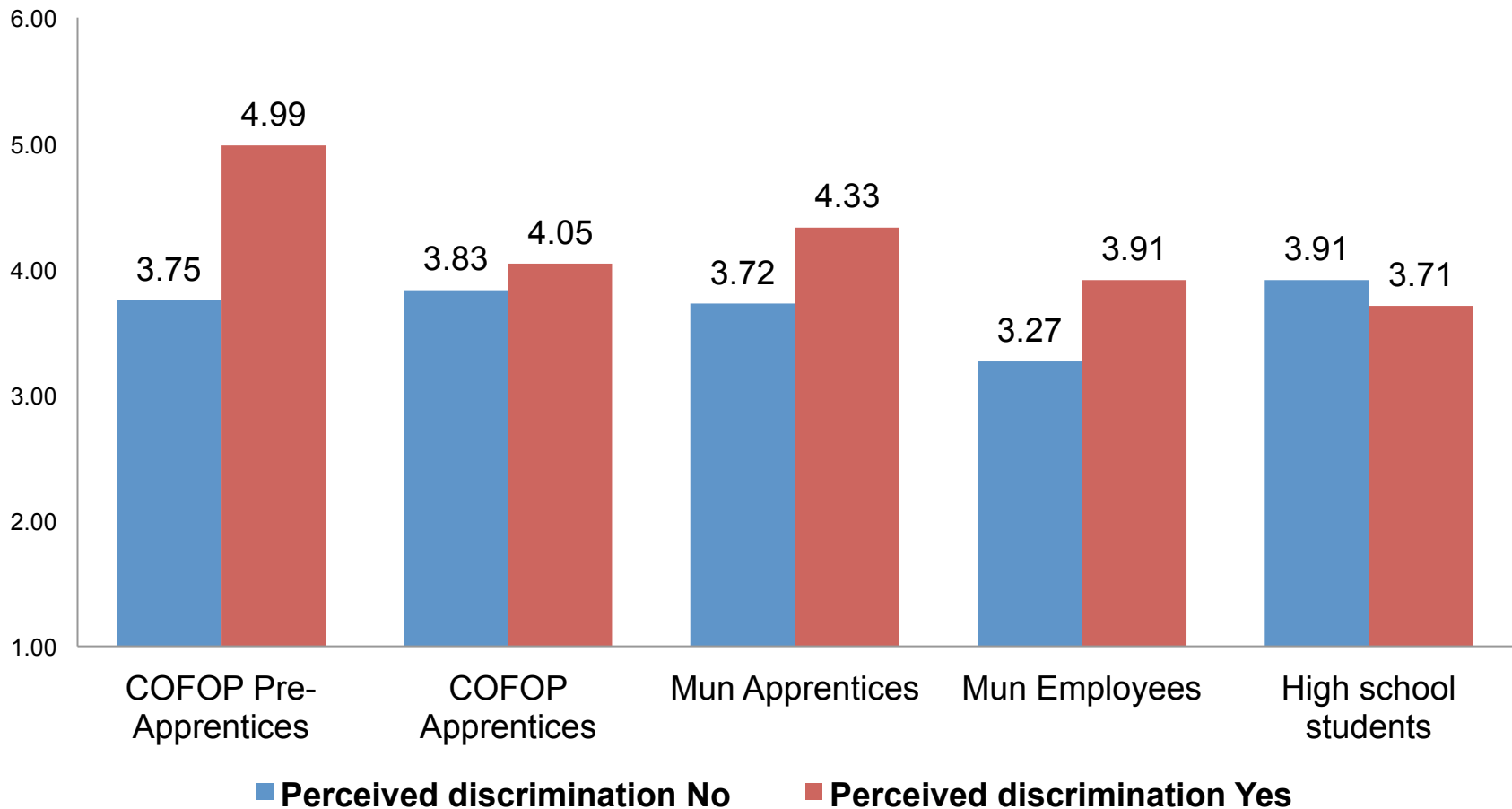
# ESTIMATED MEANS OF MOTIVATIONAL REGULATION BY PERCEIVED DISCRIMINATION (CONTROLLED FOR GENDER, AGE, INSTITUTION)



■ Perceived discrimination No (N = 533, 79.4%)

■ Perceived discrimination Yes (N = 138, 20.6%)

# INTERACTION BETWEEN INSTITUTION AND DISCRIMINATION: ESTIMATED MEANS OF **GOAL DISENGAGEMENT**



# PERCEIVED INTENSITY OF DISCRIMINATION

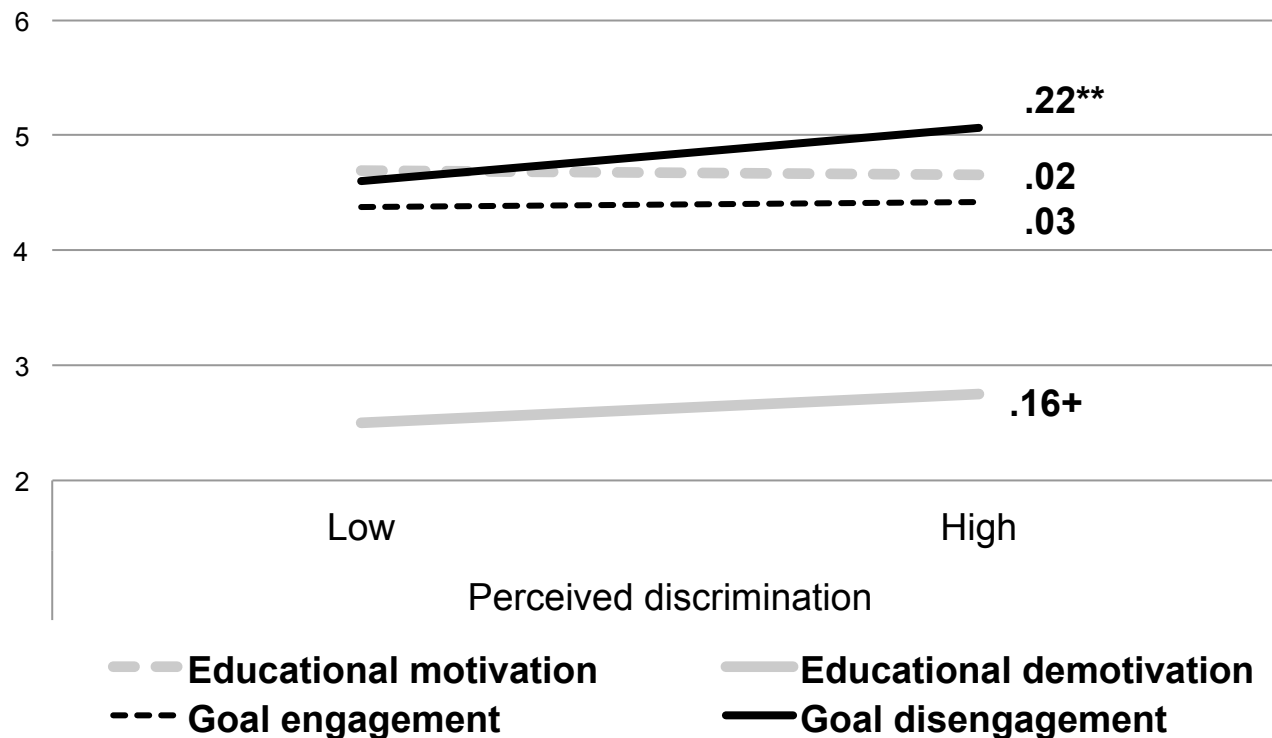
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- Perceived intensity of discrimination should lead to negative regulation among those who declare to be discriminated
- Two items (alpha = .75)
  - *Personally, I feel treated differently because I am member of this group*
  - *I suffer from negative comments because I am member of this group (e.g., jokes, insults)*



# PERCEIVED INTENSITY OF DISCRIMINATION AND AGENCY ATTITUDES

Standardised regression coefficients controlled for gender, age, and institution



# DISCUSSION

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- Perceived **intensity of discrimination is associated with negative regulation** (in particular goal disengagement), but is unrelated to positive regulation.

# SOCIAL IDENTIFICATION AND REGULATION

---

- Identifying with social groups should promote positive regulation
- Task
  - Self-chosen group (COFOP and Municipality) or “community or country of origin” (High school)
    - « I feel very attached to this group »
    - « I am proud to be member of this group »

# SOCIAL IDENTIFICATION AND MOTIVATIONAL REGULATION

Standardised regression coefficients, controlled for gender and age

	Educational motivation	Educational demotivation	Goal engagement	Goal disengagement
COFOP <i>(group chosen by respondent)</i>	.11	-.17*	.11	.08
Municipality <i>(group chosen by respondent)</i>	.32***	-.07	.16*	.02
High school <i>(community or country of origin)</i>	.18**	-.11+	.04	-.07

- Partial evidence that generic **social identification increases positive and decreases negative regulation**, in particular educational motivation.

# PERCEIVED BARRIERS TO LIFE COURSE GOALS AND LEVEL OF SELF-DEFINITION

(BAKOURI, STAERKLE ET AL., 2013)

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■ **Perceived barriers** (*McWhirter, 1997*): Constraints to one's life goals, negative contextual influences on goals  
(*"Despite my efforts, many obstacles prevent me from carrying out this project"*).

■ Adaptive role of a **collective self** in situations of stress

■ Identification with a group helps to overcome stress (*Haslam & Reicher, 2006*)

■ Shared experience, social support

→ **Collective self-definitions should help low status groups overcome the negative effects of perceived barriers to their life goals**

# COLLECTIVE SELF-DEFINITIONS

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- Who-am-I task (COFOP and Municipality)
- Classification of « most important » self-definitions into two broad categories:
  - **Collective self-definition**  
(56% COFOP / 44% MUN)
    - Ethnic, professional, relational
  - **Personal self-definition**  
(44% COFOP / 56% MUN)
    - Traits, attributes, activities

# RESULTS

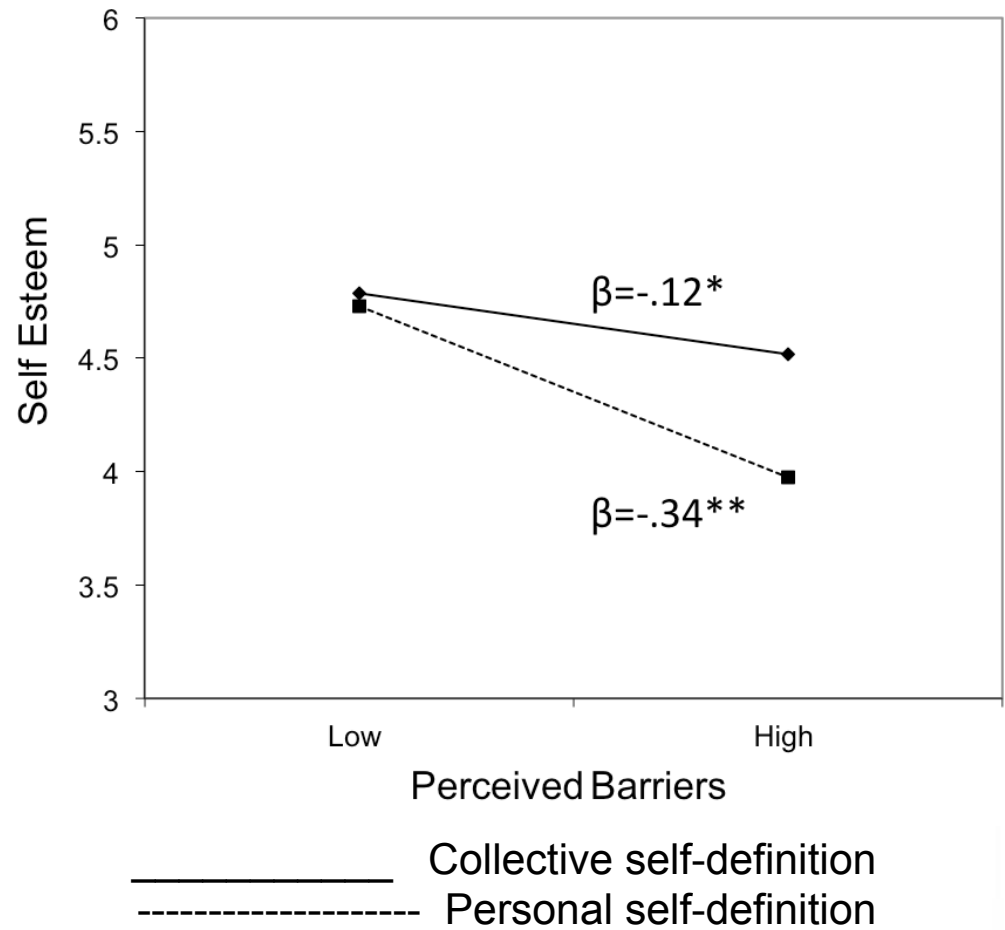
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- As expected, **low status groups perceive higher barriers** to life projects than high status groups
  - *Pre-apprentices (3.88) vs. apprentices (3.18) vs. employees (3.12),  $p < .001$*
  - *Swiss (3.07) vs. Non-Swiss (3.79),  $p < .001$*
- Perceived barriers are associated **with lower self-esteem**
  - COFOP:  $\beta = -.22$ ,  $p < .001$ , Municipality:  $\beta = -.21$ ,  $p < .001$

# COLLECTIVE SELF-DEFINITIONS

- Collective self-definitions moderate the relationship between perceived barriers and low-self-esteem

→ **Buffering function of collective self-conception**





# GENERAL CONCLUSION 1

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- **Group-based and collective processes matter** in analyses of vulnerability and life course regulation
  - Boosting role of identification with social groups
  - Detrimental effects of perceived discrimination
  - Adaptive function of collective selves

# GENERAL CONCLUSION 2

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- Contextual nature of regulation processes
  - External vulnerabilities as such do only have a **limited impact** on regulation strategies
  - **Psychological resources interact with external constraints** to give rise to motivational regulation strategies of life course demands
  - **Combinations of vulnerabilities** lead to negative regulation that in turn reinforces likelihood of negative transitions, thereby contributing to the **perpetuation of social inequalities**

Thank you for your attention