

# Development of school enjoyment at the transition to secondary school: A special focus on disadvantaged children

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Melike Ömeroğulları & Michaela Gläser-Zikuda

University of Erlangen-Nuremberg



# 1. Theoretical Background

## Transition from primary to secondary school



- This transition involves changes in
  - academic framework
  - social relationships
  
- New environment → necessity to adapt → adaptation strategies

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  - academic framework
  - social relationships
  
- New environment → necessity to adapt → adaptation strategies
  
- Transition to secondary school is considered as a critical life event (Filipp, 1995).
  - Chance and risk at the same time
  
- Majority experiences the transition positively as a challenge instead of a threat (Knoppick et al., 2018; Kurtz et al., 2010).

# 1. Theoretical Background

## Disadvantaged children in the German school system

### ➤ Who is disadvantaged?

- Migration Background
- Low socio economic status
- Low parental educational status



Low school achievement  
Less attendance of the academic track  
(Autorengruppe Bildungsberichterstattung, 2020;  
Gresch & Becker, 2010).

- Time spent together with parents
- Cultural activities with the family
- Intensive communication with parents



Positive transition experience  
Less concerns regarding the transition  
(Knoppick et al., 2018)

# 1. Theoretical Background



## Importance of emotions in the school context

- Emotions influence cognitive resources, motivation to learn and use of learning strategies (Pekrun et al., 2017)
- Positive emotions have an impact on self-regulated learning strategies, persistence of effort and joy of learning (Fend & Sandmeier, 2004; Pekrun et al., 2017; Villavicencio & Bernardo, 2013).
  - Mediating effect
- Control-value-theory of achievement emotions (Pekrun, 2006).
  - subjective control
  - subjective value

# 1. Theoretical Background

## School enjoyment



- Positive emotional attitude towards the entire learning environment at school (Fend, 1997).
  - learning and achievement activities
  - learning content
  - social relationships with teachers, classmates or peers
- Positively correlated with collaboration in class, commitment to learn and interest in learning contents (van Ophuysen, 2009).

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- Sub-dimensions (van Ophuysen, 2009)
  - Classroom learning
  - Achievement evaluation
  - Social life at school
  - Duties and responsibilities
- How does it develop? Control-value-theory!

## 2. State of research

### School enjoyment

- At the end of 4<sup>th</sup> grade majority of students have a positive attitude towards school (Valtin et al. 2010, PIRLS)
- Increase of school enjoyment at the transition from primary to secondary school (Hagenauer et al., 2013; van Ophuysen, 2008).
  - 4<sup>th</sup> to 5<sup>th</sup> grade
  - Short term increase
- Decrease of school enjoyment in the long term in secondary school (StEG-Konsortium, 2010).
  - 5<sup>th</sup> to 9<sup>th</sup> grade



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- Decrease of school enjoyment in the long term in secondary school (StEG-Konsortium, 2010).
  - 5<sup>th</sup> to 9<sup>th</sup> grade
- Girls report higher levels of school enjoyment than boys (Hagenauer et al., 2013; Harazd & Schürer, 2006; van Ophuysen, 2008).
- Affected by the (future) school track (Harazd & Schürer, 2006; van Ophuysen, 2009)
  - Future students of the academic track → higher initial level (grade 4)
  - Students of the lower secondary school → stronger increase (grade 5)

## 2. State of research

### School enjoyment and transition emotions of disadvantaged children

#### Migration Background

- No difference in school enjoyment between students with and without a migration background at the transition to secondary school (Harazd & Schürer, 2006; van Ophuysen, 2008).
- Students with a Turkish migration background experience more negative emotions regarding the transition to secondary school (Hildebrandt, 2014).
- No difference in transition emotions between students with and without a migration background (van Ophuysen, 2006).

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#### SES and educational background

- Students with lower SES and educational background express more negative emotions and are more likely to perceive the transition as a threat (Kurtz et al., 2010).
- Different backgrounds → different resources and coping strategies
- Mismatch → academic, emotional and behavioral problems (Stage-Environment-Fit) (Eccles et al., 1993)

## 3. Research questions and hypotheses

### Question 1

How does school enjoyment develop at the transition to secondary school?

### Hypothesis 1

On average, students will report higher levels of school enjoyment in 5<sup>th</sup> grade than in 4<sup>th</sup> grade.

### 3. Research questions and hypotheses

#### Question 1

How does school enjoyment develop at the transition to secondary school?

#### Hypothesis 1

On average, students will report higher levels of school enjoyment in 5<sup>th</sup> grade than in 4<sup>th</sup> grade.

#### Question 2

Are there any differences in the development of school enjoyment of disadvantaged and non-disadvantaged children?

#### Hypothesis 2

Disadvantaged children will report lower school enjoyment than non-disadvantaged children and experience a less favorable development during the transition.

## 4. Data and method

### Data

- NEPS - Starting Cohort Kindergarten (SC2)
  
- Primary school entry in 2012
  - Participation in NEPS in 5<sup>th</sup> grade
  - Transition after Grade 4 (without Berlin & Brandenburg)
  - No grade repetition
  - No grade skipping



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  - No grade repetition
  - No grade skipping
- $N = 2737$ 
  - 52% females
  - 2% *Hauptschule*, 14% *Realschule*, 17% *Gesamtschule* and 65% *Gymnasium*
  - Migration background: 2% first generation and 7% second generation



## 4. Data and method

### Measures

#### School enjoyment

*“I like going to school.”*

*“School is fun.”*

*“I enjoy learning in school a lot.”*

1 = completely disagree to 4 = completely agree

Cronbach's  $\alpha = .90 / .89$  (G4 / G5)



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#### Covariates

Sex (0 = male, 1 = female)

School track after primary school (Dummies for *Haupt-, Real- & Gesamtschule*; Ref. *Gymnasium*)

German and mathematics grades in 4<sup>th</sup> and 5<sup>th</sup> grade (reverse coded)

Supportive class climate (mathematics teacher) G5

Often trouble with teachers & classmates G5

## 4. Data and method

### Measures

#### How to define “disadvantaged”?

#### Covariates

Socio-economic &  
socio-cultural status

Educational background

Migration background

Parental support

Highest ISEI

Cultural activities of the parents

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Highest ISCED

Idealistic aspiration of the parent

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Generation status of the student

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Parental monitoring G3

Parent’s contact with the school G2

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## 4. Data and method

### Method

#### Latent growth curve modeling (LGCM)

- Between-person differences in within-person change over time
- Starting point in Grade 4 (intercept)
- Rate of change between Grade 4 and 5 (slope)
- Which variables affect the intercept or slope factor?
  
- Only two measurement points, i.e., growth form linear

## 5. Results

### LGCM

N=2737	Model 1				Model 2				Model 3			
	Intercept		Slope		Intercept		Slope		Intercept		Slope	
	$\beta$	SE	$\beta$	SE	$\beta$	SE	$\beta$	SE	$\beta$	SE	$\beta$	SE
Mean	<b>2.76</b>	.02	<b>0.33</b>	.02	<b>2.43</b>	.10	<b>0.36</b>	.10	<b>2.35</b>	.12	<b>0.42</b>	.15
Variance	<b>0.25</b>	.01	<b>0.07</b>	.01	<b>0.22</b>	.01	<b>0.08</b>	.01	<b>0.22</b>	.01	<b>0.07</b>	.01
Female <sup>1</sup>					<b>.35</b>	.03	<b>-.14</b>	.04	<b>.36</b>	.03	<b>-.18</b>	.04
<i>Hauptschule</i> <sup>2</sup>					<b>-.45</b>	.14	.16	.14	<b>-.41</b>	.14	.18	.15
<i>Realschule</i> <sup>2</sup>					<b>-.32</b>	.06	<b>.16</b>	.06	<b>-.29</b>	.06	<b>.16</b>	.06
<i>Gesamtschule</i> <sup>2</sup>					<b>-.25</b>	.05	<b>.15</b>	.05	<b>-.24</b>	.06	<b>.14</b>	.06
Grades G4 & G5*												
HISEI									-.04	.02	.02	.02
Cultural activities of the parents									.01	.02	.01	.02
HISCED									.00	.01	-.01	.01
Idealistic educational aspiration <i>Abitur</i> <sup>3</sup>									.07	.05	-.10	.06
1. generation <sup>4</sup>									.05	.12	.06	.13
2. generation <sup>4</sup>									.06	.07	.07	.07
Parental monitoring G3									.02	.02	.01	.02
Parent's contact with the school G2									.02	.02	.01	.02
Supportive classroom climate G5*												
Often trouble with teachers and classmates G5*												
CFI				.997				.994				.989
RMSEA				.109				.025				.024
SRMR				.018				.017				.015

Notes: significant coefficients are shown in **bold** ( $p < .05$ ). G: Grade (school year). Reference categories: 1: male, 2: *Gymnasium*, 3: idealistic aspiration *Hauptschule* or *Realschule* certificate, 4: no migration background. \*Intercept and Slope are not regressed on this variable.

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## 6. Discussion

### Summary

- Hypothesis 1: On average, students will report higher values of school enjoyment in 5<sup>th</sup> grade than in 4<sup>th</sup> grade
  - confirmed ✓
  - Results in line with previous research (Hagenauer et al., 2013; Harazd & Schürer, 2006; van Ophuysen, 2008)

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- Hypothesis 2: Disadvantaged children will report lower school enjoyment than non-disadvantaged children and experience a less favorable development during the transition.
  - not confirmed X
  - no significant effect of socio economic, socio cultural, educational and migration status and parental support on intercept or slope
  - Results in line with previous studies regarding no significant effect of a migration background on school enjoyment (Harazd & Schürer, 2006; van Ophuysen, 2008)



## 6. Discussion

### Significance

- Majority experiences the transition positively → impact on school enjoyment
  - How long does it last in the long term?
- Regarding school enjoyment, (e.g., socially) disadvantaged students are not at a disadvantage
  - No advantage either
- Practical implications
  - Schools should try to keep up this momentum after the transition for long term effects

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### Future research

- Effect of school enjoyment
  - on motivational characteristics, e.g., readiness for exertion?
  - on well-being at school?
  - on school achievement?

## 6. Discussion

### Strengths and Limitations

- Sample size
- Longitudinal data at the transition from primary to secondary level
- Available control variables (e.g., grades, background variables etc.)
  
- School enjoyment measured via a short scale (3 items)
- More elaborated scales including subscales (cf. van Ophuysen, 2009)
- Variables on individual level missing in Grade 4
  - E.g., self-concept and intrinsic motivation

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**Thank you for your attention!**



**Questions & Comments?**

Contact:

[melike.oemerogullari@fau.de](mailto:melike.oemerogullari@fau.de)

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# Appendix

## 4. Data and method

### Measures

#### Covariates defining “disadvantaged”

Highest ISEI	International Socio-Economic Index of Occupational Status (Ganzeboom, de Graaf & Treiman, 1992)
Highest ISCED	International Standard Classification of Education (cf. Ehmke & Siegle, 2005)
Idealistic aspiration	idealistic educational aspiration of the parent (0 = <i>Haupt- or Realschulabschluss</i> , 1 = <i>Abitur</i> )
Cultural activities	Participation in high culture (1 = <i>never</i> to 5 = <i>&gt; 5 times p.a.</i> ) e.g., “...visited an opera, a ballet or a classical concert?”
Migration background	generation status of the parents 2.5 <sup>th</sup> generation and above → no migration background
Parental monitoring G3	5 items 5-point Likert scale (1= <i>never</i> to 5= <i>always</i> ) e.g., “How often do you ask your child about how school was?”
Parent’s contact with the school G2	4 items 5-point Likert scale (1= <i>never</i> to 5= <i>very often</i> ) e.g., “How often do you visit the parent teacher conferences?”



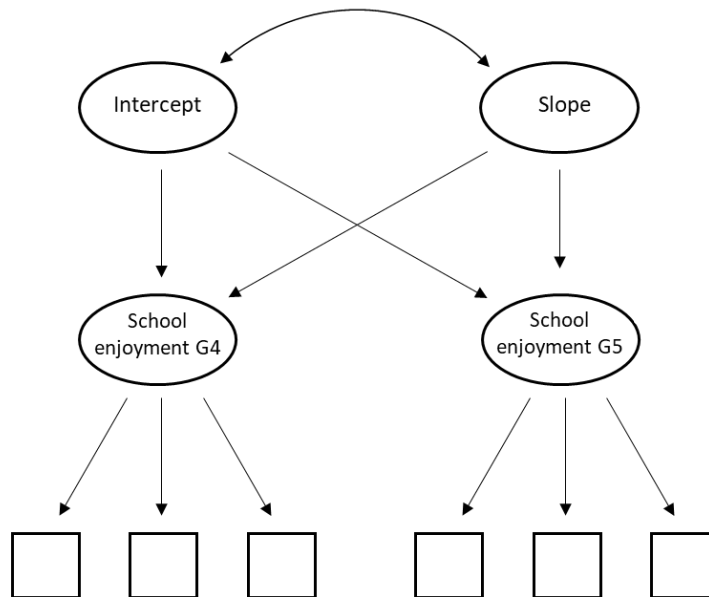
## 4. Data and method

### Method

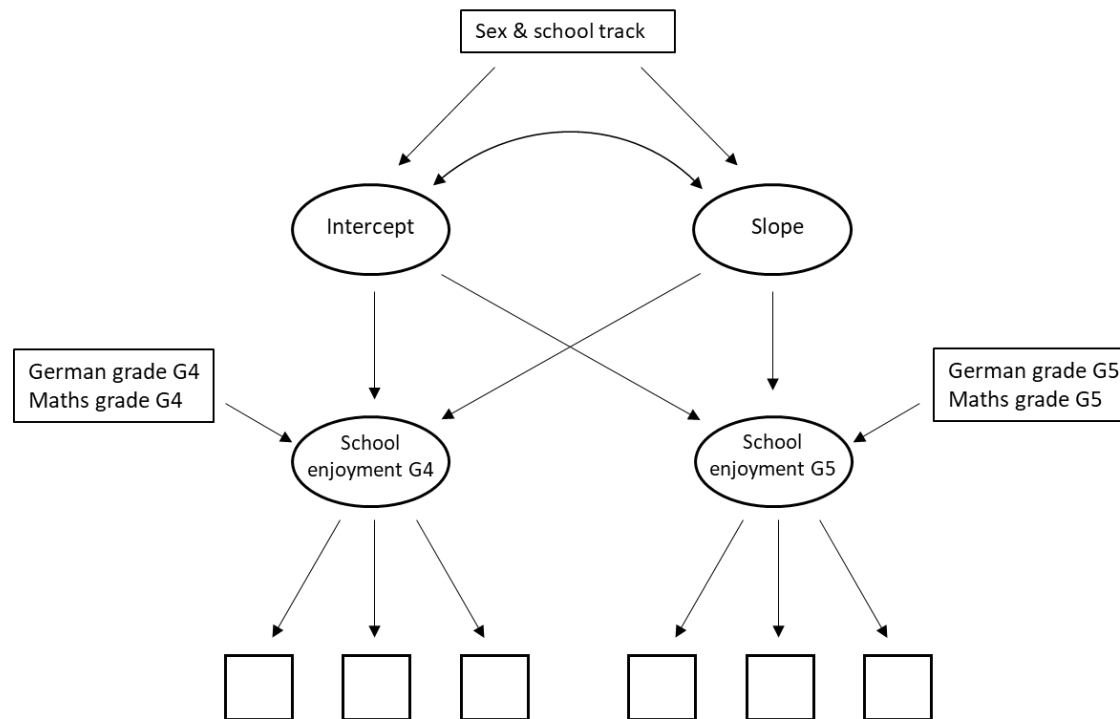
#### Latent growth curve modeling (LGCM)

- Between-person differences in within-person change over time
- Starting point in Grade 4 (intercept)
- Rate of change between Grade 4 and 5 (slope)
- Which variables affect the intercept or slope factor?
  
- Measurement invariance ✓
- Second Order LGCM with random effects in lavaan
- Full information maximum likelihood (FIML)
- Only two measurement points, i.e., growth form linear

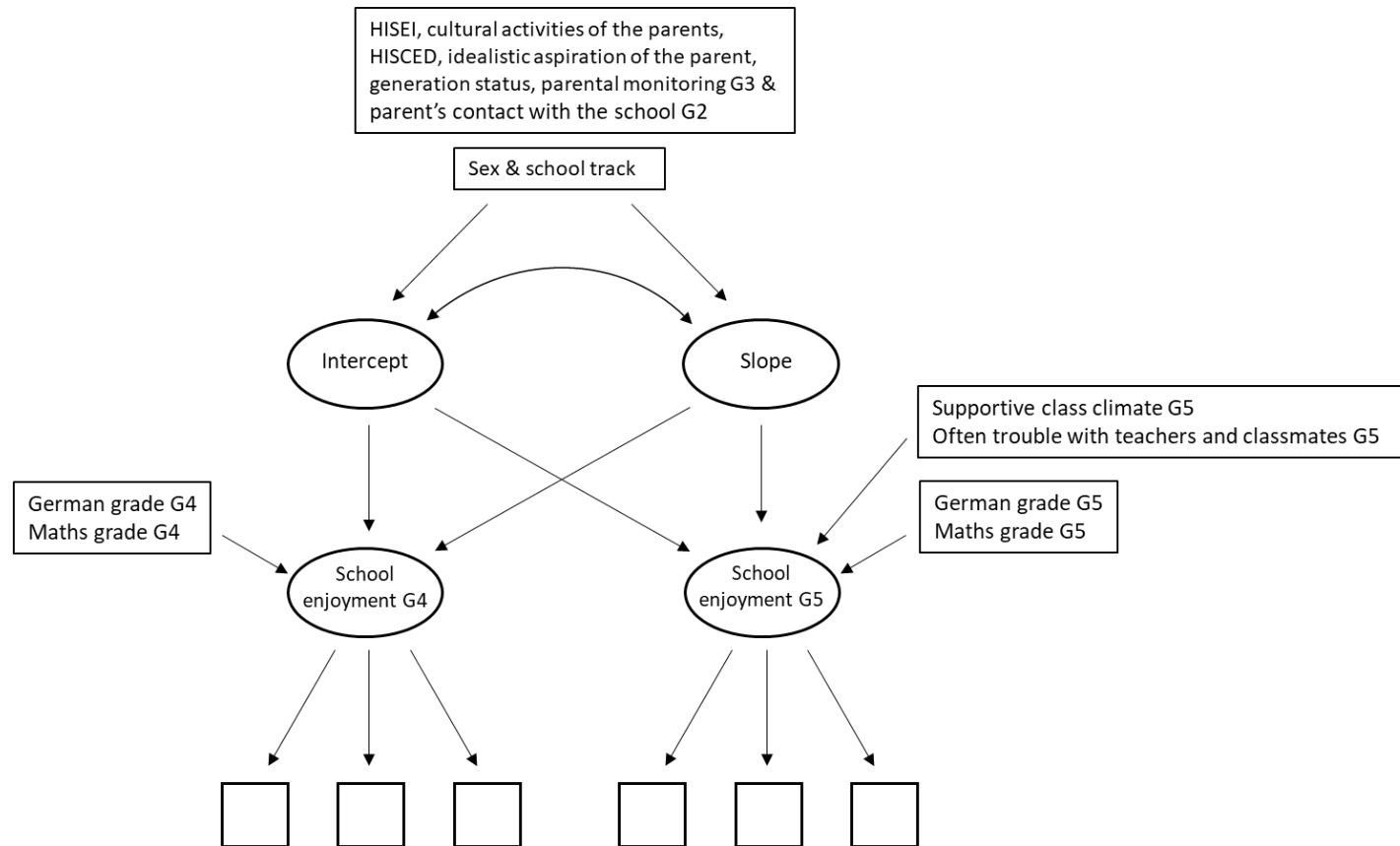
# Model 1



## Model 2



# Model 3



# 5. Results

## Development of school enjoyment

