RESL.eu
Reducing Early School Leaving in Europe

Findings from the RESL.eu Project

Every Student Matters –
Final Conference of CroCoos
Budapest, April 21st 2017

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www.resl-eu.org

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Overview

1. A short introduction to the RESL.eu Project
2. School Engagement and Motivational Development Theory
3. Towards a risk assessment tool for ESL/ELET

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Introduction

- RESL.eu Project
  - Comparative study in 9 EU member states
    (BE, ES, PL, PT, NL, SE, UK, (AU & HU)
  - Financed by EU 7th Framework Program
  - Period: February 2013 – January 2018

- Data used for this presentation (~PhD):
  - Data from both waves of Flemish (BE) student survey collected in the cities Antwerp and Ghent

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RESL.eu Research Plan

WP1: Theoretical en Methodological Framework

WP2: Field Exploration and Policy Analysis

WP3: Quantitative data:
- ➔ Exploring existing databases
- ➔ Longitudinal student survey
- ➔ Staff survey

WP4: Qualitative data:
- ➔ Longitudinal study of ESL/ELET
- ➔ School-based Prevention and Intervention
- ➔ Alternative Learning Pathways

WP5: Development of EWS and Promising Practice Models

WP6: Policy Recommendations

All RESL.eu Publications

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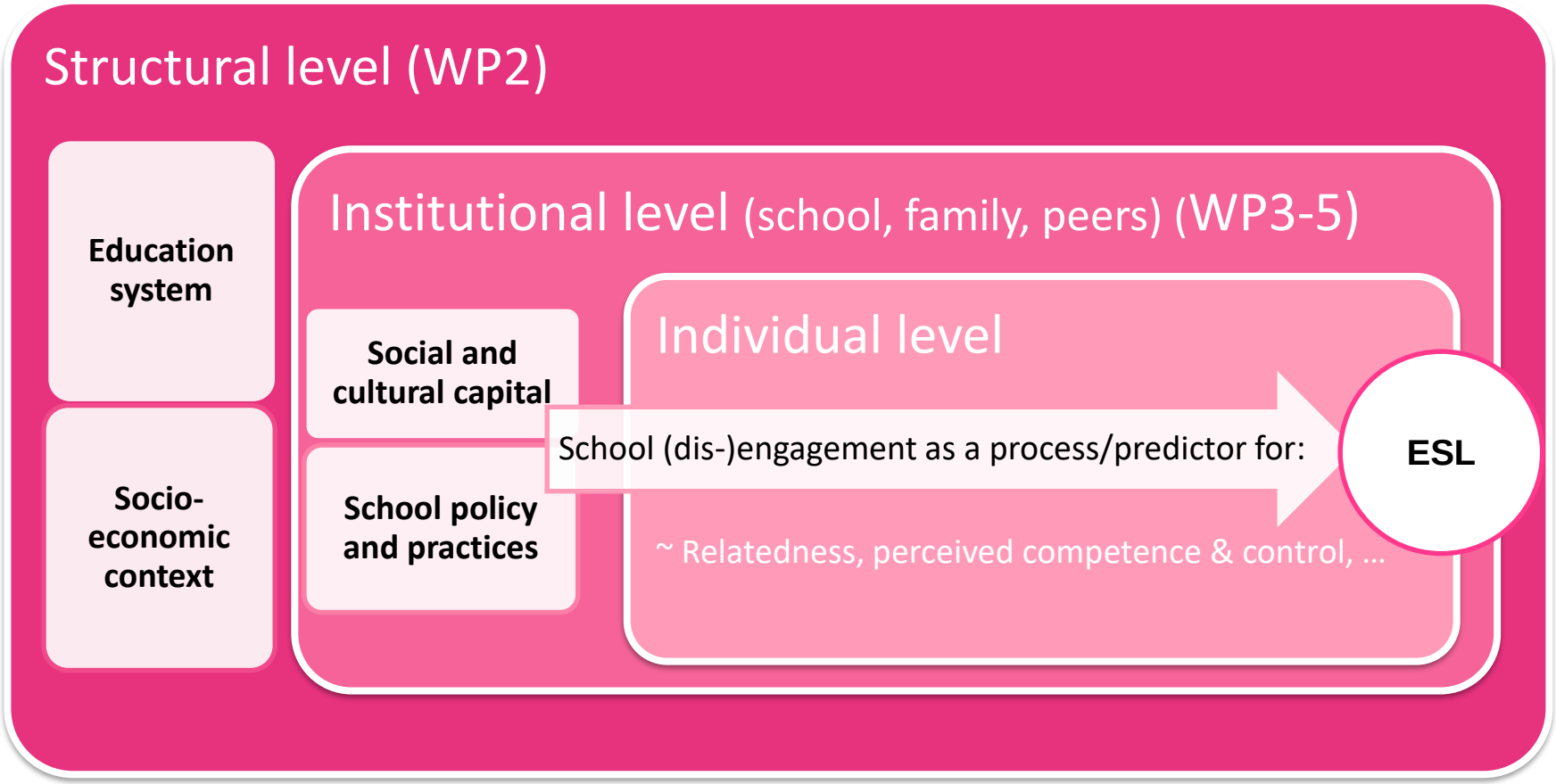
RESL.eu Conceptual model



RESL.eu Project Paper 2: Theoretical and methodological framework

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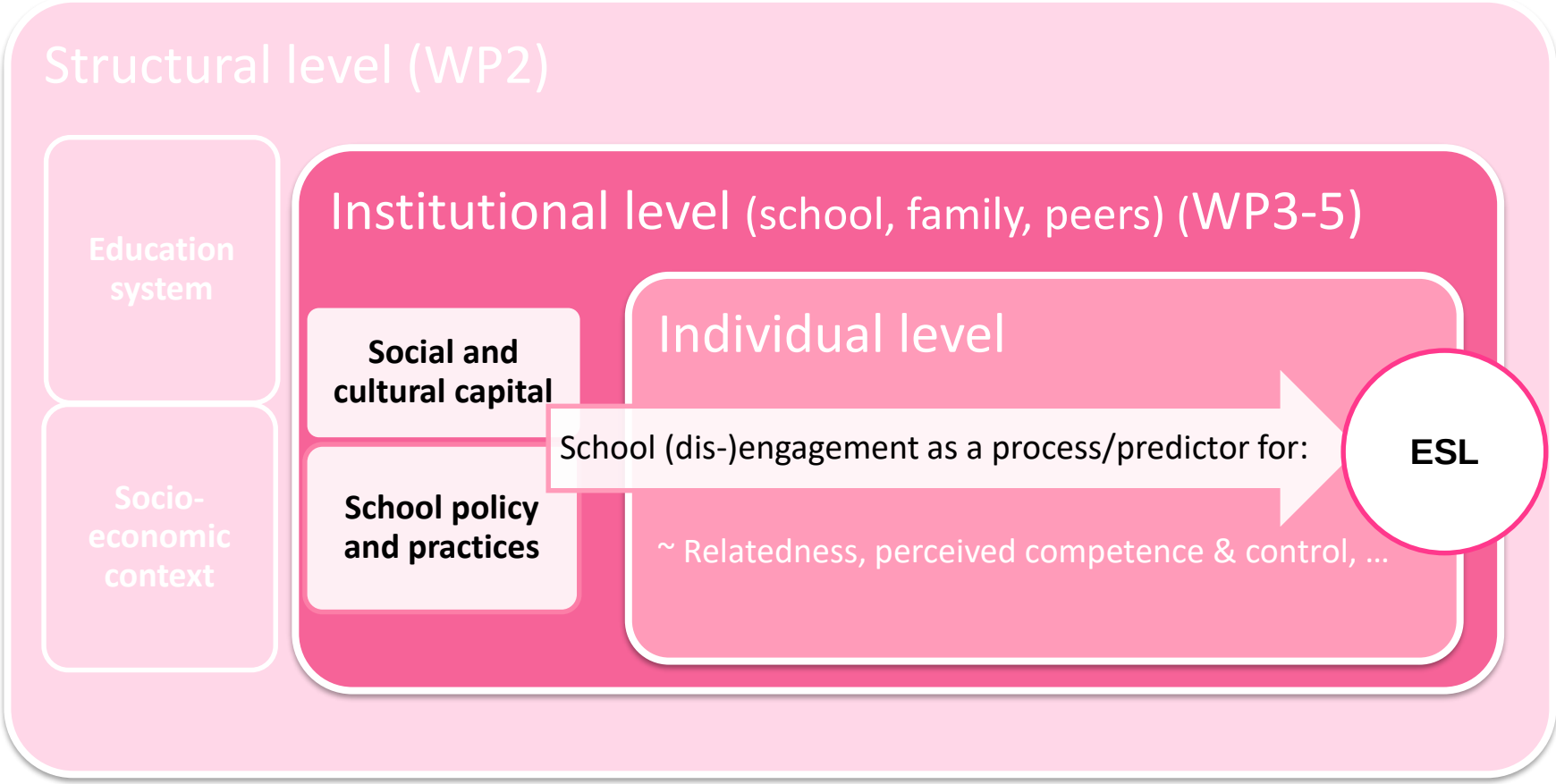
RESL.eu Conceptual model



RESL.eu Project Paper 2: Theoretical and methodological framework

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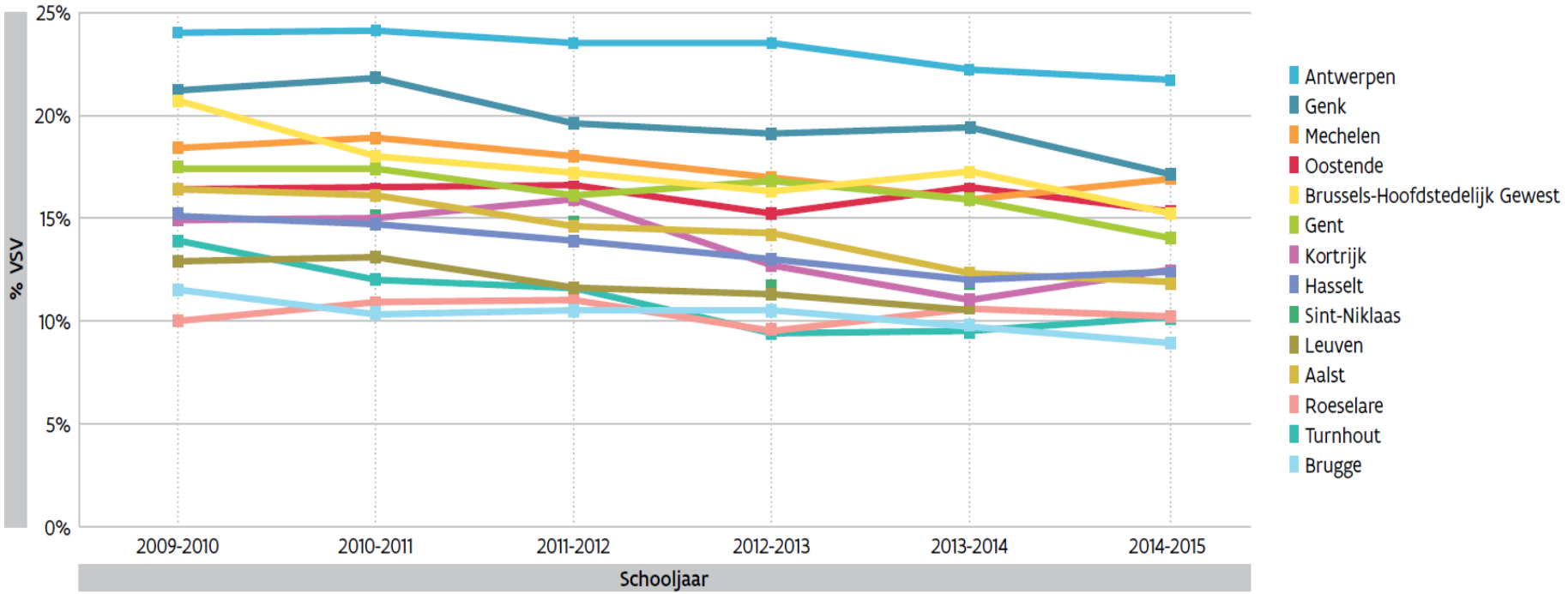
ESL in Flemish Urban Areas



Evolution in % of Early School Leavers according to the location of the school for the Flemish main cities and the Brussels Capital Region
Source: Vlaams Departement Onderwijs & Vorming, 2017

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ESL in Flanders

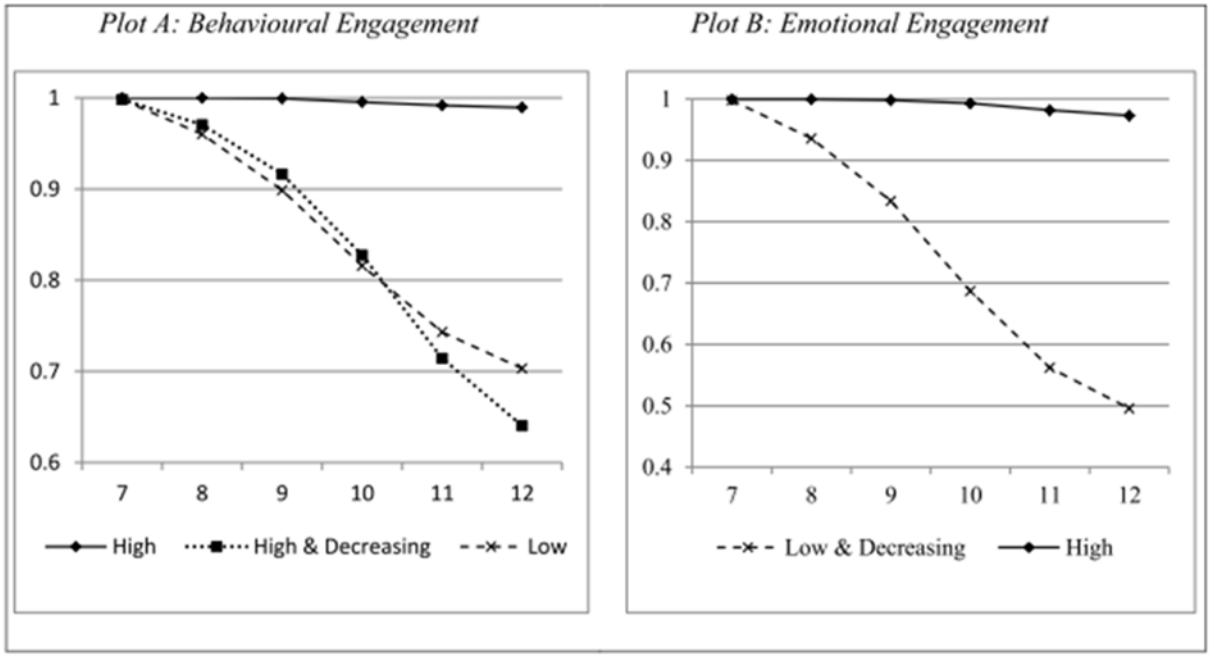
- Known **risk status** indicators (Who?):
  - Socio-demographic characteristics:
    - Males > females
    - Foreign nationality
    - Other home language than Dutch
    - Lower educated mother
  - School career characteristics:
    - Grade retention
    - (Work-based) VET
    - (Downward) educational track mobility

Source: Vlaams Departement Onderwijs & Vorming, 2017

School Engagement as a Predictor for Early School Leaving

- Low school engagement predicts ESL, also in Flanders

Figure 1: estimated survival probability of (a) behavioural engagement and (b) emotional engagement by grade.



Source: Lamote et al., 2013;
Based on Longitudinal Research in Flemish Secondary Education

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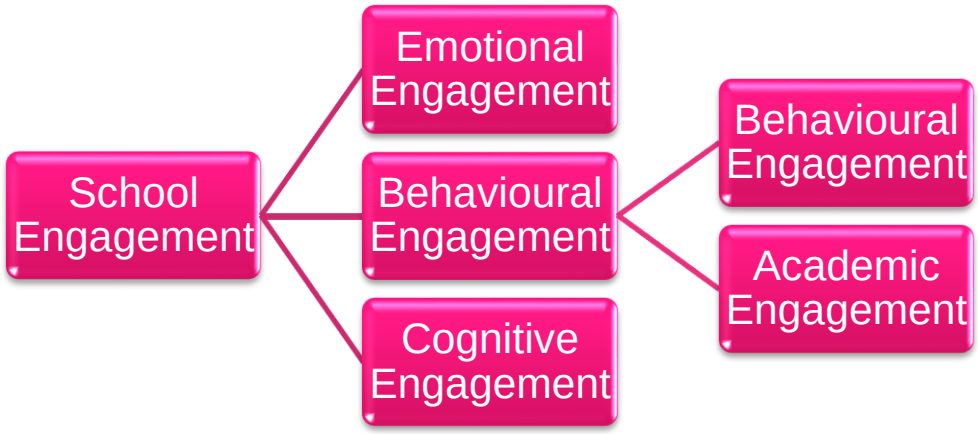
School Engagement as a Multidimensional Concept



- **Fredricks** et al. (2004) proposed a 3-dimensional concept
  - **Emotional** component: identification with 'the school'/'education'
  - **Cognitive** component: self-regulated/strategic learning approach
  - **Behavioural** component: participation in school-related activities

A Theoretical Model for Motivational Development

- From a theory on **school engagement**…
  - Lacks theory on the external relations of the different school engagement components
- … to a theory on **motivational development**
  - Distinguishes between emotional/cognitive (internal) factors and behavioural (externalised) factors

And includes contextual facilitators

A Theoretical Model for Motivational Development

- Self-System Model of Motivational Development (SSMMD; e.g. Connell & Welborn, 1991; Skinner et al., 2009)
  - **Self-system level:** Central importance of satisfying the basic human needs of **feeling related**, perceived **competence** and **control** in order to be motivated
  - **Contextual facilitators** for satisfying these needs at the self-system level (e.g. parental, teacher and peer support)
  - Internalised perceptions on relatedness, perceived competence and control are externalised through **behavioural engagement**
  - Behavioural engagement predicts **educational outcomes** such as educational attainment and early school leaving

A Theoretical Model for Motivational Development

- Self-System Model of Motivational Development
  (Operationalised by Fall & Roberts, 2012)

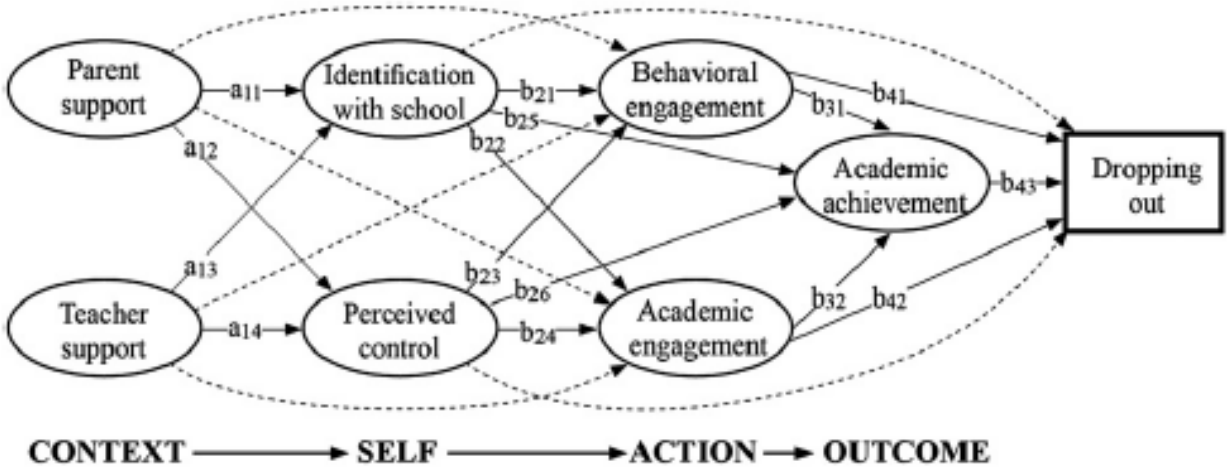


Fig. 1. Self-system model of motivational development applied to dropping out of high school. Dotted lines represent significant indirect effects, and solid lines indicate significant direct effects. Adapted from Connell and Wellborn (1991); Skinner et al. (2008); and Skinner et al. (2009).

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Operationalisation

Risk Status

- **Socio-demographics** (gender, ethnicity and SES by parental occupational groups)
- **School career variables** (track, grade retention, school mobility, prior achievement)

Context

- **Parental support** (socio-emotional, school, formal involvement and parental control)
- **Peer support** (socio-emotional support and peers valuing education)
- **Teacher support**

Self-system

- **Relatedness** (sense of school belonging and valuing school education)
- Perceived **competence** and **control** (academic self-concept and self-regulated learning)

Engagement

- **Behavioural engagement** (school compliance; *no positive operationalization available*)
- **Academic engagement** (attentiveness in class and study behaviour)

ESL

- **Early School Leaving** = Student leaving mainstream secondary education without an upper secondary education qualification (ISCED III level)

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Structural Equation Modelling

Risk Status

- **Socio-demographics** (gender, ethnicity and SES by parental occupational groups)
- **School career variables** (track, grade retention, school mobility, prior achievement)

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Sample

- Student survey:
  - 1st wave: Spring 2014
    - Online or paper-and-pencil questionnaire in class context with researcher present
    - 41 *urban* schools in Antwerp and Ghent
    - 3640 students in the 4th and 6th year of secondary education (VET (3) and academic)
  - 2nd wave: Spring 2016
    - Web or phone survey (also via WhatsApp)
    - +/- 50% retention; 12% ESL

Findings: Contextual support

- **Parental support:**
  - Socio-emotional support:
    - **(+) Attentiveness in class** **(0,083); 0,087**
    - **(+) Study behaviour** **(0,075); 0,087**
  - School support:
    - **(+) Attentiveness in class** **(-0,098); 0,036**
  - Formal school involvement:
    - **(-) School compliance** **(-0,048); -0,067**
    - **(++) Study behaviour** **(0,124); 0,123**
  - Parental control:
    - **(+) School compliance** **(0,045); 0,061**
    - **(-) Attentiveness in class** **(-0,05); -0,034**
    - **(+) Study behaviour** **(0,065); 0,08**

(Direct) and total effects are presented;
Significant effects (p<,05) only.

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Findings: Contextual factors

- **Peer support:**
  - Socioemotional peer support:
    - **(-) Attentiveness in class*** **(-0,091);-0,031**
    - **(-) Study behaviour*** **(-0,057); -0,028**
  - Peers valuing school education:
    - **(+) School compliance** **(0,046); 0,092**
    - **(++) Study behaviour** **(0,159); 0,207**
- **Teacher support:**
    - **(++) School compliance** **(0,169); 0,191**
    - **(++) Attentiveness in class** **(0,033); 0,209**
    - **(++) Study behaviour** **(0,074); 0,203**

(Direct) and total effects are presented;
Significant effects (p<,05) only.

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Findings: Self-system factors

- Perceived academic competence:
  - **(-) School compliance** **-0,082**
  - **(++) Attentiveness in class** **0,26**
  - **(+) Study behaviour** **0,049**
- Perceived control over academic performances:
  - **(+) Attentiveness in class** **0,088**
  - **(+) Study behaviour** **0,09**
- School belonging
  - **(--) School compliance** **-0,11**
  - **(-) Attentiveness in class** **-0,052**
- Valuing school education
  - **(++) School compliance** **0,204**
  - **(++) Attentiveness in class** **0,29**
  - **(++) Study behaviour** **0,236**

(Direct) and total effects are presented;
Significant effects (p<,05) only.

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Stepwise Logistic Regression

Step 1+2+6	Risk Status	• **Socio-demographics** (gender, ethnicity and SES by parental occupational groups) • **School career variables** (track T1, grade retention T1, school mobility T1, prior achievement T1, grade retention T2 and track mobility T2)
Step 3	Context	• **Parental support** (socio-emotional, school, formal involvement and parental control) • **Peer support** (socio-emotional support and peers valuing education) • **Teacher support**
Step 4	Self-system	• **Relatedness** (sense of school belonging and valuing school education) • Perceived **competence** and **control** (academic self-concept and self-regulated learning)
Step 5	Engagement	• **Behavioural engagement** (school compliance; *no positive operationalization available*) • **Academic engagement** (attentiveness in class and study behaviour)
	ESL	• **Early School Leaving** = Student leaving mainstream secondary education without an upper secondary education qualification (ISCED III level)

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Predicting ESL

1. Socio-demographic background variables

- All known risk status variables confirmed

(Males, lower SES groups, ethnic minorities more at risk)

2. Educational career characteristics (2014)

- Students in VET tracks more at risk
- Grade retention increases risk of ESL, especially >1 year
- Adding the educational career variables explains the effects of gender and SES

Yet, the differences between ethnic groups increase

- ➔ Indication for interaction effects between ethnic background and school career characteristics
- ➔ Possible effects of high levels of ethnic track/school segregation

Predicting ESL

3. Contextual support:

- No significant direct effects of contextual support on ESL

Yet, remember how contextual support influences self-system level and engagement variables (!)

- Adding contextual support variables explains a significant part of the differences between ethnic groups and between educational tracks

Predicting ESL

4. Self-perceptions and feelings of relatedness:

- Valuing the importance of education for one's future opportunities has a direct and significant protective effect on ESL
- Also, adding self-perceptions and feelings of relatedness explains even more of the differences between ethnic minority groups and educational tracks in VET

However, even when taking into account contextual support and self-system level variances:

- Native students and students in the academic track less at risk of ESL

Predicting ESL

5. Engagement Behaviour:

- Only study behaviour and attention in class significantly predicts ESL, not school compliance

6. Recent educational career characteristics (T2)

- Late school and ‘downward’ track changes increases the risk of ESL
- These effects of school and track mobility later on in the school career capture the effects student’s study behaviour and attention in class on ESL
- Grade retention remains a strong risk factor for ESL throughout the full model (!)

Conclusions

- Theory on motivational development theoretically/ empirically complements school engagement theory
- Theoretical hypotheses of SSMMD largely confirmed by data from Flemish urban secondary education

However:

- Hypotheses about the role of socio-emotional peer support and sense of school belonging were contradicted
  - ➔ Testing of mediation by peers valuing school education
  - ➔ Testing for effects of +/- shared school culture
- Explained variance in engagement behaviour more than doubled by **adding the more '*malleable*' contextual support and self-system factors** on top of risk status characteristics
- **Addressing structural factors** like grade retention, educational tracking and school/track mobility are important for RESL

What's next for RESL.eu?

- WP5:
  - Development of **Risk Assessment Tool** based on international student survey (individual an school level assessment tool)
  - Development of **Promising Practice Models** based on qualitative fieldwork in school and alternative learning pathways and staff survey
- WP6:
  - Policy briefs including **Policy recommendations**
  - **Policy meeting** in cooperation with the ET2020 Working Group on School Policy (EU Commission, DG Education and Culture)
    - (Brussels, November 2017, EC event's invitees only)
- Academic **closing conference**
  - Antwerp, January 22-24
  - Open for all, including call for papers

➔ Keep an eye on our website: www.resl-eu.org

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Thank you for your attention!

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