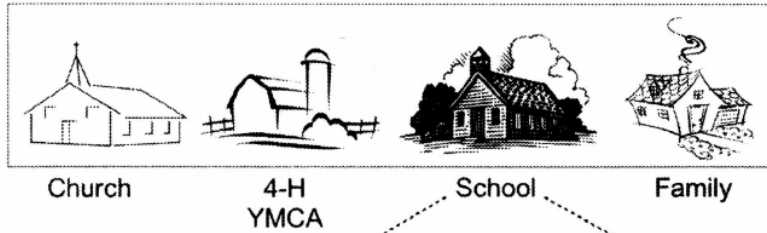




**There's (dis)engagement everywhere:  
person-oriented profiles of engagement  
with learning and school and their  
predictors at age 13 years**

**Dr Jennifer Symonds  
Dr Ela Polek**

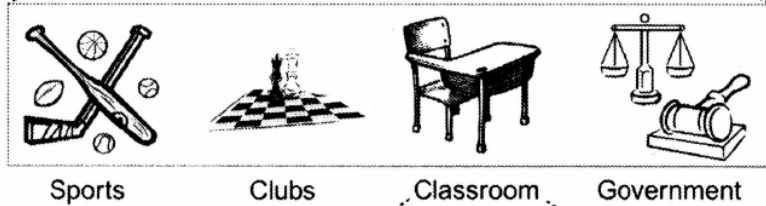
### 1. ENGAGEMENT WITH PROSOCIAL INSTITUTIONS



Promotes  
**POSITIVE DEVELOPMENT**  
Protects against  
**RISKY BEHAVIOR &  
DELIQUENCY**

Engagement indicators  
in the age 13 GUI data

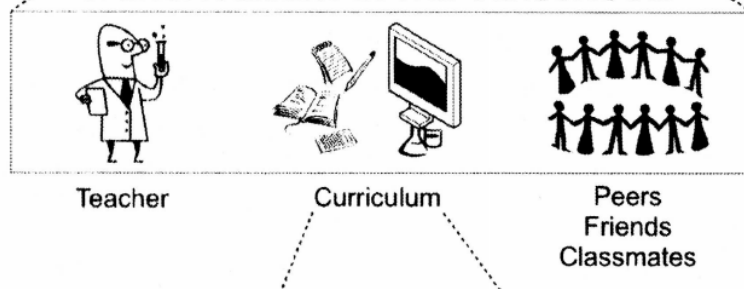
### 2. ENGAGEMENT WITH SCHOOL



Promotes  
**RETENTION &  
GRADUATION**  
Protects against  
**DROPOUT**

**SCHOOL LIKING**  
“How do you feel about  
school in general?”  
*Hates to likes very much*

### 3. ENGAGEMENT IN THE CLASSROOM



Promotes  
**ACHIEVEMENT**  
Protects against  
**FAILURE**

**INTEREST IN LEARNING**  
“How interesting do you find  
English/Irish/maths/science?”  
*Interesting to not very interesting*

**EASE OF LEARNING**  
“How difficult (reversed) do you  
find English/Irish/maths/science?”  
*Difficult to not very difficult*

Skinner, E. A., & Pitzer, J. R. (2012). Developmental dynamics of student engagement, coping and everyday resilience. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on school engagement* (pp. 21-44). New York: Springer.



# Research questions

1. **To what extent do individual children's experiences predict engagement, after controlling for which school children attend?**

*MLM with group mean centring at level 1*

2. **To what extent does school environment predict engagement, after controlling for individual children's experiences?**

*MLM with grand mean centring at level 1*

3. **What are the most salient profiles of engagement in the sample?**

*Latent profile analysis*

4. **To what extent are those profiles characterised by individual children's experiences and school environment?**

*Same method as 1 & 2*



# Multilevel predictors: child level

Female (vs male)	PCG closeness with child (Pianta)
PCG economic capital (factor scores of med. card, SES, income)	Number of close friends (0 – 11)
	Bullied (vs not)
PCG highest educational level	Teacher motivation ( <i>M</i> of 6 items $\alpha = .65$ )
Has religious orientation (vs none) 9 years	Teacher discipline ( <i>M</i> of 2 items $\alpha = .67$ )
PCG ethnic minority (vs majority)	Extracurricular activities ( <i>M</i> of 5 items)
Special needs (vs none)	
Drumcondra total logit score 9 years	

All predictors measured at 13 years unless indicated



# Multilevel predictors: school level

DEIS disadvantaged school (vs not)	Teacher motivation (aggregate)
Parent educational level (aggregate)	Teacher discipline (aggregate)
School size (small to large)	Adequacy of number of teachers (1 item)
Coeducational (vs single sex)	Adequacy of learning support (1 item)
Irish speaking school (all + some) vs not	Adequacy of school facilities (M of 6 items $\alpha = .76$ )
School has religious denomination (vs none)	Percentage of parents at PT meetings
Amount of foreign-national pupils (0 – 330)	Number of extracurricular activities
Average daily attendance	Anti-bullying programme (vs none)
	Bullying (aggregate)

Predictors taken from Principals' questionnaire or are school aggregates of child/PCG responses



# Predictors of school liking



- Parent is ethnic minority ( $d = 8.20$ )
- Teacher motivates child more ( $d = 1.84$ )
- Child is religious ( $d = .71$ )
- Higher economic capital ( $d = .49$ )
- Child more extracurricular activity ( $d = .30$ )
- Child is female ( $d = .30$ )



- Classmates' parents are more educated ( $d = .23$ )
- School is coeducational ( $d = .21$ )
- More learning support staff ( $d = .07$ )

# Predictors of interest in learning



- Parent is ethnic minority ( $d = 3.73$ )
- Teacher motivates child more ( $d = 1.19$ )
- Teacher disciplines child less ( $d = .38$ )
- Child is not bullied ( $d = .36$ )
- Child more extracurricular activity ( $d = .27$ )
- Child has SEN ( $d = .23$ )
- Child is male ( $d = .14$ )
- Child higher achievement ( $d = .06$ )

- Less bullying in school ( $d = .39$ )

# Predictors of ease of learning



- Child is not religious ( $d = 1.43$ )
- Teacher motivates child more ( $d = .74$ )
- Teacher disciplines child less ( $d = .38$ )
- Child has higher achievement ( $d = .23$ )
- Child is male ( $d = .22$ )

- Irish speaking school ( $d = .37$ )
- Classmates' parents are more educated ( $d = .10$ )





# Variable centred models: conclusions

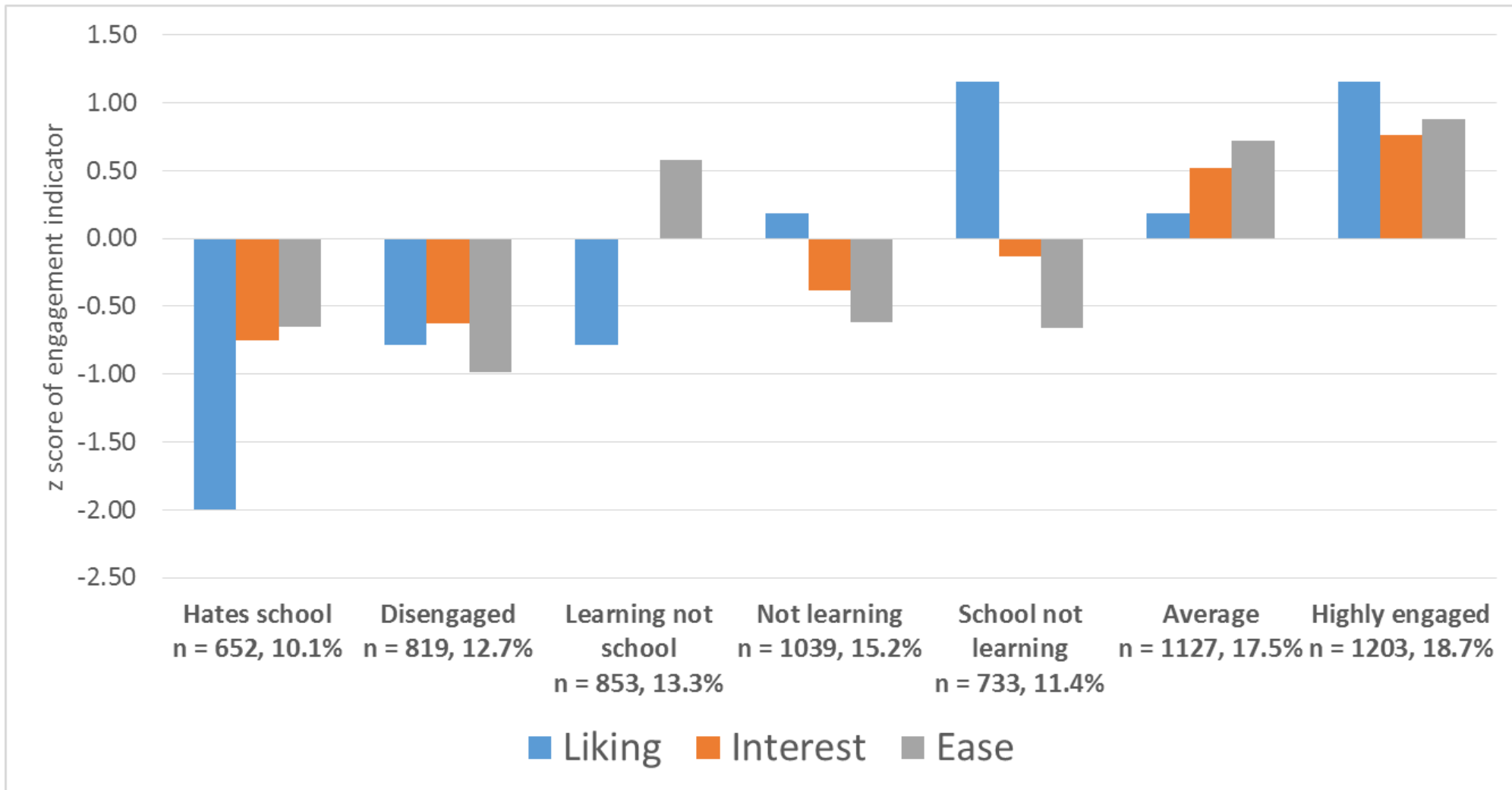
- 1. Engagement varies mainly *within* schools**
- 2. Parents' ethnicity is a key factor for liking and interest**
- 3. Teacher motivation and discipline are very important**
- 4. More females like school but more males enjoy learning**
- 5. Bullying of child and in school links to interest in learning**
- 6. Extracurricular activity links to liking & interest, not ease**
- 7. Children find learning easier in Irish speaking schools**
- 8. Economic capital only important for liking school**



# Latent profile analysis model fit statistics

	Number of profiles									
Model fit statistics	1	2	3	4	5	6	7	8	9	10
Akaike	54558.67	52751.37	52427.11	44327.70	44186.59	44167.96	43850.45	43833.53	43836.98	51301.65
Bayesian	54599.28	52819.05	52521.86	44449.53	44335.49	44343.93	44053.50	44063.65	44094.16	51585.91
Adjusted BIC	54580.22	52787.27	52477.37	44392.33	44265.57	44261.31	43958.16	43955.60	43973.41	51452.44
Entropy	-	0.583	0.538	0.994	0.916	0.832	0.819	0.793	0.831	0.755
Vuong-Lo_Mendell-Rubin	-	0.000	0.000	0.000	0.000	0.001	0.000	0.136	0.567	1.000
Lo-Mendell-Rubin	-	0.000	0.000	0.000	0.000	0.001	0.000	0.138	0.567	1.000

# Latent profiles of engagement





# Latent profile intraclass correlations

Profile	Correlation
Hates school	.01
Disengaged	.00
Learning not school	.01
Not learning	.01
School not learning	.01
Average	.00
Highly engaged	.01





# Predictors of negative adaptation (22.8%)

Hates school (10.1%)		Disengaged (12.7%)	
	d		d
Parent is ethnic majority	.42	Parent is ethnic majority	.39
Child is not religious	.26	Teachers motivate child less	.19
Teachers motivate child less	.24	Teachers discipline child more	.09
Child is bullied	.16	Child is FEMALE	.05
Parent has lower economic capital	.15		
Teachers discipline child more	.13		
Child has less extracurricular activity	.06		
School is single sex	.05		
Classmates' parents less educated	.05		



# Predictors of mixed adaptation (40.9%)

Learning not school (13.3%)	d	School not learning (11.4%)	d
Child is religious	.16	Parent is ethnic majority	.46
Child is MALE	.15	Teachers motivate child more	.11
Classmates have lower achievement	.12	Child is FEMALE	.08
Teachers motivate child less	.11	Child has lower achievement	.05
Child has less extracurricular activity	.04		
Child has higher achievement	.04		
Teachers discipline child more	.03		
School has less learning support	.03		



# Predictors of mixed adaptation (continued)

Not learning (16.2%)	d
School has religion	.64
Parent has higher economic capital	.25
School has no DEIS subsidies	.19
School has less teacher discipline	.18
Teachers motivate child less	.09
Child has lower achievement	.03
Parent is less educated	.01
Parent is less close to child	.01



# Predictors of positive adaptation (36.2%)

Average (17.5%)	d	Highly engaged (18.7)	d
Teachers motivate child more	.13	Teachers motivate child more	.39
Child has SEN	.08	Teachers discipline child less	.12
Teachers discipline child less	.07	Child is FEMALE	.11
Child is MALE	.05	Classmates' parents more educated	.06
Child has higher achievement	.05	Child has higher achievement	.03
		School has more learning support	.02
		Parent is more educated	.01





# Person centred models: conclusions

- 1. All profiles were in all types of schools**
- 2. Parents' ethnicity only influenced negative profiles**
- 3. Teacher motivation and discipline were very important**
- 4. Economic capital was only important for the most disengaged children**
- 5. More females were highly engaged, liked school *and* were disengaged**
- 6. More males liked learning not school, or had an average profile**
- 7. The achievement and parental education of classmates had tiny effects**
- 8. Children who hated school were bullied more often**
- 9. Childhood achievement was not a strong predictor, but might decline once child is in a dynamic system of disengagement (like in LSYPE)**



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