



**Fás Aníos in Éirinn**  
Growing Up in Ireland

*A Latent Class Analysis of Mental Health Symptoms in Primary School Children:  
Exploring Associations with School Attendance Problems*

Jane Sharpe University of Galway, Brendan Bunting Ulster University, Caroline  
Heary, University of Galway

# Aim

- **Aim:** The aim of the paper was to create a more nuanced understanding of the relationship between subtypes of mental health symptoms and the frequency of school absenteeism in primary school children.
- **Data:** Growing up In Ireland RMF dataset child cohort ('98) wave 1.
- **Research Questions:**
  - i) What classes of mental health difficulties emerge based on measures of emotional and behavioural symptoms taken from a nationally representative sample of Irish 9-year-olds (GUI cohort '98)?
  - ii) To what extent does the frequency of school absenteeism vary across the mental health classes?
  - iii) What is the relationship between mental health classes and systemic risk factors for School Attendance Problems at 9 years?

# Measures

What classes of mental health difficulties emerge based on measures of emotional and behavioural symptoms taken from a nationally representative sample of Irish 9-year-olds (GUI cohort '98)?

Measures

*Parents report Strength and Difficulty Questionnaire (SDQ)*

Twenty items from the four subscales representing adjustment difficulties: Emotional Problems, Conduct Problems, Hyperactivity–Inattention and Peer Problems

To what extent does the frequency of school absenteeism vary across the mental health classes?

*Days Absent*

Parents report of days absent during the last school year. The data was trichotomized as  $\leq 10$  days, between 11-20 days, and  $> 20$  days absent using percentage cut off points for days absent based on The Irish Education Welfare School Attendance Framework (TUSLA, 2015) and The Response to Intervention (RtI) model (Kearney & Graczyk, 2014).

# Results

## Classes

Four Classes of Mental Health Symptoms were Identified

High Risk of  
Emotional and  
Behavioural  
Difficulties

(N=1282)

High Risk of  
Emotional  
Difficulties

(N=1734)

High Risk of  
Behavioural  
Difficulties

(N=2718)

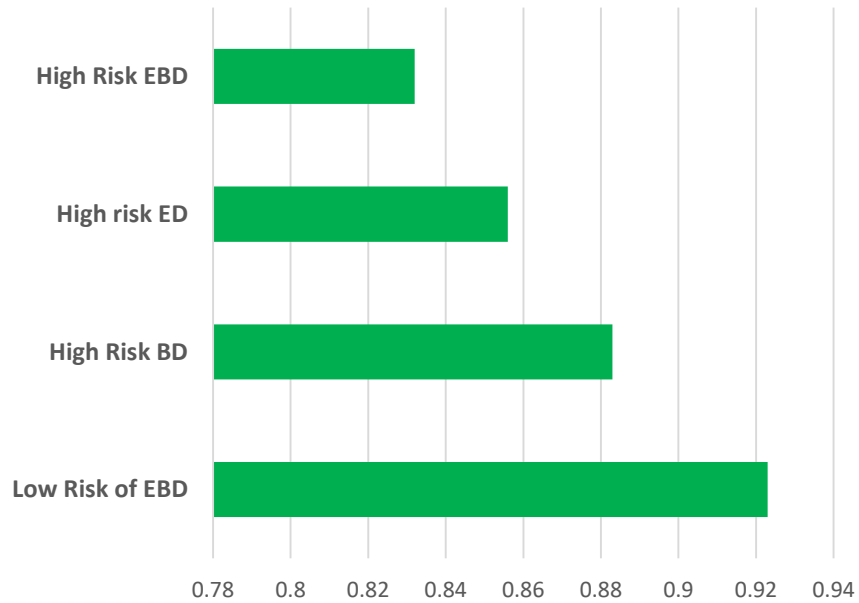
Low Risk of  
Emotional and  
Behavioural  
Difficulties

(N=2819)

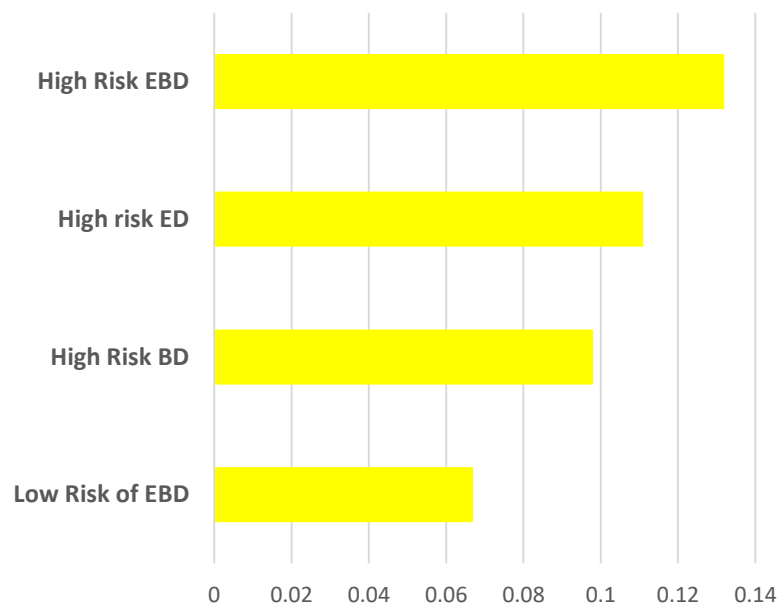
# Results

## Outcome - Variance Between Days Absent age 9

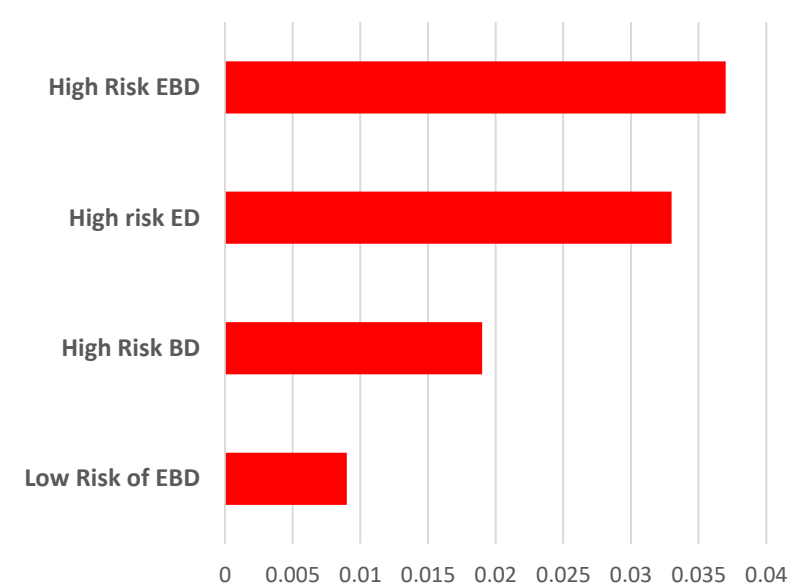
### 0-10 days



### 11-20 days



### >20 days

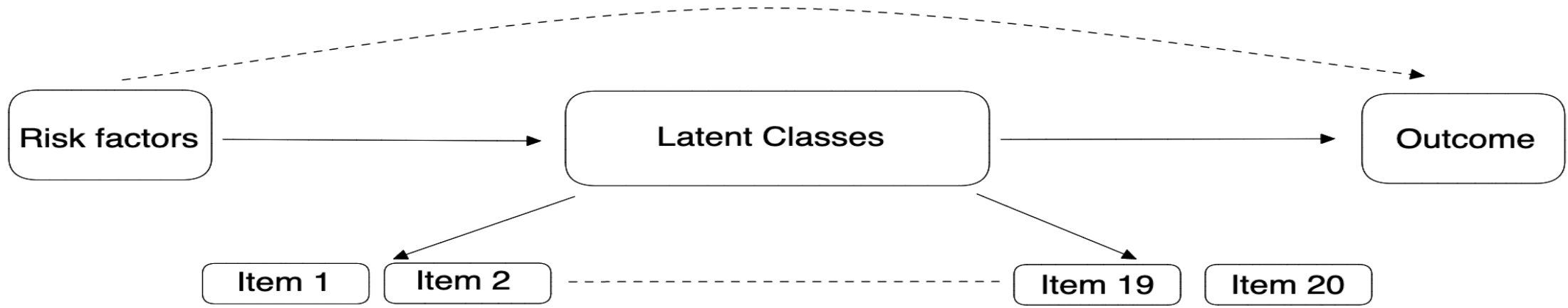
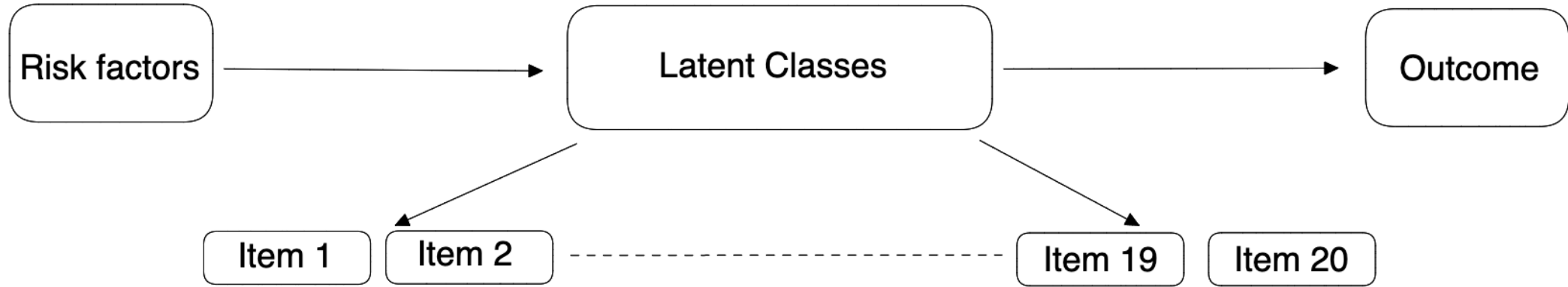


<p>High Risk of EBD DAYS ABSENT (DA)</p> <p><u>Category 1 &lt;10 days</u> Category 2 11-20 days Category 3 &gt;20 days</p>	<p>Outcome (Days Absent) OR for &gt;10</p> <p>2.433(0.00)</p>
<p>High Risk of ED DAYS ABSENT (DA)</p> <p><u>Category 1 &lt;10 days</u> Category 2 11-20 days Category 3 &gt;20 days</p>	<p>Outcome (Days Absent) OR for &gt;10</p> <p>2.208(0.00)</p>
<p>High Risk of BD DAYS ABSENT (DA)</p> <p><u>Category 1 &lt;10 days</u> Category 2 11-20 days Category 3 &gt;20 days</p>	<p>Outcome (Days Absent) OR for &gt;10</p> <p>1.597(0.00)</p>

# Risk Factors

What is the relationship between mental health classes and systemic risk factors for School Attendance Problems at 9 years?

SCHOOL	FAMILIES	SOCIO-DEMOGRAPHICS
BULLYING	PARENTAL PSYCHOPATHOLOGY	GENDER
DISLIKE OF TEACHER	PARENT CONFLICT	LOW SOCIO ECONOMIC STATUS
DISLIKE OF SCHOOL	PROBLEMS AT HOME EFFECTING PARTICIPATION AT SCHOOL REPORTED BY TEACHER	





# Effect of Risk Factors on Classes

Risk Factors	High risk EBD		High risk ED		High risk BD	
	OR	95% CI	OR	95% CI	OR	95% CI
Bullying	2.672	(2.175 – 3.282)	1.554	(1.297 – 1.862)	1.489	(1.272 – 1.742)
Dislike teacher	2.099	(1.370 – 3.216)	1.214	(0.752 – 1.959)	1.714	(1.196 – 2.455)
Dislike school	2.485	(1.822 – 3.388)	1.251	(0.867 – 1.804)	1.734	(1.340 – 2.243)
Parent Depression	4.881	(3.488 – 6.910)	2.488	(1.752 – 3.533)	1.305	(0.901 – 1.891)
Parent Conflict*	3.029	(2.196 – 4.179)	2.487	(1.813 – 3.410)	1.807	(1.343 – 2.432)
Problems at Home	4.949	(3.014 – 8.127)	1.313	(0.737 – 2.340)	1.341	(0.783 – 2.297)
Gender	0.742	(0.600 – 0.919)	1.413	(1.171 – 1.705)	0.578	(0.499 – 0.668)
Socio economics*	3.882	(2.429 – 6.204)	2.011	(1.250 – 3.236)	1.801	(1.161 – 2.793)
	1.916	(0.01)	1.842	(0.01)	1.386	(0.00)

# Key Findings

- The high risk of EBD & ED classes had the highest percentage of absenteeism, indicating that emotional difficulties are most associated with SAP's at 9 years.
- The EBD, had the highest odds of absenteeism and the strongest association with all risk factors, indicating that children with mixed mental health symptoms experience the most negative outcomes And have the greatest number of risk factors.
- Impact of risk factors varied between classes. Behavioural difficulties- more associated with school risk factors, emotional difficulties- more associated with family factors.
- Low socio-economic status and parent conflict had a direct effect on absenteeism. The impact of the remaining risk factors was mediated through the mental health of the child, indicating that the risk factors are not likely to impact school attendance unless they are effecting the wellbeing of the child.

# Recommendations

- The findings suggest that school attendance strategies for primary schools should include information about different types of SAP's, the effect of risk factors, early warning signs and resources that cultivate the emotional and behavioural wellbeing of the child.
- Exploring reasons for attendance in the high risk groups and identifying protective factors went beyond the scope of this study and are recommended for future research.