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Fás Aníos in Éirinn
Growing Up in Ireland

Socioeconomic inequalities in the oral health of Irish adolescents

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Background

- Socioeconomic oral health inequalities
- Explanatory models
 - Material
 - Behavioural
 - Psychosocial
 - Life-course

Objectives

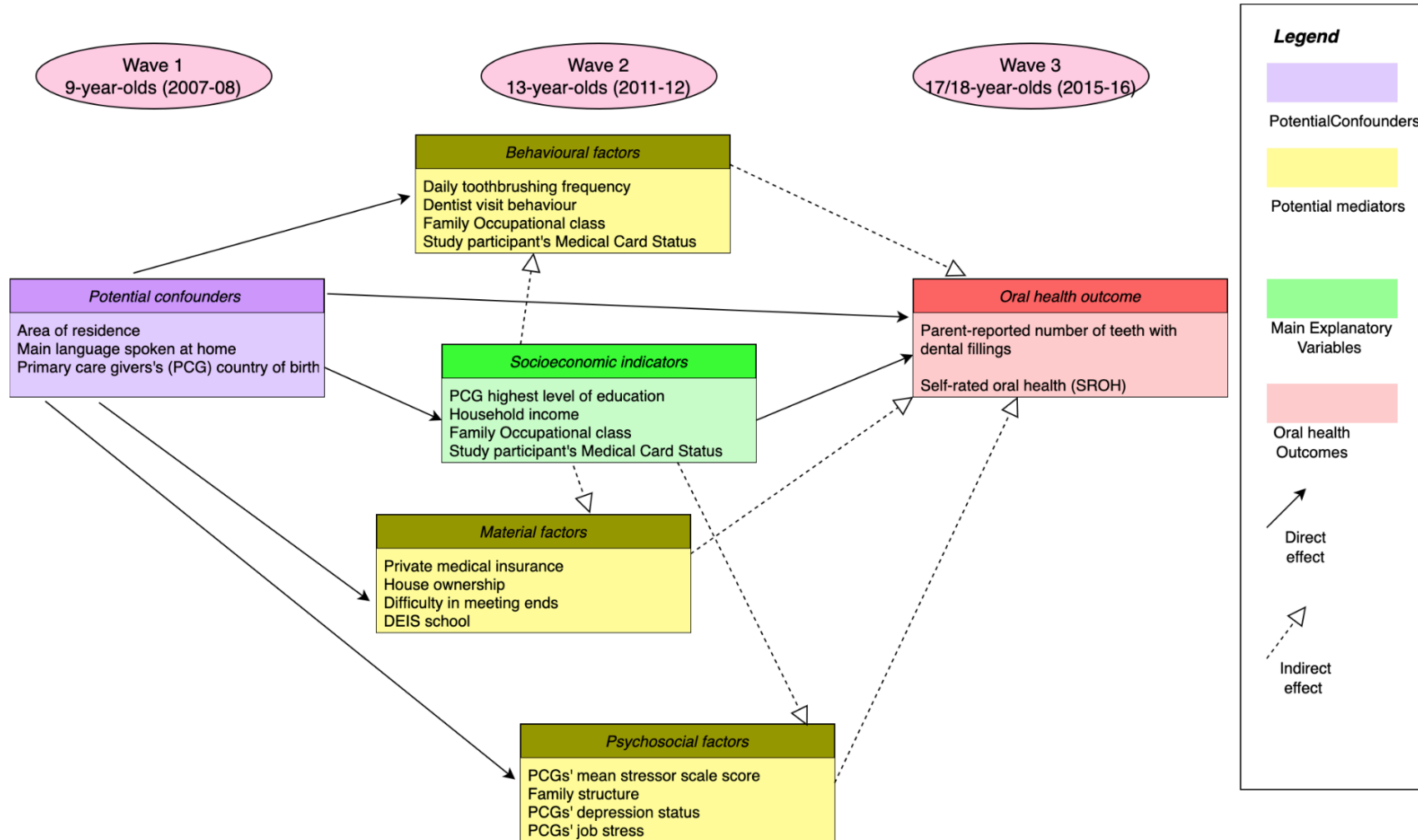
To study:

- 1) The relationship between SES measures at 13 years of age and oral health outcomes at 17/18 years.
- 2) The potential role of behavioural, material and psychosocial factors in explaining socioeconomic disparities in Irish adolescents' oral health.

Methodology

- GUI Child Cohort survey, Wave 1, 2 and 3 (N = 6,039).
- Main predictor and potential mediators (13 years)
- Oral health outcomes (17/18 years)
- Potential confounders (9 years)
- Logistic regression models
- Statistical software: IBM SPSS and R

Conceptual diagram

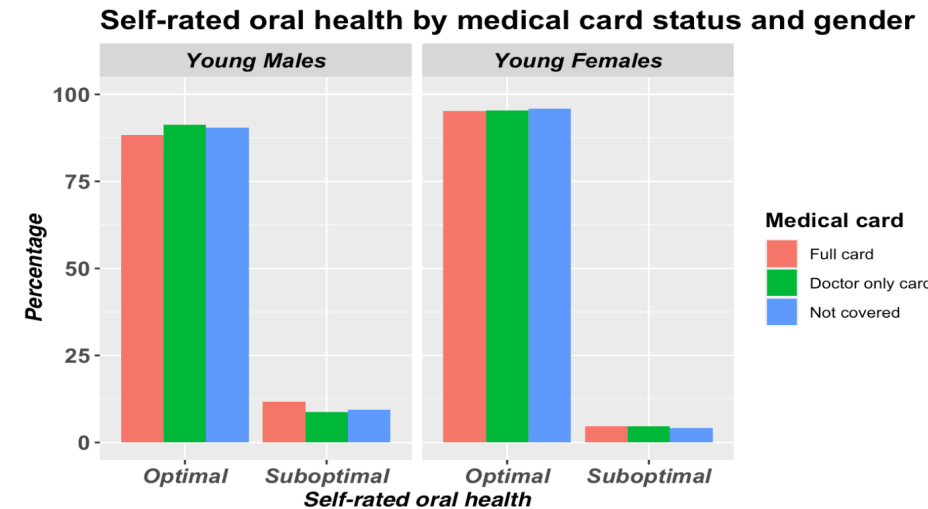
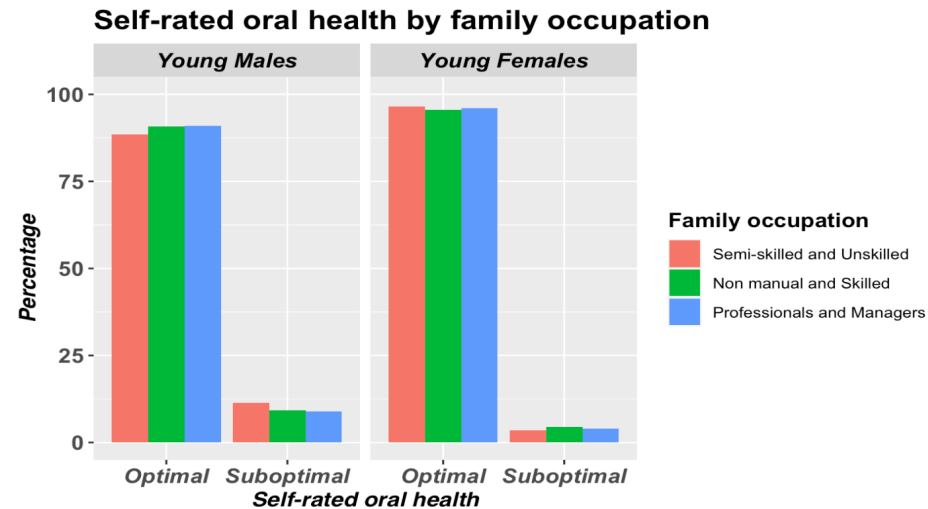
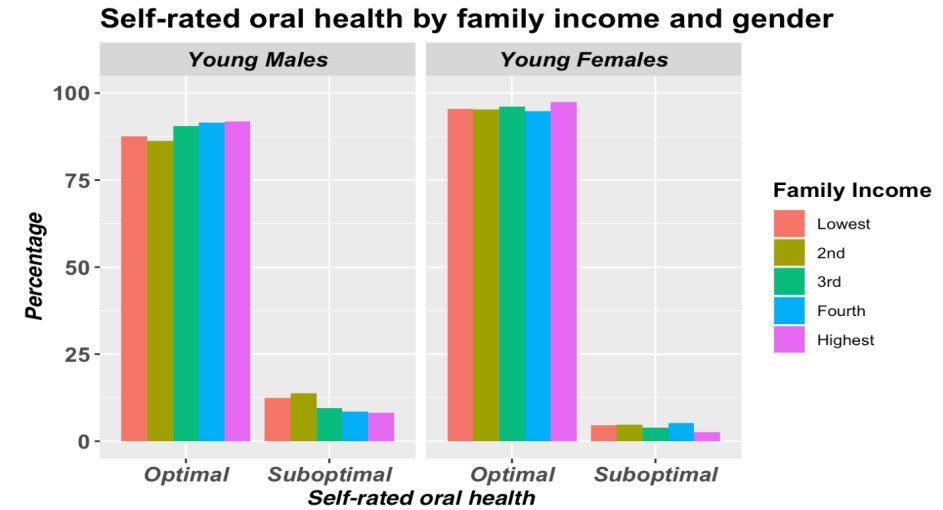
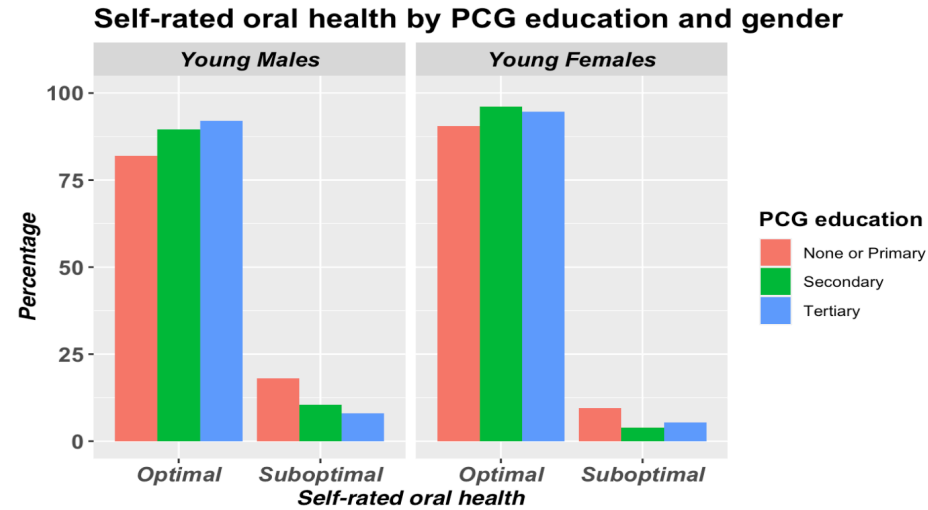


Results

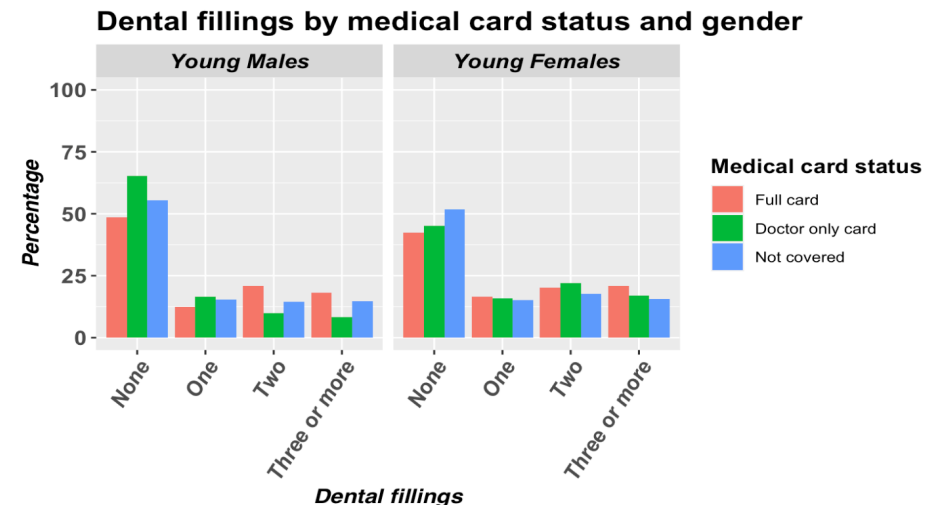
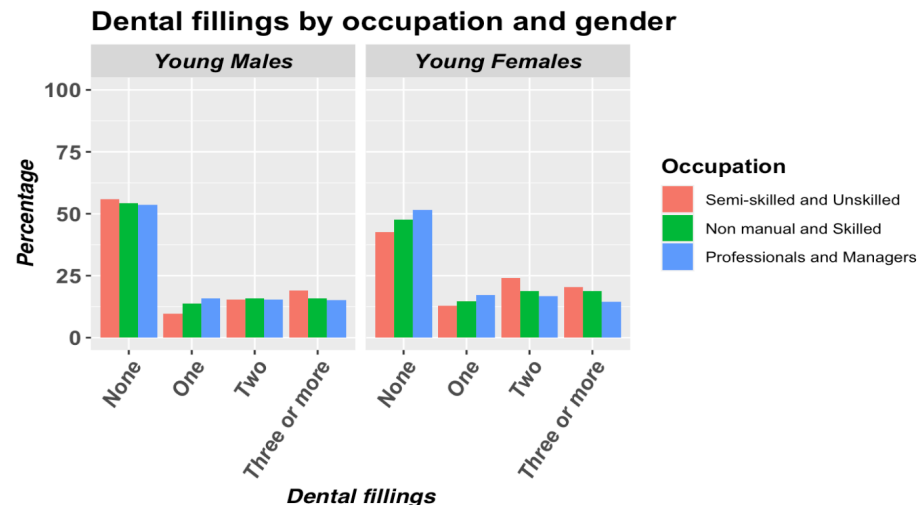
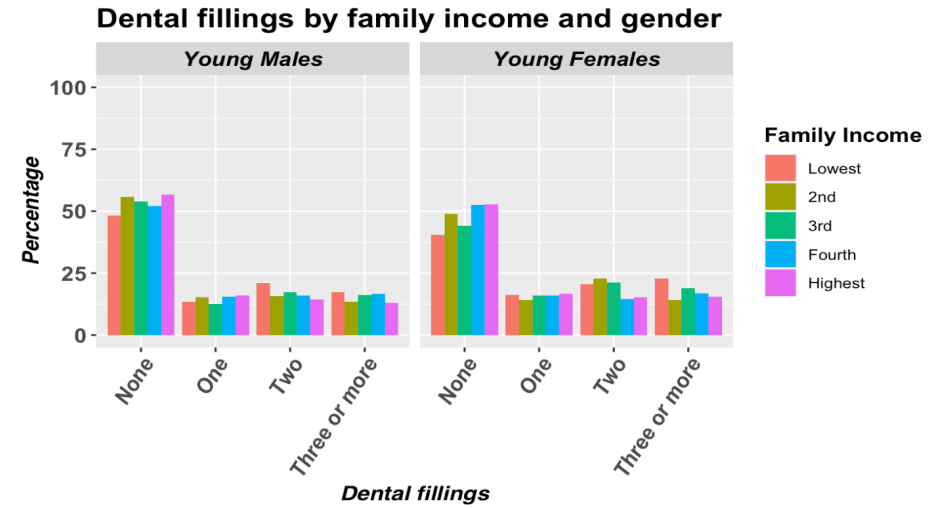
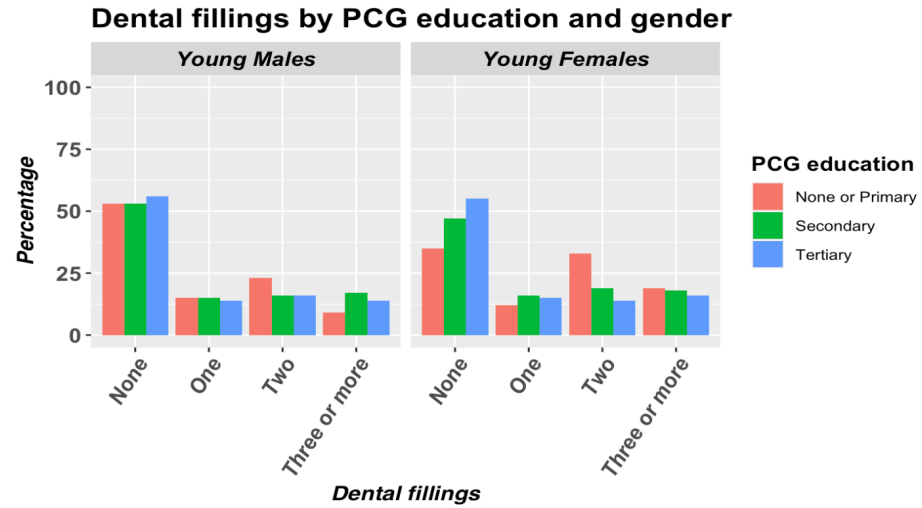
Descriptive analysis: Oral health outcomes

Variable name	Response levels	Total (%)	Young Males (%)	Young Females (%)
Young persons' Parent-reported oral health (Number of permanent teeth with fillings) (n = 5,859)	<i>None</i>	50.8	53.5	48.1
	<i>One</i>	15.0	14.4	15.6
	<i>Two</i>	17.6	16.5	18.7
	<i>Three or more</i>	16.6	15.7	17.6
Young persons' Self-reported oral health (self-rated oral health, SROH) (n = 6,033)	<i>Optimal oral health (Excellent/Very good/Good)</i>	92.6	89.8	95.6
	<i>Sub-optimal oral health (Fair/Poor)</i>	7.4	10.2	4.4

Exploratory analysis (Self-rated oral health by SES)



Exploratory analysis (Number of fillings by SES)



Explanatory results

Odds of having sub-optimal oral health at 17/18 years

	Males		Females	
	<i>Model 1</i> (OR; 95% CI)	<i>Full Model</i> (OR; 95% CI)	<i>Model 1</i> (OR; 95% CI)	<i>Full Model</i> (OR; 95% CI)
Socioeconomic position				
<i>None or primary educational level</i> (Ref: Tertiary level education)	2.31 (1.29; 4.13)	1.16 (0.56; 2.39)	1.88 (0.90; 3.95)	1.11 (0.49; 2.49)
<i>Lowest Income quintile</i> (Ref: Highest income quintile)	1.72 (1.16; 2.56)	0.80 (0.49; 1.28)	1.71 (0.86; 3.37)	1.30 (0.61; 2.76)
<i>Semi-skilled/ Unskilled manual occupational class</i> (Ref: Professional managers)	1.35 (0.93; 1.98)	1.10 (0.72; 1.69)	0.85 (0.46; 1.56)	0.51 (0.25; 1.02)
<i>Full medical card holders</i> (Ref: No medical card)	1.29 (1.01; 1.64)	0.72 (0.52; 1.00)	1.14 (0.79; 1.65)	0.90 (0.59; 1.34)

Explanatory analysis

Odds of having two teeth with dental fillings outcome at 17/18 years

	Males		Females	
	<i>Model 1</i> (OR; 95% CI)	<i>Full Model</i> (OR; 95% CI)	<i>Model 1</i> (OR; 95% CI)	<i>Full Model</i> (OR; 95% CI)
Socioeconomic position				
<i>None or primary educational level</i> (Ref: Tertiary level education)	1.34 (0.75; 2.40)	1.29 (0.68; 2.43)	3.34 (1.99; 5.60)	3.88 (2.18; 6.89)
<i>Lowest Income quintile</i> (Ref: Highest income quintile)	1.82 (1.30; 2.55)	1.65 (1.12; 2.42)	1.78 (1.26; 2.52)	2.16 (1.45; 3.23)
<i>Semi-skilled/ Unskilled manual occupational class</i> (Ref: Professional managers)	0.95 (0.67; 1.34)	0.91 (0.61; 1.35)	1.74 (1.29; 2.36)	1.56 (1.12; 2.18)
<i>Full medical card holders</i> (Ref: No medical card)	1.65 (1.34; 2.05)	1.47 (1.13; 1.93)	1.41 (1.14; 1.74)	1.57 (1.23; 1.99)

Strengths and limitations

- A nationally representative sample
- Number of fillings: parental beliefs, dental services affordability and availability
- Other explanatory factors
- Recall, reporting and social desirability bias

Recommendations

- Possible interaction between area-based and individual measures of SES.
- Role of structural and commercial determinants of health.
- Use of a life-course approach.
- Data linking

Policy implications

- Behaviour factors are modifiable risk factors for dental diseases.
- Improving the material circumstances of families with a lower SES

Conclusion

- Socioeconomic inequalities in Irish adolescents' parental and self-reported oral health.
- Oral health behaviours showed a socioeconomic gradient.
- Behavioural, material and psychosocial factors partially accounted for socioeconomic disparities in oral health.

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Thank you

