

# LIFETIME SCHOOL FAILURE AND PHYSICAL FIGHTING AT 17 YEARS OF AGE

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## INTRODUCTION

Physical fighting clusters with other adverse health behaviours such as tobacco smoking, alcohol drinking, marijuana and hashish use and sexual risk taking<sup>1</sup>. Cross-sectional evaluations related school performance with violence but few longitudinal approaches examined the extent to which school failure contribute to engage in physical fighting.

## OBJECTIVE

To evaluate the association between lifetime school failure and physical fighting in youth.

## METHODS

In 2003, we assembled a population-based cohort of urban adolescents born in 1990, enrolled in public and private schools of Porto (EPITeen)<sup>2</sup>; 2160 agreed to participate. In 2007, the first follow-up took place and 1716 (79.4%) adolescents could be evaluated.

At both study waves, socio-demographic and behavioural characteristics were obtained by self-completed questionnaires.

School failure is considered when a student fails to advance to the next school grade, and it was measured as the school grade retention reported by adolescents.

Physical fighting was assessed at 17 of age and defined by the involvement in physical fights during the previous 12 months.

For this analysis we excluded participants without complete information on school grade retention and on physical fighting involvement; the final sample was 1687 adolescents.

The chi-square test was used to compare proportions. Odds ratios and 95% confidence intervals (OR, 95%CI) were calculated using logistic regression. Separate models for females and for males were fitted, with adjustment for adolescents' smoking initiation and parents' education.

## REFERENCES

<sup>1</sup> Fraga, Ramos, Dias and Barros (2011) Physical fighting among school-going Portuguese adolescents: social and behavioural correlates. *Prev Med*, 52, 401-4.

<sup>2</sup> Ramos and Barros (2007) Family and school determinants of overweight in 13-year-old Portuguese adolescents. *Acta Paediatr*, 96, 281-6.

## RESULTS

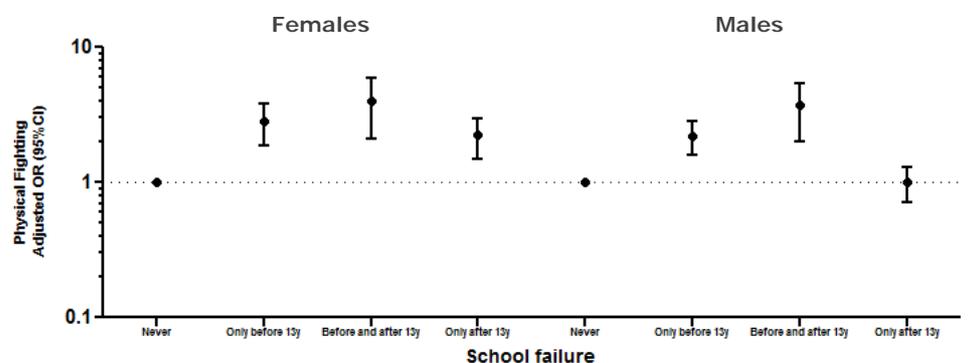
During the previous 12 months, 32.5% (19.4% females and 47.0% males) of the study adolescents were involved in physical fighting. Physical fighting resulted in needed medical care for 5.4% of the females and 10.3% of the involved males. The school premises were reported as the setting where fights occurred by 40.7% females and 46.5% males.

### Physical fighting in the previous 12 months according to parents' education, smoking initiation and school failure.

	Females			Males		
	N	Involvement in physical fighting (%)	p-value	N	Involvement in physical fighting (%)	p-value
Parents' Education (years)						
<7	237	25.3	<0.001	186	50.0	0.568
7-9	175	26.3		156	48.7	
10-12	231	14.3		222	46.4	
>12	232	12.9		241	43.6	
Smoking initiation (age)						
Never smoked	420	12.9	<0.001	399	35.8	<0.001
After 13 y	194	22.7		213	57.7	
Before 13y	181	25.4		164	63.5	
School failure						
Never	540	12.4	<0.001	455	41.1	<0.001
Only before 13y	150	32.7		169	59.2	
Before and after 13y	43	46.5		49	71.4	
Only after 13y	133	25.6		118	45.8	

Compared with those without school failure, the adjusted odds for involvement in fights were 2.5 (1.3-4.7) in females who failed only before 13 y, 3.1 (1.3-7.7) when school failure occurred both before and after 13 y, and 1.9 (1.1-3.6) when it occurred only after 13y. For males the results were, respectively, 2.0 (1.2-3.4), 2.9 (1.2-6.9) and 0.9 (0.5-1.5).

### Lifetime school failure and involvement in physical fighting at 17 years of age.



## CONCLUSIONS

Involvement in physical fighting is more common when there is school failure. The risk is greater if retention occurs during compulsory education (before 13 years of age) and, particularly, if the adolescent fails to advance to a next grade before and after that age.