

Substance use in popular movies Prevalence, effects on European adolescents, and opportunities for primary prevention - a cross-cultural study -

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BACKGROUND

According to social learning theory, movie depictions of smoking and drinking are a potentially powerful socializing agent.



OBJECTIVES

- (1) To measure the frequency of substance use in movies,
- (2) To estimate the effects of movie rating policies on movie substance use exposure,
- (3) To investigate the influence of such depictions on substance use initiation in adolescence, and
- (4) To recommend preventive measures.



DESIGN

Longitudinal survey with two waves and a one year interval.

SETTING

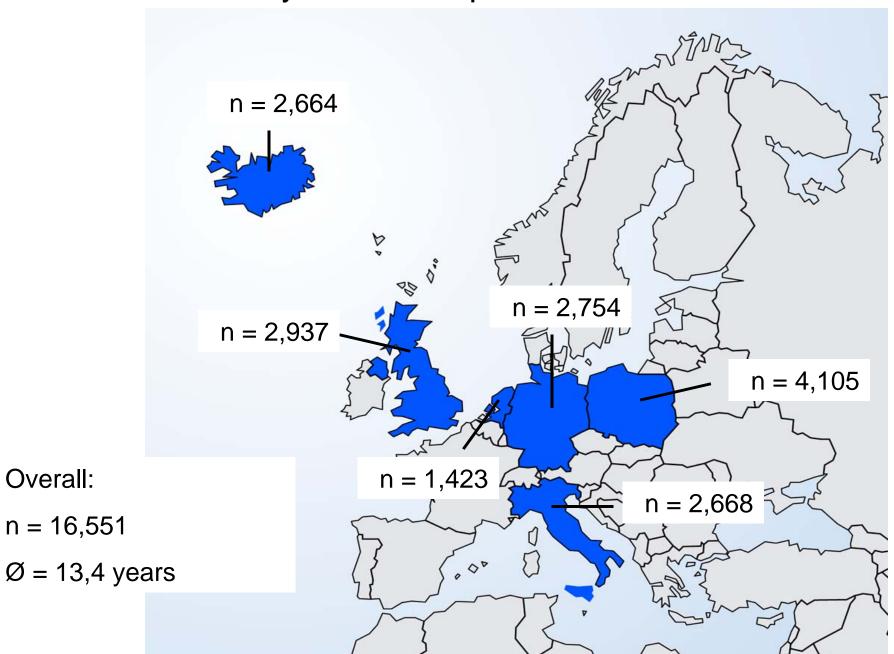
115 public schools in six European countries – Germany, Iceland, Italy, Netherlands, Poland, and UK.

Survey in six European countries

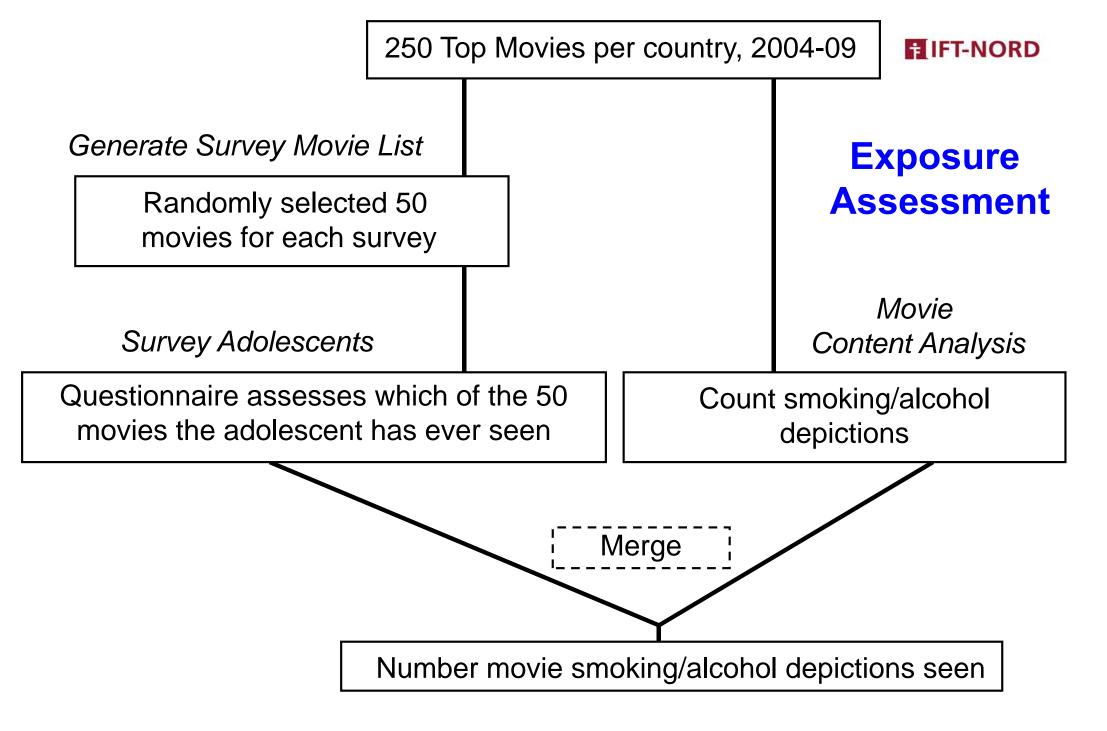
Overall:

n = 16,551





Thorax 2011, 66: 875-883

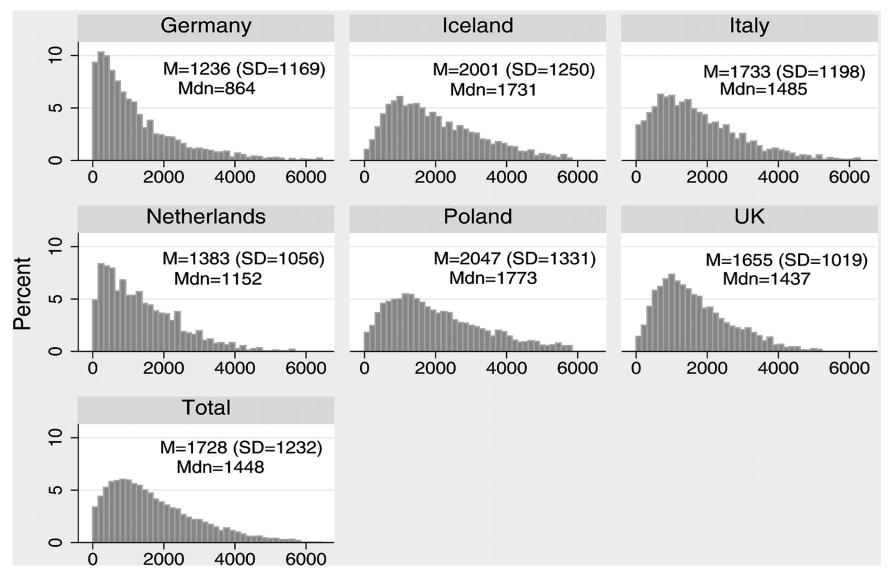




Cross-sectional analysis



Exposure to **smoking in movies** among adolescents from six European countries

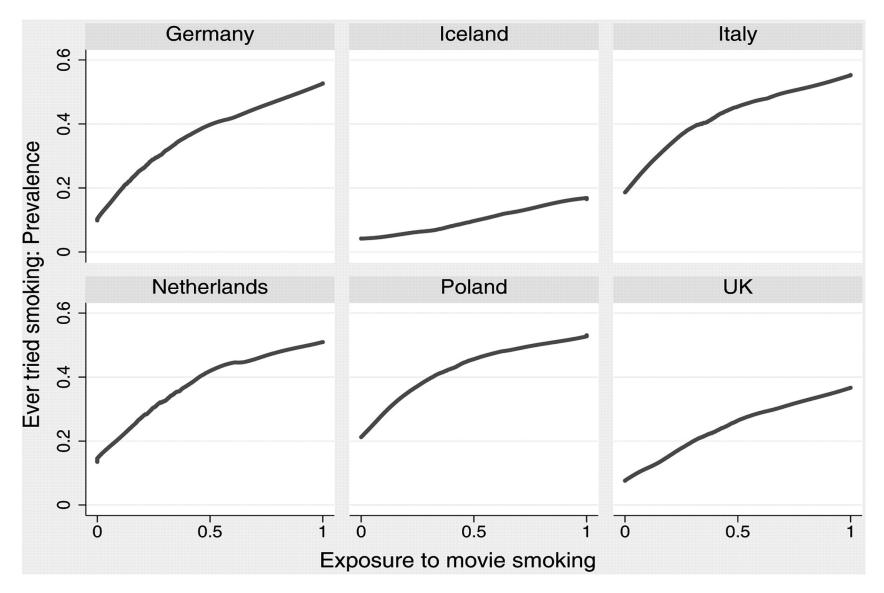








Association between exposure to movie smoking and ever-smoking

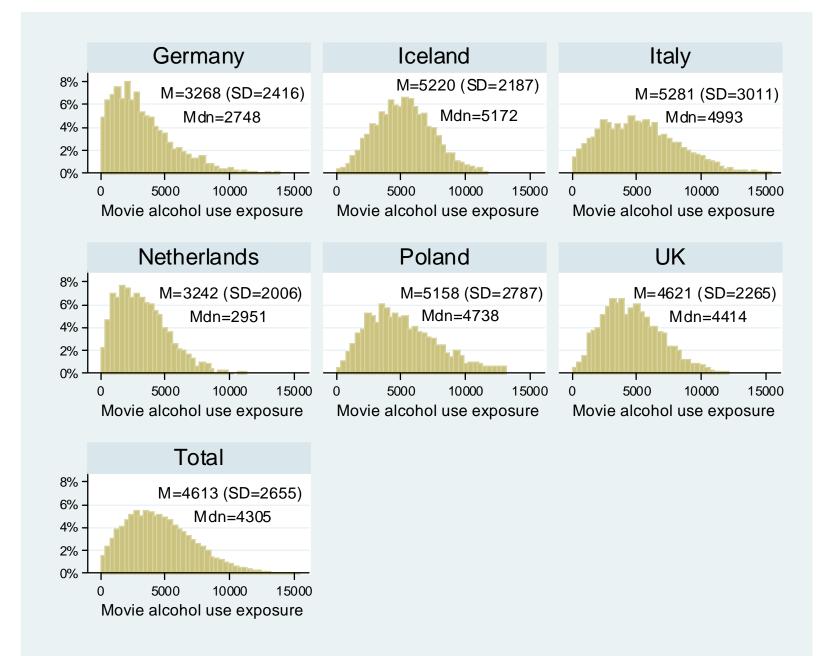






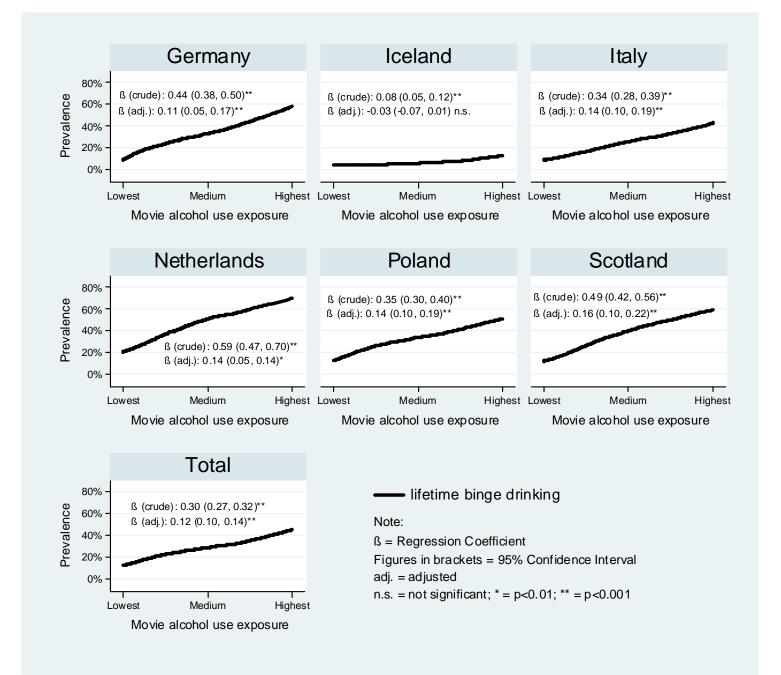


Exposure to alcohol consumption in movies among adolescents from six European countries



Association between exposure to alcohol use in movies and binge drinking







Sensitivity analysis: Lifetime Binge Drinking

Correlation between exposure to movie smoking and movie alcohol use: r=0.83

| Predictor | β |
|-----------------------------------|----------|
| Exposure to movie alcohol use | 0.09*** |
| Exposure to onscreen smoking | 0.03 |
| Age | 0.03*** |
| Gender (0=male, 1=female) | 0.01 |
| Family affluence | -0.00 |
| School performance | -0.05*** |
| TV screen time | -0.00 |
| Sensation seeking/ rebelliousness | 0.10*** |
| Peer drinking | 0.13*** |
| Mother drinking | 0.01 |
| Father drinking | 0.01 |
| Sibling drinking | 0.05*** |



Longitudinal analysis



Baseline sample 16,551



Follow-up sample (at least 1 year later) 13,642 (82%)





Baseline never-smokers 9,987 (74%)

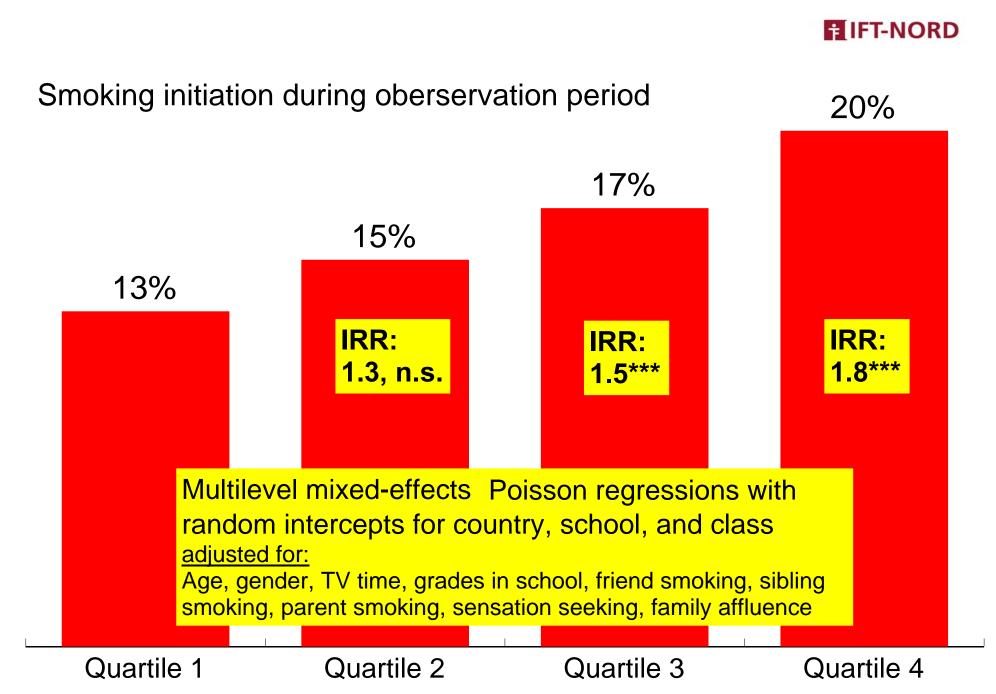
Baseline never binge-drinkers 10,245 (75%)



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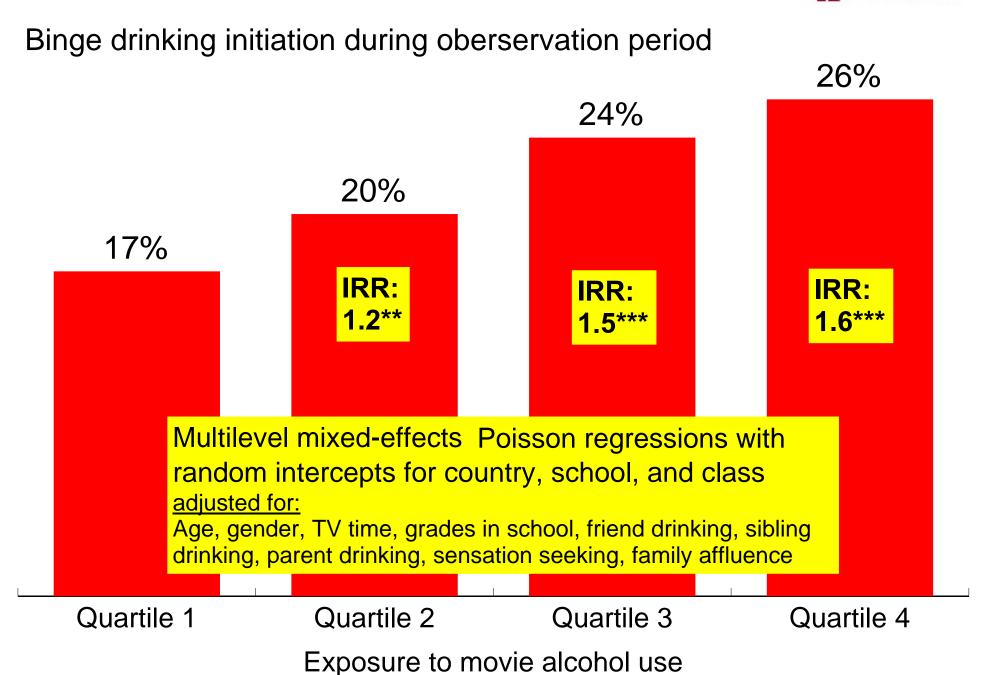
1,692 (17%) initated smoking

2,276 (22%) initated binge drinking

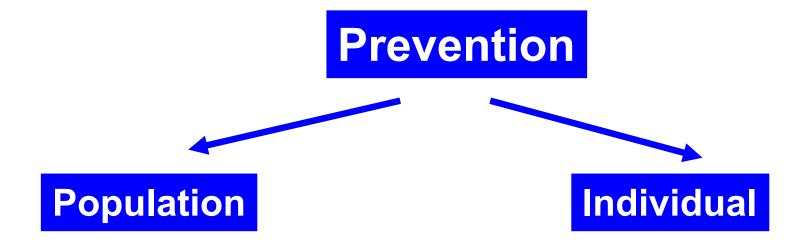


Exposure to movie smoking









Change of the environment

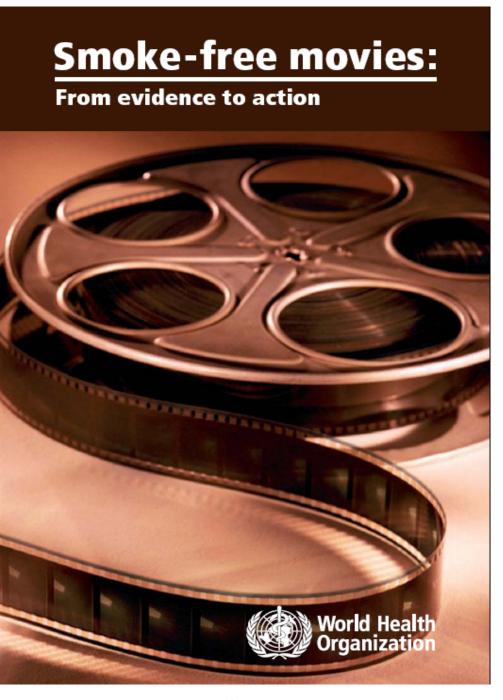
Restricting youth access to movies which portray substance use

Change of the behavior

Programs to enhance media literacy in children and parents

Counter-advertising





1st ed. 2009/ 2nd ed. 2011

Recommendations

- (1) Restricting youth access to movies which portray smoking
- (2) Anti-tobacco ads before movies that depict smoking



Same recommendations



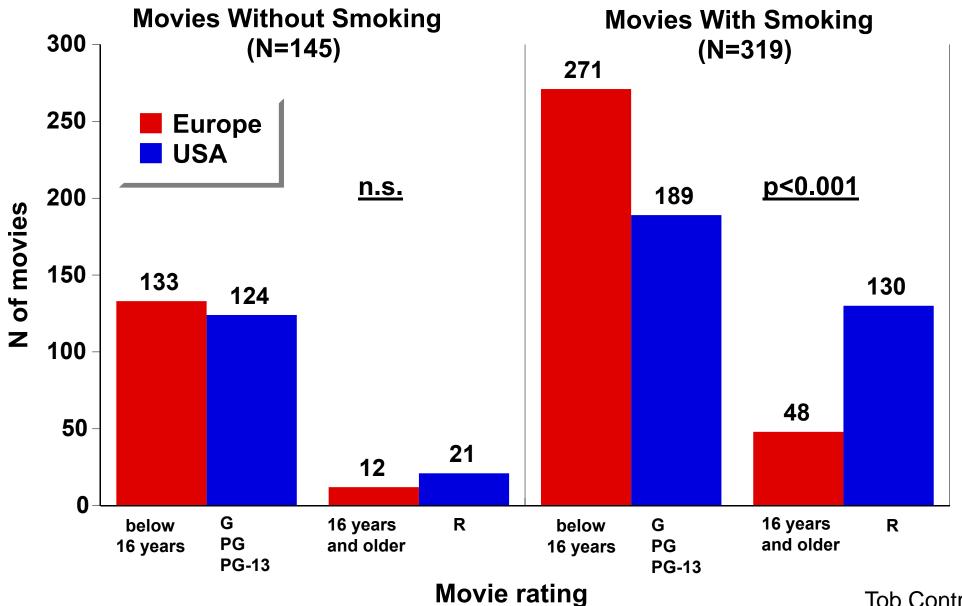
Morbidity and Mortality Weekly Report

July 15, 2011

Smoking in Top-Grossing Movies — United States, 2010



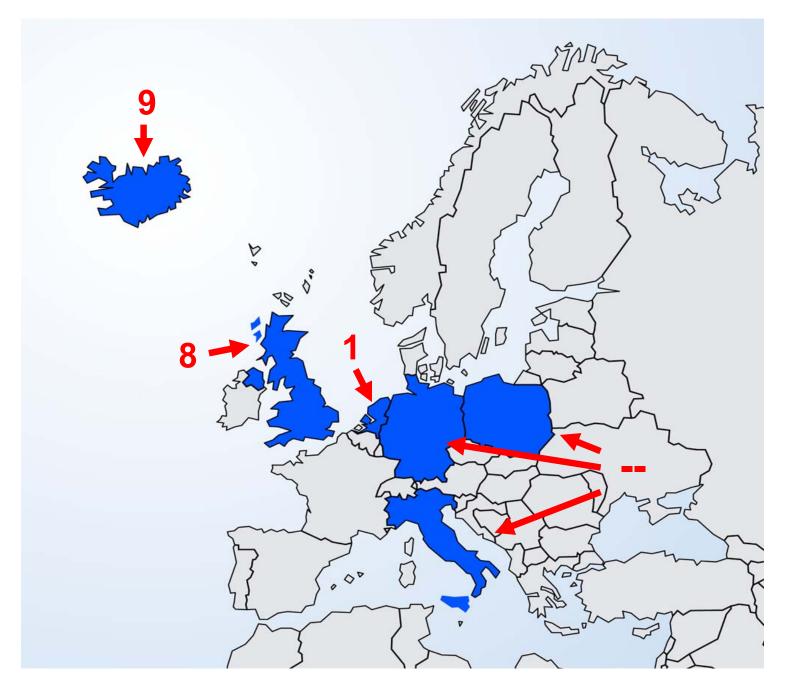
Youth access to movies that contain smoking in Europe compared with the USA



Tob Control, in press



Spending on public information campaigns according to Tobacco Control Scale, 2010 (Max: 15 points)





Summary

- (1) Smoking and drinking is frequently portrayed in movies, and European youth is exposed to these behaviors
- (2) Substance use in movies is associated with youths' substance use
- (3) There are preventive measures available both at the population but also at the individual level
- (4) Currently these preventive measures are not implemented