



Prevalence of smoking in movies as perceived by teenagers: Longitudinal trends and predictors



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#200905

Objective

- To assess the longitudinal trends of the prevalence of smoking in movies as perceived by teenagers in different age cohorts, and identify predictors of these trends

Background

- Depictions of smoking are prevalent in the U.S. contemporary movies.
- Prevalence of such depiction as perceived by teenagers, its longitudinal trends, and characteristics associated with these trends have not been studied.

Methods

- Data came from the Minnesota Adolescent Community Cohort (MACC) Study.
- Analyses were conducted on 4164 participants who were age 12-16 (cohort 12, 13, 14, 15, and 16) in 2000. All participants were surveyed every 6 months until 2008.
- Outcome measure: Perceived frequency of actors and actresses smoking: 1=never, 2=hardly ever, 3=some of the time, 4=most of the time
- Longitudinal trends of perceived prevalence of smoking in movies assessed in each age cohort
- Association between these trends and time-invariant demographics, and time-variant socio-environmental variables, and attitudes toward tobacco companies were evaluated by including both baseline values and differences between baseline and final values.

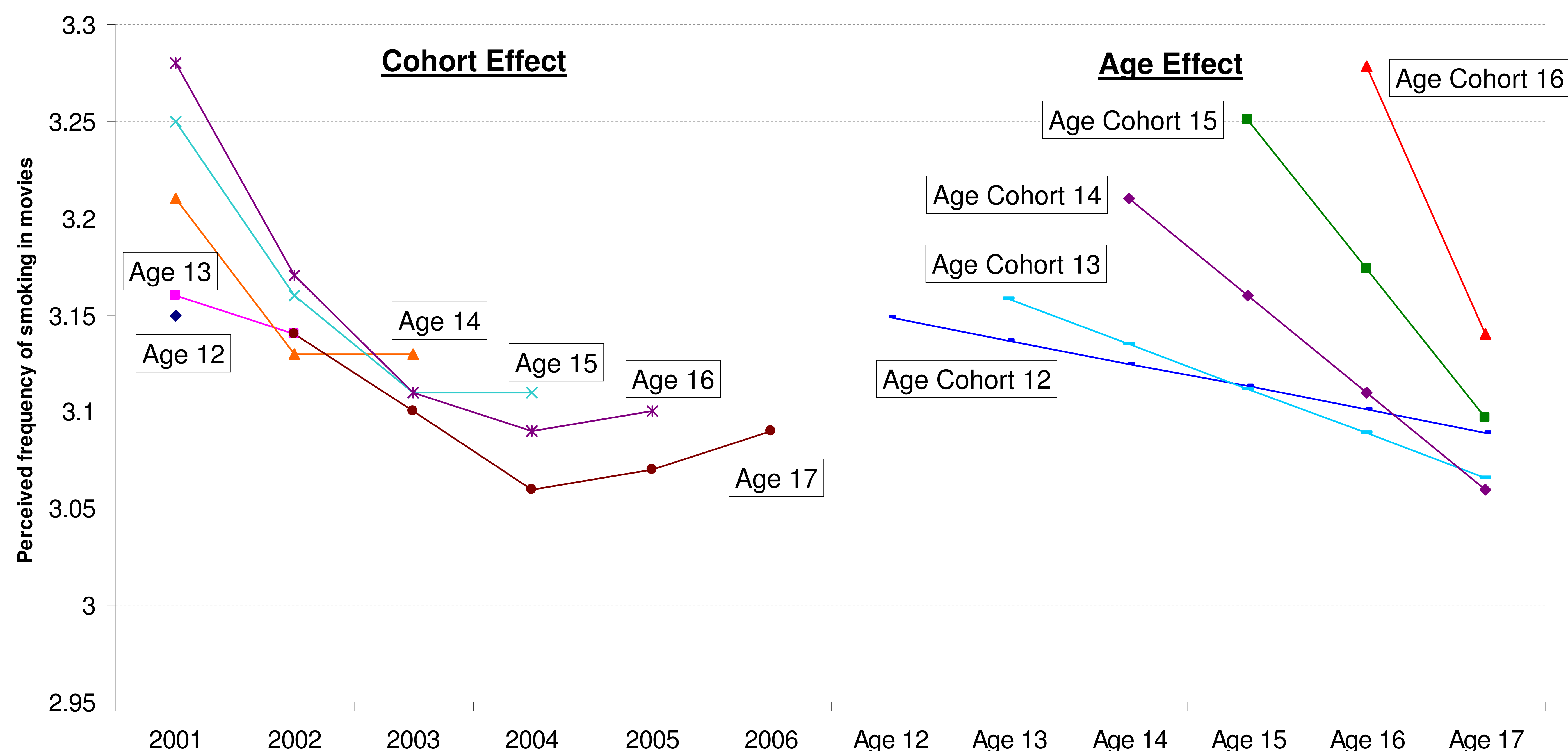
Results

- Prevalence of smoking in movies as perceived by teenagers significantly reduced over time, particularly between 2001 and 2003.
- Significantly steeper reduction in age cohort 14, 15, and 16 than the younger cohorts.
- Agreeing tobacco industry making too much money from teens and number of close smoking friends were consistently associated with initial values of the trends.

Conclusions

- Prevalence of smoking in movies as perceived by teenagers significantly decreased over time, particularly in the older cohorts. This may reflect a reduction in smoking depictions in movies.
- Effects of the heightened perceived prevalence of smoking in movies by awareness of tobacco marketing toward teens and having more smoking friends need to be evaluated.

Longitudinal trends of prevalence of smoking in movies as perceived by teenagers, by age, cohort and year.



Multivariate analysis on longitudinal trends and predictor variables by age cohort*.

	Cohort 12	Cohort 13	Cohort 14	Cohort 15	Cohort 16
Effects on initial value of perceived frequency of smoking in movies					
Male vs. female			0.07		-0.19
Parent Education	-0.18	-0.30	-0.16		-0.19
Non-white vs. White		0.22	0.39		
Tobacco industry making too much \$\$ from teens		0.14	0.20	0.12	0.20
# smoking friends	0.18	0.16	0.23	0.24	0.11
Parent smoking	0.00	0.04	-0.05	0.20	
Sibling smoking	0.04	0.12	0.05	0.28	
Weekly allowance	0.12	0.07	0.11	0.00	
Effects on changes in perceived frequency of smoking in movies					
Male vs. female			-0.26		-0.08
Parent Education	0.04	0.25	0.25		0.26
Non-white vs. White		0.14	-0.13		
Tobacco industry making too much \$\$ from teens		-0.14	-0.07	0.03	-0.13
Δ in tobacco industry making too much \$\$ from teens			0.19		
# smoking friends	-0.07	0.09	-0.07	-0.14	0.02
Δ in # smoking friends	0.07	0.03	0.03		
Parent smoking	0.05	-0.14	-0.12	-0.39	
Sibling smoking	-0.03	-0.18	-0.11	-0.17	
Weekly allowance	-0.12	-0.02	-0.08	0.00	
Δ in weekly allowance	-0.09	-0.13	-0.09	0.00	

*Bolded estimates are statistically significant (p<0.01). Only variables reached statistical significance (p<0.1) in bivariate analysis entered the model. Demographic variables were adjusted only for each other, while other variables were adjusted for all the variables included in the column and restriction on smoking at home.