

# Adolescent Smoking and the Social Capital of Local Communities in Transylvania, Romania

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## OBJECTIVES

The aim of the study was to identify the effect of social capital on adolescent smoking.

Social capital is defined as the resources that individuals access through their social networks, which may influence tobacco smoking in adolescents.

The major purpose of this study was to operationalize and assess these constructs and determine the degree to which empirical data are consistent with our proposed framework (Fig. 1.).

## METHODS

A stratified random sample of 1313 7th and 8th grade students from three counties in Transylvania, Romania completed a self-administered questionnaire on smoking-related knowledge, attitudes and behaviors. The respondents' smoking status was classified as current smokers, experimenters and never smokers. The impact of social capital as personal and community activities, school achievements and smoking related knowledge were measured. Multinomial logistic regression models were used to measure the association between social participation and smoking.

## Graphs and Tables

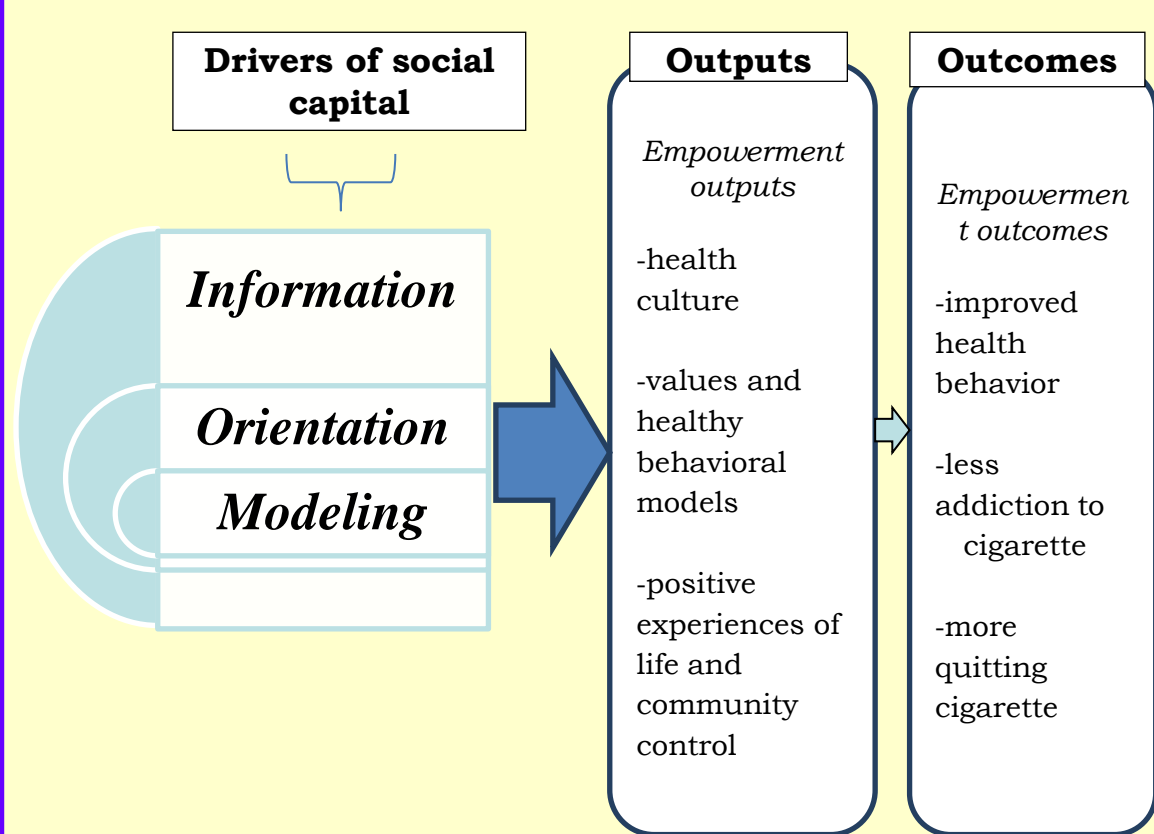


Fig. 1. The impact of social capital on adolescent smoking – framework of study (Source: authors)

### VARIABLES

Students were classified into three groups according to the **smoking status of the respondents**: never smokers, experimenters, and smokers. Never smokers were those who have never tried smoking or puffing not even once.

**Demographic variables** included gender and age in years.

### Information

- knowledge about smoking

### Orientation

- school results
- level of the school
- community activity
- church attendance

### Modeling

- exposure to tobacco smoking at home,
- smoker classmates
- smoking in the community
- attitude of the nearest neighbor towards smoking

	N	%	
Sex	Male	650	49.5
	Female	663	50.5
Age (years)	13	483	36.8
	14	647	49.3
	15	183	13.9
	Missing	224	17.1
Smoking behavior	Smokers	224	17.1
	Experimenters	412	31.4
	Never smokers	677	51.5
Knowledge about the consequences of smoking	Smoking is harmless	437	33.3
	Smoking is rather harmful	784	59.7
	Smoking is very harmful	228	17.4
School results	Very low	390	29.7
	Rather low	333	25.4
	Rather high	349	26.6
	Very high	13	1.0
	Missing	275	20.9
School level	Very low	331	25.2
	Rather low	364	27.7
	Rather high	343	26.1
	Very high	410	31.2
Community activity	Very high	263	20.0
	Rather high	282	21.5
	Very low	358	27.3
	Weekly	486	37.0
Church attendance	Several times a month	332	25.3
	More than once in half a year	223	17.0
	Less than once every six months	246	18.7
	Missing	26	2.0
Exposure to tobacco smoking at home	Frequently (6-7 days / week)	430	32.7
	Occasionally (1-5 days / week)	261	19.9
Smoker classmates	Never	568	43.3
	Very high rate	370	28.2
	High rates	303	23.1
Smoking in the community	Low rates	357	27.2
	Very low rate	283	21.6
	Very high rate	348	26.5
	High rates	356	27.1
The attitude of the nearest neighbor	Low rates	351	26.7
	Very low rate	242	18.4
	Missing	16	1.2
	Very negative, prohibiting	291	22.2
The attitude of the nearest neighbor	Rather negative, prohibiting	207	15.8
	Permissive	297	22.6
	Indifferent	505	38.5
	Missing	13	1.0

	Univariate				Multivariate				
	Experimenters vs. never smokers		Smokers vs. never smokers		Experimenters vs. never smokers		Smokers vs. never smokers		
	OR	95%CI	OR	95%CI	aOR	95%CI	aOR	95%CI	
Age (years)	13	0.70	0.42-1.18	0.55	0.27-1.10	0.77	0.45-1.32	0.92	0.46-1.87
	14	0.74	0.52-1.03	0.66	0.42-1.04	0.71	0.50-1.01	0.82	0.51-1.32
	15	Ref.		Ref.		Ref.		Ref.	
Gender	Male	1.01	0.74-1.37	1.26	0.89-1.79	0.99	0.72-1.38	1.21	0.79-1.86
	Female	Ref.		Ref.		Ref.		Ref.	
Knowledge about the consequences of smoking	Smoking is harmless	2.58**	1.28-5.20	5.82***	2.86-11.84	2.36*	1.11-5.05	4.28***	2.05-8.94
	Smoking is rather harmful	1.91***	1.44-2.54	3.71***	2.65-5.19	1.83***	1.35-2.49	3.22***	2.17-4.76
	Smoking is very harmful	Ref.		Ref.		Ref.		Ref.	
School performance	Very low	1.79*	1.12-2.86	3.92***	2.34-6.58	1.73*	1.08-2.78	3.22***	1.86-5.59
	Rather low	1.54*	0.99-2.39	2.62***	1.65-4.17	1.57*	1.02-2.40	2.66***	1.60-4.41
	Rather high	1.70*	1.13-2.58	1.49	0.91-2.44	1.80**	1.19-2.72	1.32	0.77-2.26
	Very high	Ref.		Ref.		Ref.		Ref.	
School level	Very low	1.07	0.55-2.10	2.14	0.96-4.74	1.03	0.54-1.95	1.73	0.81-3.67
	Rather low	0.96	0.53-1.71	1.87	0.85-4.12	0.75	0.41-1.37	0.79	0.43-1.47
	Rather high	1.08	0.63-1.84	1.95	0.89-4.28	0.92	0.53-1.59	1.15	0.66-2.02
	Very high	Ref.		Ref.		Ref.		Ref.	
Community activity	Very high	1.26	0.85-1.86	1.67*	1.09-2.56	1.36	0.90-2.04	2.54***	1.60-4.03
	Rather high	0.94	0.662-1.44	1.05	0.64-1.74	1.14	0.76-1.73	2.14**	1.26-3.61
	Rather low	1.04	0.74-1.48	1.28	0.76-2.15	1.22	0.86-1.74	2.42**	1.32-4.45
	Very low	Ref.		Ref.		Ref.		Ref.	
Church attendance	Weekly	0.68	0.42-1.11	0.56	0.31-1.02	0.67	0.41-1.08	0.45*	0.22-0.91
	Several times a month	0.73	0.46-1.15	0.87	0.50-1.52	0.79	0.50-1.25	0.95	0.51-1.77
	More than once in half a year	0.75	0.45-1.24	0.66	0.40-1.09	0.72	0.42-1.23	0.76	0.45-1.31
	Less than once every six months	Ref.		Ref.		Ref.		Ref.	
Exposure to tobacco smoking at home	Frequently (6-7 days / week)	1.73**	1.26-2.38	2.32**	1.47-3.68	1.47*	1.03-2.10	1.22	0.68-2.20
	Occasionally (1-5 days / week)	1.14	0.78-1.67	2.06**	1.35-3.15	1.10	0.75-1.62	1.79*	1.06-3.01
	Never	Ref.		Ref.		Ref.		Ref.	
	Very high rate	2.03*	1.15-3.61	10.68***	5.12-22.28	1.75	0.94-3.26	9.05***	4.10-20.00
Smoker classmates	High rates	1.28	0.74-2.21	3.75**	1.70-8.30	1.12	0.62-2.02	3.34**	1.44-7.34
	Low rates	1.20	0.61-2.33	1.42	0.57-3.53	1.05	0.54-2.04	0.99	0.38-2.55
	Very low rate	Ref.		Ref.		Ref.		Ref.	
	Very high rate	1.50	0.98-2.28	2.88***	1.74-4.76	1.11	0.72-1.73	2.50**	1.37-4.57
Smoking in the community	High rates	1.29	0.87-1.90	1.48	0.95-2.33	1.19	0.79-1.78	1.25	0.74-2.12
	Low rates	1.40	0.94-2.09	1.29	0.76-2.18	1.33	0.87-2.05	1.12	0.60-2.08
	Very low rate	Ref.		Ref.		Ref.		Ref.	
	Very high rate	0.84	0.56-1.24	0.40**	0.23-0.70	0.92	0.59-1.46	0.48**	0.28-0.83
The attitude of the nearest neighbor	Rather negative, prohibiting	1.00	0.73-1.38	0.49**	0.29-0.84	1.06	0.72-1.58	0.44*	0.23-0.83
	Permissive	1.23	0.86-1.76	0.98	0.64-1.51	1.31	0.88-1.96	1.00	0.62-1.63
	Indifferent	Ref.		Ref.		Ref.		Ref.	
	Missing	Ref.		Ref.		Ref.		Ref.	

## RESULTS

51.5% of the respondents did not smoke, 31.4% tried at least once (experimenters), 17.1% were defined as smokers. Attending church (OR: 0.45; 95%CI: 0.22–0.91) and highly negative attitudes about smoking by nearest neighbors (OR: 0.45; 95%CI: 0.28–0.83), were protective factors, while very high (OR: 2.54; 95%CI: 1.60–4.03), moderately high (OR: 2.14; 95%CI: 1.26–3.61) and low (OR: 2.42; 95%CI: 1.32–4.45) intensive community activities increased the risk of adolescent smoking. The odds of smoking were higher among those who had less information about the harmful effects of smoking (harmless vs. very harmful, OR: 4.28, 95%CI: 2.05–8.94).

## CONCLUSIONS

A high degree of attachment to a community and knowledge about the negative effects of smoking reduces the risk of smoking experimentation and regular use. Stronger anti-smoking communications in communities are associated with lower rates of adolescent smoking behavior.

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