



## Social intelligence, emotional closeness to important others and cigarette smoking among Slovak young adolescents

Olga Orosova<sup>1</sup>,  
Beata Gajdosova<sup>1</sup>, Ferdinand Salonna<sup>1</sup>,  
Maria Sarkova<sup>1</sup>, Rene Sebena<sup>2</sup>

<sup>1</sup>PJ Safarik University in Kosice, Faculty of Arts, Department of Educational Psychology and Health Psychology,  
Slovak Republic

<sup>2</sup>PJ Safarik University in Kosice, Faculty of Arts, Department of Psychology, Slovak Republic

30th ISPA Conference, July 8 - 13,  
2008, Utrecht, Netherlands



## **Institutional background of presented research results**

PJ Safarik University in Košice, Slovak Republic

and

University of Groningen, Netherlands

FILIA, NGO in Košice, Slovak Republic

UNIPREV, Belgium

30th ISPA Conference, July 8 - 13,  
2008, Utrecht, Netherlands



## **Research background of presented research results**

### **Individual, interpersonal, social, and societal factors of risk behaviour among young adolescents and young adults.**

Research and Development support Agency under the contract  
No. APVV-20-038 205

### **The efficacy of peer drug prevention programmes.**

European Union, Transition fund programme under the Contract  
No. 200401676403-02-01-0005-11.

30th ISPA Conference, July 8 - 13,  
2008, Utrecht, Netherlands



## **Aim**

To explore the impact of social intelligence, emotional closeness, and perceived access to cigarettes on the likelihood that adolescents would smoke cigarettes

30th ISPA Conference, July 8 - 13,  
2008, Utrecht, Netherlands



## Theoretical background

### Protective and risk factors

(Pokorný, Jason, Schoeny, 2003)

### Social intelligence

(Orosová et al., 2007, Gini, 2006, Lee et al., 2002, Kosmitzki, John, 1993)

### Emotional closeness

(Spencer, 2007, Johnson 2004, Aron, Aron, Smollan, 1992)

### Youth access to cigarettes

(Milton et al., 2008, Forrester et al., 2007, Widome et al., 2007, Pokorný, Jason, Schoeny, 2003)

30th ISPA Conference, July 8 - 13,  
2008, Utrecht, Netherlands



## Motivation to research

The Peer Program for the Prevention of Drug Dependency

a strategy of social influence  
a strategy of the development of life skills (cognitive, social, emotional)

Obtaining information

Socio-personal development

Protective influence of the program on strengthening the life of adolescents without smoking  
cigarettes, consuming alcohol and using drugs

30th ISPA Conference, July 8 - 13,  
2008, Utrecht, Netherlands



## Motivation to research

The time commitment for the project is 60 hours/1 school year

1996

50 students have completed the program per year

30th ISPA Conference, July 8 - 13,  
2008, Utrecht, Netherlands



## Subjects

4744 young adolescents (elementary school pupils)

mean age 14.3 (SD=0.65),

48.7 % girls

30th ISPA Conference, July 8 - 13,  
2008, Utrecht, Netherlands



## Data-collection

The agreement and support of Ministry of Education of Slovak Republic

October - December 2006

Trained skilled data collectors

A voluntary and anonymous basis

30th ISPA Conference, July 8 - 13,  
2008, Utrecht, Netherlands



## Measures

### The Tromsø Social Intelligence Scale (TSIS)

(Silvera, Martinussen, Dahl 2001)

social information processing  
social skills  
social awareness

21 items, with each factor having seven items

a seven-point Likert-type scale

from 1 ('describes me extremely poorly') to 7 ('describes me extremely well')

30th ISPA Conference, July 8 - 13,  
2008, Utrecht, Netherlands



## Measures

### Emotional closeness (EC)

to mother, to father, to best friend, and to shipmates

„I greatly love mother“; „I greatly love father“  
„I greatly love best friend“; „I greatly love shipmates“

7 – point scale from 1 = definitely yes to 7 = definitely no

30th ISPA Conference, July 8 - 13,  
2008, Utrecht, Netherlands



## Measures

### Perceived access to cigarettes

7 point scale:

from: 1=very easy to 7= very difficult

30th ISPA Conference, July 8 - 13,  
2008, Utrecht, Netherlands



## Measures

### Smoking cigarettes

No

Yes (irregularly and regularly/daily smoking)

## Statistical Analyses

SPSS, Version 12

Binary logistic regression

30th ISPA Conference, July 8 - 13,  
2008, Utrecht, Netherlands



### Table Sample description

	Smoking	
	No (N, %)	Yes (N, %)
Boys	703	477
	59.58%	40.42%
Girls	862	516
	62.55%	37.45%

Analyses were performed separately for both genders

30th ISPA Conference, July 8 - 13,  
2008, Utrecht, Netherlands



## Statistical Analyses

**Model 1** contained seven independent variables:  
 social information processing  
 social skills  
 social awareness  
 emotional closeness to mother, father, best friend, shipmates

**Model 2** contained one independent variable:  
 perceived access to cigarettes

**Model 3 = (Model 1+Model 2)** contained eight independent variables:  
 social information processing  
 social skills  
 social awareness  
 emotional closeness to mother, father, best friend, shipmates  
 perceived access to cigarettes

The dependent variable of models:  
**Smoking cigarettes**

30th ISPA Conference, July 8 - 13,  
 2008, Utrecht, Netherlands

### Model 1

*The effect of social processes(SP), social skills(SS), social awareness(SA),  
 emotional closeness(EC) on smoking cigarettes among girls (C=0.67)*

	Girls		95.0% C.I. for EXP(B)	
		OR	Lower	Upper
TSIS – SP		0.964	0.938	0.990
TSIS - SS		1.052	1.014	1.090
TSIS – SA		0.948	0.922	0.974
EC Mother		1.315	1.118	1.546
EC Father		1.197	1.081	1.325
EC Best friend		0.807	0.642	1.015
EC Shipmates		0.772	0.637	0.934
		p≤0.001	p≤0.01	

30th ISPA Conference, July 8 - 13,  
 2008, Utrecht, Netherlands

<b>Model 1</b> <i>The effect of social processes(SP), social skills(SS), social awareness(SA), emotional closeness(EC) on smoking cigarettes among boys (C=0.67)</i>			
<b>Boys</b>		<b>95.0% C.I. for EXP(B)</b>	
	<b>OR</b>	Lower	Upper
TSIS - SP	<b>0.964</b>	<b>0.931</b>	<b>0.998</b>
<b>TSIS - SS</b>	<b>1.078</b>	<b>1.024</b>	<b>1.134</b>
TSIS - SA	0.971	0.939	1.004
EC Mother	1.142	0.941	1.384
<b>EC Father</b>	<b>1.256</b>	<b>1.057</b>	<b>1.492</b>
EC Best friend	0.967	0.771	1.213
EC Shipmates	0.801	0.636	1.009
<b>p≤0.01</b>		<b>p≤0.05</b>	

30th ISPA Conference, July 8 - 13,  
2008, Utrecht, Netherlands

<b>Model 1</b> <i>The effect of social processes(SP), social skills(SS), social awareness(SA), emotional closeness(EC) on adolescents' smoking cigarettes</i>		
	<b>Boys</b>	<b>Girls</b>
<b>TSIS - SP</b>	<b>protective</b>	<b>protective</b>
<b>TSIS - SS</b>	risk	risk
<b>TSIS - SA</b>		<b>protective</b>
<b>EC Mother</b>		<b>protective</b>
<b>EC Father</b>	<b>protective</b>	<b>protective</b>
<b>EC Best friend</b>		
<b>EC Shipmates</b>		risk
<b>p≤0.05</b>	<b>p≤0.01</b>	<b>p≤0.001</b>

30th ISPA Conference, July 8 - 13,  
2008, Utrecht, Netherlands

**The effect of social processes (SP), social skills (SS), social awareness (SA), emotional closeness (EC) on adolescents' smoking cigarettes (Model 1) in comparison to others our research results: alcohol consumption and drunkenness**

	Smoking		Alcohol consumption		Alcohol Drunkenness	
	Boys	Girls	Boys	Girls	Boys	Girls
	P	P				
TSIS - SP	RISK	RISK	RISK	RISK		RISK
TSIS - SS		P	P			P
TSIS - SA		P	P	P	P	P
EC Mother	P	P				P
EC Best friend			RISK			
EC Shipmates		RISK		RISK	RISK	RISK
			p≤0.05	p≤0.01	p≤0.001	

30th ISPA Conference, July 8 - 13, 2008, Utrecht, Netherlands

**Model 2**

The effect of perceived access to cigarettes on **smoking cigarettes** among girls

C=0.94

Girls		95,0% C.I. for EXP(B)	
Smoking	OR	Lower	Upper
Perceived access to cigarettes	0.335	0.299	0.377
	p≤0.001		

30th ISPA Conference, July 8 - 13, 2008, Utrecht, Netherlands

**Model 2**

The effect of Perceived access to cigarettes on **smoking cigarettes** among boys (C=0.89)

<b>Boys</b>		<b>95,0% C.I.for EXP(B)</b>	
Smoking	OR	Lower	Upper
Perceived access to cigarettes	0.464	0.427	0.503
p≤0.001			

30th ISPA Conference, July 8 - 13,  
2008, Utrecht, Netherlands

**Model 3**

The effect of social processes(SP), social skills(SS), social awareness(SA), emotional closeness(EC), perceived access to cigarettes on **smoking** among girls (C=0.96)

<b>Girls</b>		<b>95,0% C.I.for EXP(B)</b>	
smoking	OR	Lower	Upper
<b>TSIS - SP</b>	<b>0.949</b>	<b>0.900</b>	<b>1.000</b>
TSIS - SS	1.048	0.979	1.122
TSIS - SA	0.964	0.920	1.009
EC Mother	1.195	0.894	1.597
<b>EC Father</b>	<b>1.344</b>	<b>1.073</b>	<b>1.683</b>
EC Best friend	0.736	0.499	1.085
EC Shipmates	0.753	0.550	1.030
<b>Perceived access to cigarettes</b>	<b>0.260</b>	<b>0.205</b>	<b>0.329</b>
p≤0.001		p≤0.05	

30th ISPA Conference, July 8 - 13,  
2008, Utrecht, Netherlands

<b>Model 3</b>			
<b>The effect of social processes(SP), social skills(SS), social awareness(SA), emotional closeness(EC), perceived access to cigarettes on smoking among boys (C=0.93)</b>			
		95.0% C.I. FOR EXP(B)	
smoking	OR	Lower	Upper
TSIS - SP	0.945	0.898	0.994
TSIS - SS	1.084	1.007	1.168
TSIS - SA	0.930	0.884	0.980
EC Mother	1.434	1.102	1.867
EC Father	1.019	0.813	1.277
EC Best friends	1.026	0.747	1.411
EC Shipmates	0.673	0.491	0.923
Perceived access to cigarettes	0.425	0.365	0.495
	p≤0.001	p≤0.01	p≤0.05

30th ISPA Conference, July 8 - 13,  
2008, Utrecht, Netherlands

<b>The effect of explored factors (Model 1; Model 3) on adolescents' smoking</b>				
<b>Model 1: social processes(SP), social skills(SS), social awareness(SA), emotional closeness(EC)</b>				
<b>Model 2: social processes(SP), social skills(SS), social awareness(SA), emotional closeness(EC), perceived access to cigarettes</b>				
	Boys		Girls	
	Model 1	Model 3	Model 1	Model 3
TSIS - SP	P	P	P	P
TSIS - SS	Risk	Risk	Risk	
TSIS - SA		P	P	
EC Mother		P	P	
EC Father	P		P	P
EC Best friend				
EC Shipmates		Risk	Risk	
Perceived access to cigarettes		Risk		Risk

30th ISPA Conference, July 8 - 13,  
2008, Utrecht, Netherlands



## Conclusion

Smoking prevention and the development of behavioral  
and cognitive aspects of social intelligence

Smoking and emotional closeness

Perceived access to cigarettes and commercial and social  
sources

30th ISPA Conference, July 8 - 13,  
2008, Utrecht, Netherlands



Thank you for your attention!

30th ISPA Conference, July 8 - 13,  
2008, Utrecht, Netherlands