A longitudinal analysis of psychosocial risk and protective factors and adolescent polydrug use

Krzysztof Ostaszewski, Agnieszka Pisarska
Institute of Psychiatry and Neurology in Warsaw, Poland

Background:
Warsaw Adolescent Study builds upon resilience research that emphasizes the role of protective factors in youth healthy development

Aims:
- to test compensatory and protective models of resiliency in a longitudinal sample of urban middle school youth from Warsaw, Poland
- to explore protective effects of family practices and school bonding on adolescent polydrug use

Sample:
includes 1841 adolescents (56% females, 83% living with both parents) who were assessed at three time points (Wave 1, 7th grade, age 13,5), (Wave 2, 8th grade, age 14,5) and (Wave 3, 9th grade, age 15,5) of three-wave longitudinal study conducted in public and non-public middle schools in Warsaw.

These factors represent multiple levels of influence (family, school, and peers) described in social ecological theory (Bronfenbrenner, 1986).

Results

Measures:

Measures used as psychosocial factors (Wave 1)

Factors (number of items)	$\bar{x}$	SD	α
Mother support (5)	4.23	0.84	0.90
Father support (5)	3.80	1.16	0,95
Parental monitoring (9)	4.09	0,73	0.89
Family rituals (7)	2,76	0,55	0.73
Natural mentor support (5)	2.63	1.78	0.98
School positive bonding (4)	2.80	0.67	0.83
Importance of school to student (4)	4,36	0,68	0,86
Friends support (4)	3.77	0.93	0.87
Meaningful activities (5)	1.66	1,13	0.42
Friends negative influences (12)	1.48	0.44	0.82
a/ Friends who use drugs (4)	1.10	0.31	0.80
b/ Friends who cut/ dropped out of school (4)	1.92	0.60	0.64
c/ Friends who use alcohol (4)	1,43	0,68	0,82

Measures used to assess polydrug use (Wave 3)

Factors (number of items)	$\bar{x}$	SD	Skweness
Last month cigarette use	0.47	0.99	2.25
Last month alcohol use	0.79	1.08	1.42
Last year drunkenness	0.60	1.02	1.88
Lifetime illegal drug use	0.31	0.84	3.12

Socio-demographic variables
- Gender (coded Male =1, Female =2)
- Family composition (coded 1= living with both parents, 2= does not live with both parents)
- School status (coded 1= public, 2= non-public)

Summary of results:
- Parental support and family rituals predicted parental monitoring.
- School, importance adult mentor support, friends support predicted school bonding.
- Higher parental monitoring and higher school bonding were directly associated with lower levels of adolescent polydrug use.
- Both parental monitoring and school bonding were indirectly associated with polydrug use by lowering the negative peer influences and increasing adolescent's meaningful activities.

Poster illustrations by Maciej Trzepałka
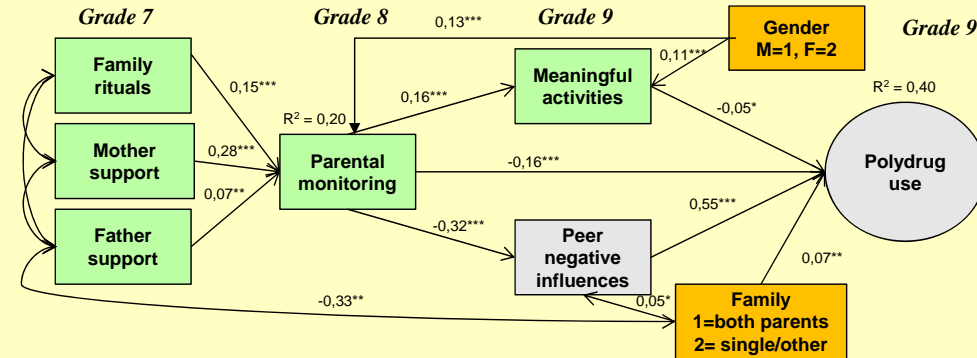
1. Longitudinal structural model testing family practices, negative peer influences and adolescent polydrug use. ADF- based fit indices: CMIN/DF = 3,66, RMSEA=0,38, SRMR=0,33
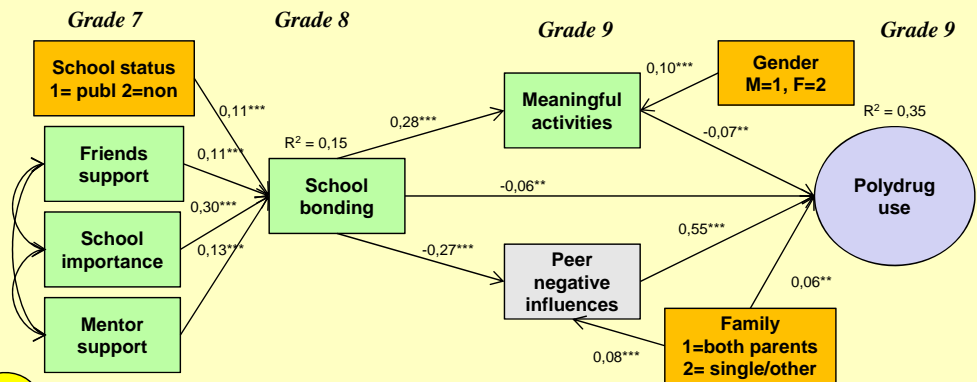
2. Longitudinal structural model testing school bonding, negative peer influences and adolescent polydrug use. ADF- based fit indices: CMIN/DF = 4,42, RMSEA=0,43, SRMR=0,38

Conclusions:
- Longitudinal analysis results indicate that protective factors modify the effects of the peer negative influences in adolescent substance use. This supports the risk-protective model of resiliency
- Enhance both parental positive practices and school bonding may be an effective prevention strategies across middle school years
- The results of a school survey conducted in Warsaw are consistent with earlier results suggesting the protective effects of parental /school positive bonding in adolescence