



# Motivation as an explanatory factor in weight reduction among Slovak adolescent girls



Lucia Hricová, Oľga Orosová, Jaroslava Kahancová

Department of Educational Psychology & Health Psychology, Faculty of Arts, PJ Safarik University in Kosice, Slovakia



APVV

## 1 Objective

This study aimed to explore how **autonomous motivation** (arising from the Self) and **external regulation** (arising from pressures from the social environment) explain **healthy and unhealthy weight reduction strategies**.

## 2 Methods

### Sample:

- 100 adolescent girls (Mage=17.5, SD=1.27)
- convenient sampling method
- Paper-pencil questionnaire

### Measures:

**Treatment Self-Regulation Questionnaire** (Levesque et al., 2007)

- 2 scales: Autonomous motivation (AM - 6 items) & External regulation (ER - 4 items) assess the degree of non/autonomous self-regulation regarding why individuals engage in reducing their weight
- 7-point Likert-type scale - 1 (not at all true) to 7 (very true), 0 (not engaged)
- Cronbach's alpha=.88 (AM) and .86 (ER)

**Frequency of weight reduction strategies** (Al Sabbah et al., 2010; Thøgersen-Ntoumani et al., 2010)

- frequency of the 14 listed methods (8 healthy and 6 unhealthy) used to control their weight during the previous 12 months
- 5-point response scale - 1(never) - 5 (always)

**BMI** (Body mass index)

- self-reported weight in kilograms/height<sup>2</sup>

### Data analysis:

- standard multiple regression

## 4 Conclusions

- The more **autonomously motivated** the girls are to reduce their weight, the more often they use **health-appropriate ways of weight reduction**.
- **Unhealthy weight reduction strategies** were found to be associated with both **autonomous and external regulation**.
- However, **unhealthy ways** of weight reduction were more strongly associated with **external motivation**.

## 3 Results

Table 1. Frequency of healthy and unhealthy weight reduction strategies

Strategies		Mean	SD
Healthy	<b>exercising</b>	<b>3.44</b>	.92
	eating fewer sweets	2.86	1.20
	eating less fat	2.81	1.15
	drinking fewer soft drinks;	3.35	1.44
	eating less (smaller amounts)	3.06	1.32
	<b>eating more fruit/vegetables</b>	<b>3.99</b>	1.04
	<b>drinking more water</b>	<b>4.03</b>	1.04
Unhealthy	dieting under the supervision	1.13	.47
	<b>skipping meals</b>	<b>2.15</b>	1.11
	fasting	1.43	.88
	restricting diet to one or more food groups	1.78	1.28
	vomiting	1.17	.72
	using diet pills or laxatives	1.14	.57
smoking more	1.19	.64	

Table 2. Standard multiple regression model of (1) Healthy strategies and (2) Unhealthy strategies

Model	Predictors	Beta	t	p
(1) Healthy strategies	BMI	-.06	.56	.58
	<b>Autonomous motivation</b>	<b>.52**</b>	<b>4.29</b>	<b>&lt;0.001</b>
	External regulation	-.04	-.33	.74
(2) Unhealthy strategies	BMI	-.1	-1.03	.31
	<b>Autonomous motivation</b>	<b>.25*</b>	<b>2.12</b>	<b>p&lt;0.05</b>
	<b>External regulation</b>	<b>.41*</b>	<b>3.54</b>	<b>p&lt;0.05</b>

Note: \*p<0.05, \*\*p<0.001; (1) F(3,84) = 10.24\*\*, (2) F(3,84) = 13.48\*\*; explained variance: (1) 26.% and (2) 32.5%.

## Acknowledgement

This work was supported by the scientific grant agency of the Slovak Research and Development Agency under the contract no. APVV-0253-11, no. APVV-15-0662 and by the Ministry of Education, Science, Research and Sport of the Slovak Republic and the Slovak Academy of Sciences under contract no. VEGA 1/0713/15.