

## Background

Resilience is an important factor of successful adaptation, particularly when facing a challenging or threatening situation. Therefore, monitoring individual's resilience and its changes in intervention programs such as Unplugged is important.

The aim of this study was to explore the main effect of time and the interaction effects of gender and Unplugged intervention program on schoolchildren's resilience.

## Unplugged

- Universal school-based program for preventing smoking, substance use and alcohol abuse among early adolescents adolescents ([www.eudap.net](http://www.eudap.net))
- Based on the Comprehensive Social Influence model
- Consisted of twelve 45-minute lessons for pupils in primary schools.
- Administered by teachers trained in Unplugged (3-day course).

## Method

- A cluster randomized controlled trial was carried out in 2013/2014 with 1295 participating schoolchildren (M=11.52; 46.8% boys).
- The schools were randomly assigned to either experimental (EG, n=641) or control group (CG, n=654). EG was exposed to the program Unplugged.
- The sample was finally divided into 3 categories where the EG was further divided according the level of commitment shown by the teachers implementing the program: EG with a committed teacher, EG with an uncommitted teacher, and CG
- Data collections were conducted immediately before (T1) and then 3 months (T2) and 18 months (T3) after the program Unplugged implementation.
- The Adolescent Resilience Scale (Oshio et al., 2003) was used with the aim to measure the psychological features of resilient individuals at T1, T2 and T3. The scale consists of 21 items. Respondents were asked to choose a rating scale using anchors of 5 = Definitely yes and 1= Definitely no.

## Statistical analyses

The analyses were conducted using a GLM Repeated Measures procedure.

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## Results

The results of GLM repeated measure analysis indicated a significant main effect of time on resilience ( $F=6.58, p \leq 0.001$ ).

The results also showed significant interaction effects of gender x resilience ( $F=5.40, p \leq 0.01$ ) and gender x Unplugged participation x resilience ( $F=3.17, p < 0.05$ ).

Tests of Within-subjects Contrasts indicated:

- a significant decrease in resilience from T1 to T3 ( $F=7.50, p < 0.01$ , Figure 1)
- a significant decrease in resilience from T1 to T3 among boys ( $F=5.61, p < 0.05$ , Figure 2)
- EG with a committed teacher showed a significant increase in resilience only among girls from T1 to T3 ( $F=3.93, p < 0.05$ , Figure 3).

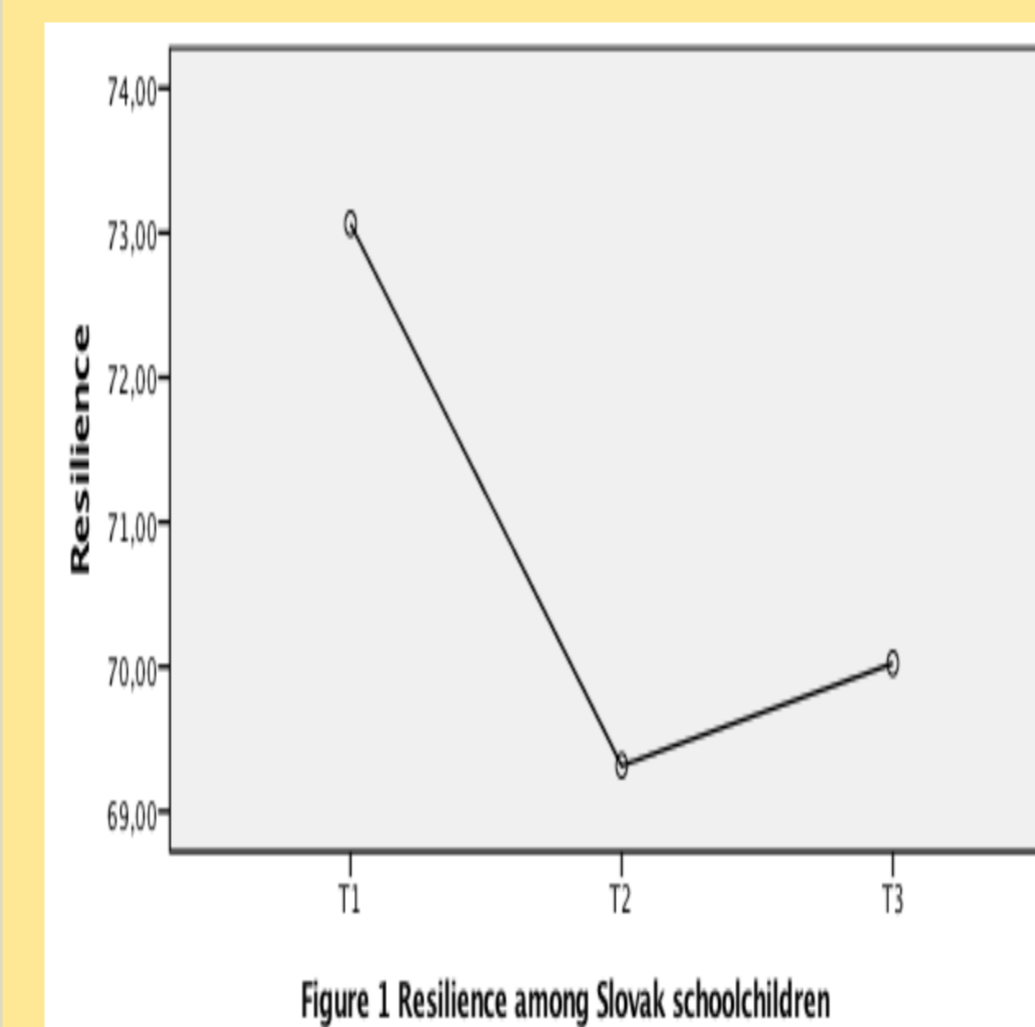


Figure 1 Resilience among Slovak schoolchildren

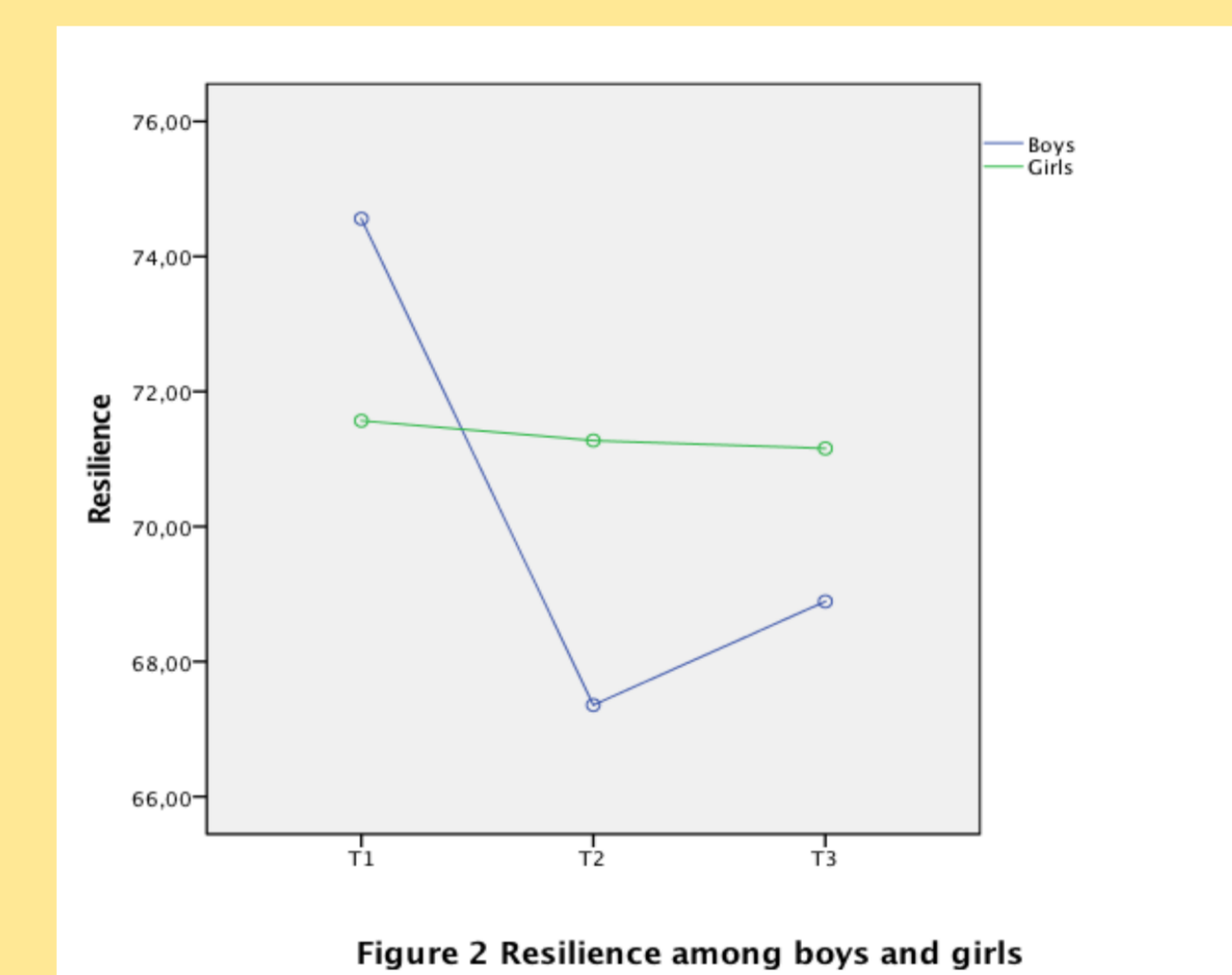


Figure 2 Resilience among boys and girls

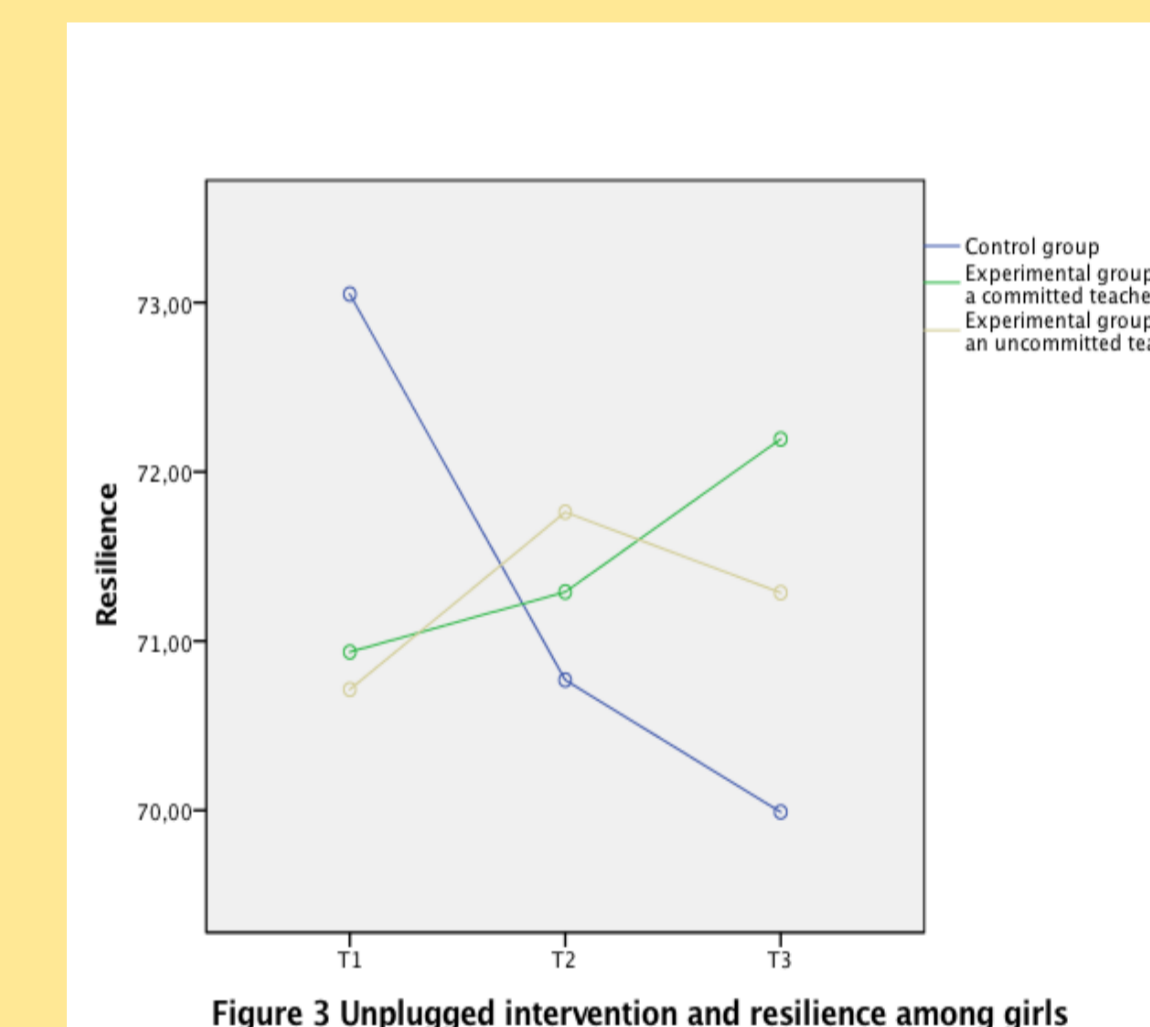


Figure 3 Unplugged intervention and resilience among girls

Notes: before (T1), 3 months (T2), 18 months (T3) after the program Unplugged implementation

## Conclusion

A persisting effect of the Unplugged intervention on resilience, i.e. 18 months after the Unplugged intervention administration, was found only among girls.

The commitment of teachers implementing the program was seen to play a critical role in reaching expected level of implementation fidelity of the intervention.

Reference: Oshio, A., Kaneko, H., Nagamine, S., & Nakaya, M. (2003). Construct validity of the adolescent resilience scale. *Psychological reports, 93*(3\_suppl), 1217-1222.