

POSITIVE YOUTH DEVELOPMENT IN SLOVENIA: TEST OF A MODEL

Ana Kozina, & Tina Pivec
Educational Research Institute (Slovenia)

Abstract

The PYD framework is based on Relational Developmental System Theory, which focuses on the importance of the interplay between individual characteristics and contexts (e.g., school, family, community, society) (Lerner, 2007). In the study, we will put this model through an empirical test using structural equation modelling. We will test a path leading from developmental assets (internal and external assets) to the 5Cs and further on to the positive (contribution) and negative (bullying, anxiety) outcomes. The basic assumptions are that the amount of developmental assets present is related to the PYD outcomes, the 5Cs, and these to the lower level of risky and problem behavior and to greater contribution. We will test three alternative models with variations in the 5Cs part: 5Cs model, one-factor model, two-factor model. The rationale for testing 5Cs as one factor originates in the studies (e.g., Holsen et al., 2017) showing that the associations between the 5Cs and negative outcomes appear to depend on how the 5Cs are treated in data analysis, i.e., as separate Cs or as one PYD factor. Similarly, proofs of a two-factor model can be found in the literature (Årdal et al., 2018). We will use Slovenian youth sample ($N = 1982$; 57.4% female; $M_{\text{age}} = 15.35$, $SD = 1.21$) participating in PYD-SI-MODEL study and a selection of self-report measures: Developmental Assets Profile (Scales, 2011), PYD questionnaire (Geldof et al., 2013), LAOM Anxiety Scale (Kozina, 2012); Adolescent Peer Relationship Index Bully-Target (Parada, 2000), and Thriving and Contribution Indicators (Benson, 2003). The findings show better fit of the 5C model. The study is the first of this kind to test the model on Slovenian data therefore together with scientific added value, the study has direct implications also for practice and for the promotion of positive youth development in Slovenia.

Keywords: *Positive youth development, Slovenia, school, structural equation modelling.*

1. Introduction

The basic idea of the Positive Youth Development (PYD) framework is that youth will develop positively when their strengths (internal assets) are aligned with the resources in their environment (external assets). Thus, positive youth development outcomes (5Cs: competence, confidence, character, caring, connectedness) will be more probable, risky or problem behaviors (e.g., bullying, anxiety) less frequent and prosocial behavior and contribution more present (Lerner, 2007). In the study, we will put this model through an empirical test using structural equation modeling. We will test a path leading from developmental assets (internal and external assets) to the 5Cs and further on to the positive (contribution) and negative (bullying, anxiety) outcomes. The basic assumptions are that the amount of developmental assets present is related to the PYD outcomes, the 5Cs, and these to the lower level of risky and problem behavior and to greater contribution. We will test three alternative models with variations in the 5Cs part: the 5Cs model, one-factor model, two-factor model. The rationale for testing 5Cs as one factor originates in the studies (e.g., Holsen et al., 2017) showing that the associations between the 5Cs and negative outcomes appear to depend on how the 5Cs are treated in data analysis, i.e., as separate Cs or as one PYD factor. Similarly, proofs of a two-factor model can be found in the literature (Årdal et al., 2018; Gomez-Baya et al., 2019).

2. Method

2.1. Participants

A randomized sample consisted of 1982 students from Slovenia (57.4% female; $M_{\text{age}} = 15.35$, $SD = 1.21$) who participated in a study Positive Youth Development in Slovenia: Developmental pathways in the context of migration (PYD-SI Model).

2.2. Instruments

Developmental Assets Profile (Scales, 2011), PYD questionnaire (Geldof et al., 2013), LAOM Anxiety Scale (Kozina, 2012); Adolescent Peer Relationship Index Bully-Target (Parada, 2000), Cyber Bullying (Griezel et al., 2012) and Thriving and Contribution Indicators (Benson, 2003).

2.3. Procedure

The students completed a paper or online version of the questionnaire measuring indicators of positive youth development with possible connected factors and demographics. The structural equation modelling (SEM) was performed in Mplus. The study was supported by The Slovenian Research Agency as part of the project Positive Youth Development in Slovenia: Developmental Pathways in the Context of Migration (PYD-SI Model) [J5-1781].

3. Results

Before testing the fit of the models with structural equation models, we have tested the structure of all measured constructs using CFA and ESEM. The ESEM was used for Developmental Assets and for the rest of the measured constructs, CFA was used.

Table 1. Fit indices (ESEM and CFA) for measured constructs.

	$\chi^2(df)$	RMSEA	SRMR	CFI	TLI	BIC	AIC
DA	5088.523 (1373)***	.037 (.036-.038)	.035	.905	.889	228485.845	226601.048
PYD	3462.426 (503)***	.055 (.053-.056)	.063	.909	.898	159833.428	159129.108
APRI	5809.234 (579)***	.068 (.066-.069)	.056	.894	.902	122816.172	122128.870
LAOM	974.539 (72)***	.080 (.075-.084)	.040	.937	.920	74092.972	73830.608
CB	736.205 (48)***	.085 (.080-.091)	.037	.964	.950	23588.639	23487.514
TC	55.886 (4)***	.081 (.063-.101)	.026	.962	.906	26807.662	26718.428

Notes: DA = Developmental Assets Profile; PYD = PYD questionnaire, APRI = Adolescent Peer Relationship Index Bully-Target; LAOM = Anxiety Scale; CB = Cyber Bullying; TC = Thriving and Contribution Indicators.

We have tested three alternative models with variations in the 5Cs part: 5Cs model, one factor hierarchical model, two-factor model.

Table 2. Test of the alternative models: Fit indices.

MODEL	$\chi^2(df)$	RMSEA	SRMR	CFI	TLI	BIC	AIC
5C	32794,376 (11891)***	.030 (.029-.030)	.050	.886	.881	621216.403	616585.506
1F	40089.871 (11972)***	.034 (.034-.035)	.076	.846	.841	627196.387	623018.513
2F	37896.290 (11952)***	.033 (.033-.033)	.057	.858	.853	625154.663	620864.932

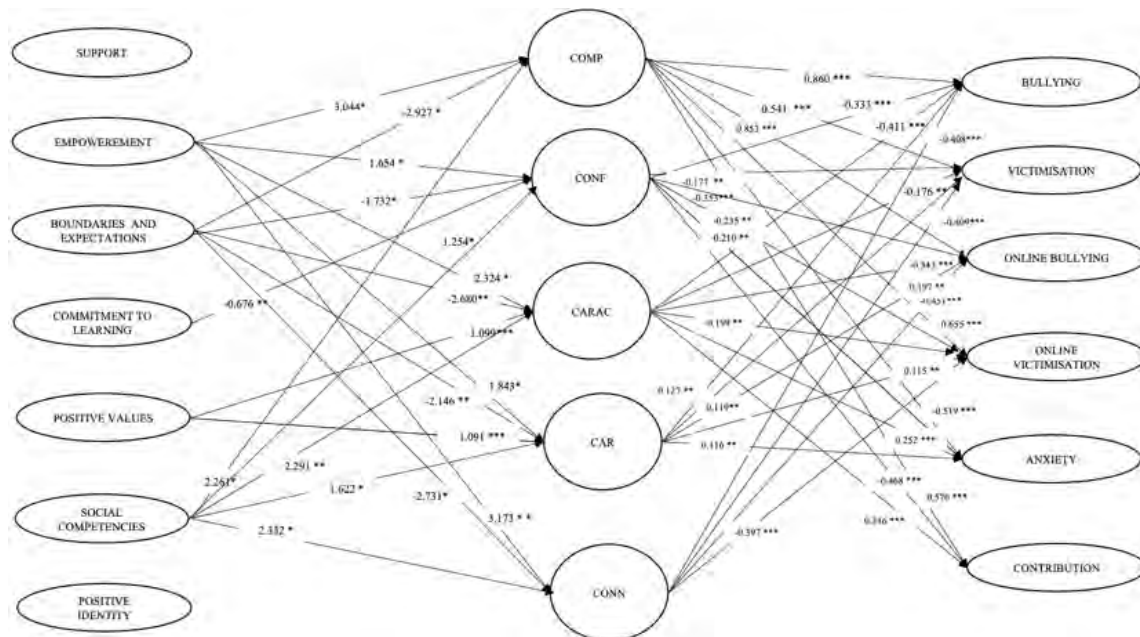
Notes. Suggested modification indices were used, allowing correlation within measured constructs.

All three models show adequate fit, with the 5C model showing better fit than others, considering all included fit indices. The paths in the 5Cs model are presented below (see Figure 1).

4. Conclusions

In the study, we have tested alternative PYD models: the original 5Cs (Lerner, 2007), hierarchical one-factor model (Holsen et al., 2017) and 2-factor model (Årdal et al., 2018; Gomez-Baya et al., 2019). As it turned out, the original 5Cs model. Based on the model we can see the important role of the development assets (especially *Empowerment*, *Limits and Expectations* and *Social Competencies*) for the 5Cs and the role the 5Cs further on play in Bullying (Cyber as well), Anxiety and Contribution. The study is first to test the model on Slovenian data, therefore together with scientific added value, the study has direct implications also for practice and for promotion of positive youth development in Slovenia.

Figure 1. Structural equation model (Model 1.1.): Paths between Developmental assets (Support, Empowerment, Boundaries and expectations, Commitment to learning, Positive values, Social competencies, Positive identity), the 5Cs (Competence, Confidence, Character, Caring, Connection), problematic behaviour (Bullying, Victimisation, Online Bullying, Online Victimisation) and Contribution. The numbers present standardised coefficient estimates. Only significant paths are presented. *** $p < .001$, ** $p < .05$; * $p < .10$.



References

- Benson, P. L. (2003). Developmental Assets and Asset-Building Community: Conceptual and Empirical Foundations. In: Lerner R.M. & Benson P.L. (Eds.) *Developmental Assets and Asset-Building Communities. The Search Institute Series on Developmentally Attentive Community and Society, vol 1.* (pp. 19–43). Springer. https://doi.org/10.1007/978-1-4615-0091-9_2
- Geldhof, G. J., Larsen, T., Urke, H., Holsen, I., Lewis, H., & Tyler, C. P. (2019). Indicators of positive youth development can be maladaptive: The example case of caring. *Journal of Adolescence, 71*, 1–9. <https://doi.org/10.1016/j.adolescence.2018.11.008>
- Geldhof, G. J., Bowers, E. P., Boyd, M. J., Mueller, M. K., Napolitano, C. M., Schmid, K. L., ... & Lerner, R. M. (2013). Creation of short and very short measures of the five Cs of positive youth development. *Journal of Research on Adolescence, 24*(1), 163–176. <https://doi.org/10.1111/jora.12039>
- Griezel, L., Finger, L. R., Bodkin-Andrews, G. H., Craven, R. G., & Yeung, A. S. (2012). Uncovering the structure of and gender and developmental differences in cyber bullying. *The Journal of Educational Research, 105*(6), 442–455. <https://doi.org/10.1080/00220671.2011.629692>
- Holsen, I., Geldhof, G. J., Larsen, T., & Aardal, E. (2017). The Five Cs of positive youth development in Norway: Assessment and associations with positive and negative outcomes. *International Journal of Behavioral Development, 41*(5), 559–569. <https://doi.org/10.1177/0165025416645668>
- Kozina, A. (2012). The LAOM Multidimensional Anxiety Scale for measuring anxiety in children and adolescents: Addressing the psychometric properties of the scale. *Journal of Psychoeducational Assessment, 30*, 264–273. <https://doi.org/10.1177/0734282911423362>
- Lerner, R. M. (2007). *The good teen.* The Stonesong Press.
- Parada, R. H. (2000). *Adolescent peer relations instrument: A theoretical and empirical basis for the measurement of participant roles in bullying and victimization of adolescence. An interim test manual and a research monograph: A test manual.* University of Western Sydney, Self-Concept Enhancement and Learning Facilitation (SELF) Research Centre, Publication Unit.
- Scales, P. C. (2011). Youth developmental assets in global perspective: Results from international adaptations of the developmental assets profile. *Child Indicators Research, 4*(4), 619–645. <https://doi.org/10.1007/s12187-011-9112-8>