

The effects of 5Cs and Developmental Assets on Well-being and Satisfaction with Life Among Youth in Kosovo

Fitim Uka^{1,2}, Arian Musliu^{3,4}, Tringa Mehmeti⁴, Shkurtë Bajgora⁴, Vlera Isufi²

¹ University of Prishtina "Hasan Prishtina"

² Multidisciplinary Clinic "Empatia", Prishtinë, Kosovo

³ Ludwig-Maximilians Universität München

⁴ Psycho-Social and Medical Research Center

Abstract

The basic models of Positive Youth Development (PYD)—the 5Cs (competence, confidence, character, connection, and caring) and developmental assets (internal and external assets) are considered crucial for many positive outcomes. To date, there are limited studies on 5Cs and developmental assets in the context of lower-middle-income countries (LMICs). The current study aimed to identify the effects of 5Cs and developmental assets in well-being and satisfaction with life among youth in Kosovo. In total, 916 students (66.7% females) with a mean age of 16.32 years old participated in this study. They completed several instruments that measured PYD 5Cs, internal and external assets, well-being, and satisfaction with life. In line with the PYD perspective, we found that internal and external assets were significantly correlated with 5Cs. Caring and character were not found to predict well-being and satisfaction with life, while the rest of 5Cs and both internal and external assets were shown to have a positive effect on well-being and satisfaction with life. Lastly, we discussed how these findings can contribute to developing new educational programs to increase students' academic performance and well-being. Specifically, we propose to enhance students' competence, connection, and confidence as these factors showed clearly bigger significant effects on well-being and satisfaction with life.

Keywords: Positive Youth Development, Developmental Assets, Satisfaction with Life, Well-being

Učinek 5 C-jev in razvojnih virov na dobro počutje in zadovoljstvo z življenjem med mladimi na Kosovu

Povzetek

Osnovni modeli pozitivnega razvoja mladih (PYD) - 5C-ji (kompetentnost, samozavest, karakter, povezanost in skrb) ter razvojni viri (notranji in zunanji viri) skupaj vodijo v številne pozitivne izide. Do danes so raziskave 5C-jev in razvojnih virov v kontekstih držav z nižjimi oz. srednjimi dohodki (LMIC) redke. Cilj te raziskave je bil ugotoviti učinke 5C-jev in razvojnih virov na dobro počutje in zadovoljstvo z življenjem med mladimi na Kosovu. Skupaj je v raziskavi sodelovalo 916 dijakinj in dijakov (66,7% deklet) s povprečno starostjo 16,32 let. Uporabili smo več pripomočkov, ki merijo 5C-je, notranje in zunanje vire, dobro počutje in zadovoljstvo z življenjem. V skladu s perspektivo PYD smo ugotovili, da so notranji in zunanji viri statistično pomembno povezani s 5C-ji. Pri tem Skrb in Značaj nista napovedovala dobrega počutja in zadovoljstva z življenjem, medtem ko se je pokazalo, da preostali C-ji, ter tako notranji kot zunanji viri pozitivno vplivajo na počutje in zadovoljstvo z življenjem. Nazadnje smo razpravljali o tem, kako lahko te ugotovitve prispevajo k razvoju novih izobraževalnih programov za povečanje učne uspešnosti in dobrega počutja dijakinj in dijakov. V tej smeri predlagamo predvsem spodbujanje kompetentnosti povezanosti in samozavesti dijakinj in dijakov, saj so ti pokazali očitno pomembne učinke na dobro počutje in zadovoljstvo z življenjem.

Ključne besede: pozitiven razvoj mladih, razvojni viri, zadovoljstvo z življenjem, dobro počutje

The ongoing debate about the most influential factors of well-being and satisfaction with life among youth have produced many interesting results. Although, there has been controversial findings, lately a well-established evidence suggests a compromise, pointing to the importance of both: intrapersonal competencies and environmental or contextual factors. Attempts to explain the complexity of the interaction between these two facets derived different theoretical approaches. The Positive Youth Development (PYD; Lerner et al., 2009) represents one of the most influential theory, suggesting that if adolescents establish mutually beneficial relations with peers and the institutions of their social world, they are more likely to thrive and experience a hopeful future distinguished by positive contributions to self, family, community, and civil society (Lerner et al., 2005; Lerner et al., 2009). A key defining feature of PYD is its consideration of the potential and capacity of each individual young person. All and sundry in

the face of adversity are viewed as strong and uniquely capable depending on their developmental stage, instead of merely being regarded as “inadequate” or “undeveloped”.

A well-established evidence showed that the PYD framework is related to several positive outcomes such as mental and physical health, academic achievement and satisfaction, employment, life satisfaction, and overall adolescent well-being (Beck & Wiium, 2019; Catalano et al., 2019; Kozina et al., 2018; Soares et al., 2019; Shek & Chai, 2020; Zhou et al., 2020). To further investigate each of these relationships, models within the PYD framework were proposed. Some of the most widely used and successful PYD models include Lerner’s 5Cs (Lerner et al., 2009) which consists of five factors (competence, confidence, connection, character and caring), and the Developmental Assets model (Benson, 2003) which consist of two high-order factors (internal and external assets).

Lerner’s 5Cs model of PYD

Lerner’s 5Cs model of PYD (Lerner et al., 2009) is built upon five factors: (1) *competence* (positive view of one’s actions in a specific area, e.g. social, academic, cognitive, vocational skills), (2) *confidence* (internal sense of positive self-worth and self-efficacy), (3) *connection* (positive bonding with peers), (4) *character* (respect for societal norms, interpersonal values and skills, moral commitment), and (5) *caring* (a sense of empathy and sympathy for others). As each factor is operationalized differently, authors propose to treat each of the factors as independent (Lerner et al., 2009). Further, the literature points to different outcomes and effects regarding each C. For example, high levels of confidence and connection are negatively associated with anxiety and depressive symptoms (Holsen et al., 2016; Kozina et al., 2020). In contrast, caring is positively related to anxiety and depression, while competence and character showed a nonsignificant effect (Holsen et al., 2016; Kozina et al., 2020). Furthermore, it is found that character and confidence are positively associated with academic achievement (e.g. math achievement), while connection showed negative relation with the same outcome (Kozina et al., 2018). These relationships are attributed to the fact that character and confidence are solely measured by self-perceived competence and subjective values, whereas connection is measured by a combination of home, teacher, peer and neighborhood relationships (Kozina et al., 2018). In contrast to expectations that each of the five competencies will show a positive outcome, Årdal and colleagues (2017) found that

confidence, competence, and connection fully mediate the effect of perceived school empowerment on school satisfaction, while caring and character did not have a role. The justification of diverse findings led to the differences in the context in which the items were measured. Confidence, competence, and connection are school-context related, while items measuring caring and character are not particularly context oriented (Årdal et al., 2017). Thus, the types of measurements which are usually context-related, lead to difficulties in pinpointing the exact relationship type between 5Cs and outcomes. This can be applied for the contextual factors as well. As such, the context in which the 5Cs are measured should be taken into consideration and studies built upon the Lerner's 5Cs model of PYD framework should be conducted in different cultures to examine the effects of 5Cs and reach generalizability.

Developmental Assets of PYD

The Developmental Assets model focuses on integrating psychological and environmental strengths to enhance thriving and health outcomes among young individuals (Benson, 2003). As such, it consists of two high-order factors namely internal and external assets. Internal assets describe a young person's set of skills, competences and values, whereas the external assets express the contextual and relational features of a young person's environment (Benson, 2003). In addition, both internal and external assets are further divided into four factors each. Internal assets consist of: (1) commitment to learning, (2) positive values, (3) social competence, and (4) positive identity. While, external assets consist of (1) support, (2) empowerment, (3) boundaries and expectations, and (4) constructive use of time. This model is purposefully designed to guide community-based practices that strengthen the natural socialization of communities.

Just like the potential of 5 Cs, youth with higher number of developmental assets are shown to be more likely to experience thriving outcomes (Scales et al., 2000). Precisely, young individuals with higher levels of developmental assets are more likely to be successful at school, overcome adversity, maintain physical health, and delay gratification (Scales et al., 2000). In addition to that, youth programs that promote empowerment and positive identity among vulnerable individuals were associated with increased resilience overtime (Sanders & Mundford, 2014).

Also, in the same line with Lerner's 5Cs, it is shown that specific factors of developmental assets may have different effects on positive youth

outcomes. For example, both internal and external assets are shown to be good predictors of academic achievement (Beck & Wiium, 2019). But, when an in-depth investigation was conducted, it was found that some of the factors of internal assets such as commitment to learning and positive identity, and one of the factors of external assets like support were the only ones that showed a positive relationship with academic achievement (Beck & Wiium, 2019). However, according to Scales and colleagues (2006) all the factors of developmental assets have concurrent and longitudinal associations to students' GPA. Nonetheless, some of the factors reflecting adherence to norms of responsibility and connection to community showed larger effects on students' GPA overtime (Flynn et al., 2012; Scales et al., 2006). Further studies also showed consistent effects of the developmental assets on healthy behaviors (see Atkins et al., 2002; Benson et al., 1999), which were replicated in other cultures as well (see Uka et al., in press; Scales et al., 2000).

As both models (5Cs and developmental assets) have some similarities and since they are based on the same theory (Lerner et al., 2005; Lerner et al., 2009), an integrative approach model was proposed (Lerner et al., 2009; Overton, 2015). Thus, young people's development should be seen as an interaction between individuals' characteristics (internal assets) and context (external assets) which in turn may lead to an increase of positive outcomes such as 5Cs. In this direction, the 5Cs and developmental assets were found to have a bidirectional relationship, which may influence satisfaction with life and overall well-being (Soares et al., 2019; Zulling et al., 2011).

The effects of PYD on Life Satisfaction and Well-being

Although an integrative approach was proposed, each factor of such model should be treated as independent as well, due to their unique effects on outcomes (Lerner et al., 2009; Overton, 2015). To date, the existing literature points to a relationship between positive youth development and life satisfaction and well-being among adolescents. For example, high levels of character, confidence and connection were associated with higher levels of life satisfaction and contribution (Pilkauskaite-Valickiene, 2015). Similar findings were found from Zhou et al. (2020) that showed that the PYD attributes were positive predictors of life satisfaction and well-being and negatively predicted hopelessness. Furthermore, life satisfaction and well-being often were found to mediate the effect of the PYD attributes on different outcomes. For example, life satisfaction was found to mediate the effect of

PYD attributes on delinquent behavior (Zhu & Shek, 2020). All in all, the lack of PYD attributes usually leads to the experience and inability to cope with negative life events, which in turn affects life satisfaction (Zhou et al., 2020; Zhu & Shek, 2020).

Less ambiguous findings were found regarding the effects of the developmental assets on life satisfaction and well-being. Both types of assets (internal and external) explain a considerable amount of the variance of life satisfaction with individual assets being slightly stronger predictors (Soares et al., 2019). Specifically, internal assets like self-esteem, sense of purpose, plan and decision making, school engagement and positive value of caring, as well as external assets such as family support and communication, support from non-parent adults, and youth as resources are all meaningful predictors of life satisfaction among adolescents (Soares et al., 2019). However, some of the assets also showed a negative relationship with life satisfaction. For instance, assets like support from non-parent adults and future aspirations had a negative association with life satisfaction and overall mental health among college students (Zullig et al., 2011). This can be explained due to the less supportive nature of non-parent adult relationships that students encounter in their college years. Moreover, students have a hard time accommodating to the increasing competitive nature of the working world, which in turn affects their health and their satisfaction with life (Zullig et al., 2011).

Consistent positive effects of PYD framework on well-being and life-satisfaction was found when tested and piloted in different intervention programs (Bleck & DeBate, 2016). In recent years, an emerging number of youth programs have employed a PYD approach to their design in order to promote and foster bonding, competence, resilience, empowerment, and prosocial behaviors among youth (Catalano et al., 2004; Moore, 2017). Also, numerous meta-analyses provide evidence that PYD-based programs reduce violence and aggression, substance-use, school misbehavior, school dropout rates, and high-risk sexual behavior (Benson & Scales, 2009; Bonell et al., 2015; Guerra & Bradshaw, 2008). However, it should be noted that the most of the studies within the PYD framework have Western (e.g. Sanders & Munford, 2014; Sanders et al., 2015) and Asian (e.g. Shek & Chai, 2020; Zhu & Shek, 2020; Zhou et al., 2020) samples. As it is already established that context plays a crucial role within the PYD framework, it was recommended that future studies should consider culture as well, especially LMICs where research is scarce (USAID, 2016; Wium & Dimitrova,

2019). To our knowledge, there are only a few studies that took into consideration other cultures and LMIC samples (e.g. Uka et al., in press).

Research Gap and Study Aim

The overall student's performance in Kosovo significantly lags behind major averages of the OECD countries (OECD, 2016, 2018). Thus, studies that lay the ground for PYD interventions—which were found to have long-term effects—in LMICs such as Kosovo are desperately needed. Although they are fundamental for adolescent's well-being, the lack of funds for research and training makes them unseen in the field of intervention, yielding negative outcomes. A new line of evidence from LMICs would be beneficial to further develop positive youth programs, focusing on positive socialization and developmental processes, assets and skills, rather than risks and problems and they could potentially allow youth to develop decision-making abilities. The assessment of modest existing programs in LMICs shows that most PYD programs can be applied to these countries, however, they require proper and rigorous examination for follow-up long-term outcomes (Catalano et al., 2019). Thus, with research regarding PYD programs and their effects on adolescent's life being modest, PYD interventions cannot be designed properly.

Therefore, we aimed to conduct a study that will contribute to the existing literature with a sample from LMICs such as Kosovo. Specifically, this study aimed to identify the effects of 5Cs (competence, confidence, character, connection, and caring) and developmental assets (internal and external assets) on well-being and satisfaction with life among youth in Kosovo. Although the literature confirms the monotonic positive relationship between these variables, we aim to extend the investigation in an understudied population, such as the youth in Kosovo. Moreover, using Path Models, the current study aims to identify which factor is the best predictor of well-being and life satisfaction, thus informing both policies and intervention. Based on the previous evidence, we hypothesized that 5Cs and development assets are correlated with one another. We also hypothesized that both internal and external assets will positively predict satisfaction with life and well-being. However, we expected similar findings as Årdal et al. (2017), thus hypothesizing that only three out of 5Cs (competence, confidence and connection) will predict significantly satisfaction with life and well-being.

Methodology

Sample

In this study 916 students (66.7% females and 33.3% males) participated with a mean age of 16.32 years old ($SD = .99$). All the participants were randomly chosen from six municipalities of Kosovo. From them, 34.7% were in the 11th grade, followed by 34.5% of the participants that were in the 10th grade and 30.8% of the participants that were in the 12th grade. The distribution of the participants between urban vs rural settlement was almost similar with 46.2% of the participants living in urban areas and 42% living in rural areas.

Procedure

Prior to data collection, we got permission from each author's institution to conduct this study as we do not have a specific regulation law for such studies in Kosovo. After getting the approval from the institutions, we then informed school principals, teaching staff, parents, and students about the purpose and methods of the study. Upon agreement by schools to take part in the study, parental and student consent was obtained. After that, every participant completed the study measures as an anonymous self-report questionnaire at their schools, during their regular school hours. Two well-trained psychologists administered data collection and informed/supported students when the questionnaire was being filled out in a group setting. Procedure of data collection per class took approximately 45 min.

Measures

The *Developmental Assets Profile* (DAP; Benson, 2007) was used to measure *the developmental assets*. The questionnaire examines the 40 developmental assets through targeted items for external assets which measures support (e.g. "I have a family that gives me love

and support") empowerment (e.g. "I feel valued and appreciated by others") boundaries and expectations (e.g. "I have a family that knows where I am and what I am doing") and constructive use of time (e.g. "I am involved in a sport, club, or other group"), and internal assets which measures commitment to learning (e.g. "I enjoy learning") positive values (e.g. "I think it is important to help other people") social competencies (e.g. "I plan ahead and make good choices"), and positive identity (e.g. "I feel I have control of my life and future"). Participants indicate their answers on a 4-point Likert scale from 1 (*not at all or rarely*) to 4 (*extremely or almost always*).

Reliability coefficients of the asset categories ranged from $\alpha = .61$ to $\alpha = .82$ in our sample.

The short form of the PYD questionnaire (Geldhof et al., 2014) was used to measure the 5 competencies. The PYD questionnaire contains 34 items. A 5-point Likert scale is used to assess each item, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Sample items that measure the 5Cs are Competence (e.g. “I do very well in my classwork at school”); Confidence (e.g. “All in all, I am glad I am me”); Character (e.g. “I hardly ever do things I know I shouldn’t do”); Connection (e.g. “My friends care about me”); and Caring (e.g. “When I see another person who is hurt or upset, I feel sorry for them”). Reliability measures (Cronbach’s alphas) of the 5Cs are adequate: Reliability coefficients of the PYD categories ranged from $\alpha = .64$ to $\alpha = .88$ in the Kosovar sample.

The Satisfaction with Life Scale (Diener et al., 1985) was used to measure global cognitive judgments of one’s life satisfaction (not a measure of either positive or negative affect). This is a 5-item scale (e.g. “In most ways my life is close to my ideal”), which 7-point scale ranges from 7 (*strongly agree*) to 1 (*strongly disagree*). The reliability coefficient on the present data was $\alpha = .84$.

The World Health Organization - Five Well-Being Index (WHO-5; Topp et al., 2015) is a short self-reported measure of current mental well-being. The WHO-5 has been found to have adequate validity in screening for depression (e.g. “I have felt cheerful and in good spirit”) and it is suitable for children aged 9 and above. Participants indicate their answers on a 6-point Likert scale, ranging from 0 (*at no time*) to 5 (*all of the time*). The reliability coefficient on the present data was $\alpha = .84$.

Analytic Strategy

Prior to analyzing the data, we conducted Confirmatory Factor Analyses (CFAs) for each of the scales used in this study. Then, we estimated a path analysis which required several steps. The first step was to calculate the factor scores by calculating the mean score as suggested in the original papers. Then, the model was estimated by using the 5Cs of the PYD, and internal and external assets as the independent variable, and well-being and satisfaction with life as the outcome variables. Model fit was tested using the maximum-likelihood ratio-test statistics and indices of model fit, including the root-mean-square error of approximation (RMSEA), the comparative fit index (CFI), and the standardized root-mean square residual

(SRMR). RMSEA values of .06 or lower were considered to indicate an acceptable model fit. In addition, CFI values of .95 or above and SRMR values of < .08 were used to indicate an acceptable model fit (Hu & Bentler, 1999; Kelloway, 1998). The standardized regression coefficients were used as effect size measures, with $\beta < .10$ indicating a small effect, a β of $\approx .20$ a medium-sized effect, and $\beta > .30$ indicating a large effect (Gignac & Szodorai, 2016).

Results

Table 1. Descriptive Statistics for all Study Variables.

		%	M	SD	Min	Max
Gender						
	Female	66.60%				
	Male	33.30%				
Age						
			16.32 years	0.99	14.00	19.00
	14 years	0.80%				
	15 years	23.60%				
	16 years	30.40%				
	17 years	33.10%				
	18 years	12.00%				
	19 years	0.10%				
Grade						
	10th grade	34.50%				
	11th grade	34.70%				
	12th grade	30.80%				
Settlement						
	Urban	46.20%				
	Rural	42.00%				
Competence			3.60	0.66	1.50	5.00
Confidence			3.99	0.65	1.50	5.00
Character			3.85	0.60	1.00	5.00
Caring			4.24	0.75	1.00	5.00
Connection			3.80	0.63	1.00	5.00
Internal Assets			3.13	0.42	1.53	4.23
External Assets			2.86	0.38	1.55	3.84
Satisfaction with Life			5.21	1.25	1.00	7.00
Well-being			3.53	0.93	1.00	5.00

Results showed that three out of four scales used in this study showed acceptable model fit. Satisfaction with life scale showed a good model fit with only RMSEA above the criteria ($\chi^2 (5) = 53.40, p < .001, CFI = 0.972, RMSEA = 0.108, SRMR = 0.032$) and so did the well-being scale ($\chi^2 (5) = 57.92, p < .001, CFI = 0.969, RMSEA = 0.113, SRMR = 0.040$). Internal and external assets scale also showed good fit with RMSEA above the criteria ($\chi^2 (19) = 138.33, p < .001, CFI = 0.957, RMSEA = 0.083, SRMR = 0.039$). On the other side, the 5Cs scale did not showed a good fit with CFI below .95. However, once some residuals were let to correlate, the model was close to being acceptable ($\chi^2 (503) = 1251.49, p < .001, CFI = 0.888, RMSEA = 0.046, SRMR = 0.059$). Further, descriptive statistics for main demographic variables and each of the calculated factors used to estimate the path model are reported in Table 1. To find out the relationship between all variables included in the study we conducted a correlation analysis. Results showed that 5Cs of the PYD and the developmental assets (i.e. external and internal assets) were significantly related to one another. In this direction, external asset was strongly correlated with internal asset and this correlation was the highest ($r = .749, p < .001$). Next, all 5Cs were positively correlated with each other ($r_s = 505-098, ps < .005$). Lastly, internal and external assets were positively correlated with the 5Cs ($r_s = 591-288, ps < .001$). For the full correlation matrix, please see Table 2.

Table 2. Correlations with Confidence Intervals of the Independent Factors.

Variable	1	2	3	4	5	6
1. Competence	/					
2. Confidence	.51** [.46, .56]	/				
3. Character	.23** [.16, .29]	.34** [.28, .39]	/			
4. Caring	.10** [.04, .17]	.15** [.09, .21]	.51** [.46, .56]	/		
5. Connection	.37** [.31, .43]	.45** [.40, .50]	.47** [.42, .52]	.39** [.33, .44]	/	
6. Internal Assets	.29**	.41**	.58**	.44**	.54**	/

Variable	1	2	3	4	5	6
	[.23, .35]	[.35, .46]	[.53, .62]	[.38, .49]	[.49, .58]	
7. External Assets	.34**	.39**	.46**	.32**	.59**	.76**
	[.28, .39]	[.33, .44]	[.41, .51]	[.26, .38]	[.54, .63]	[.73, .78]

Note. **p = <.01, *p < .05

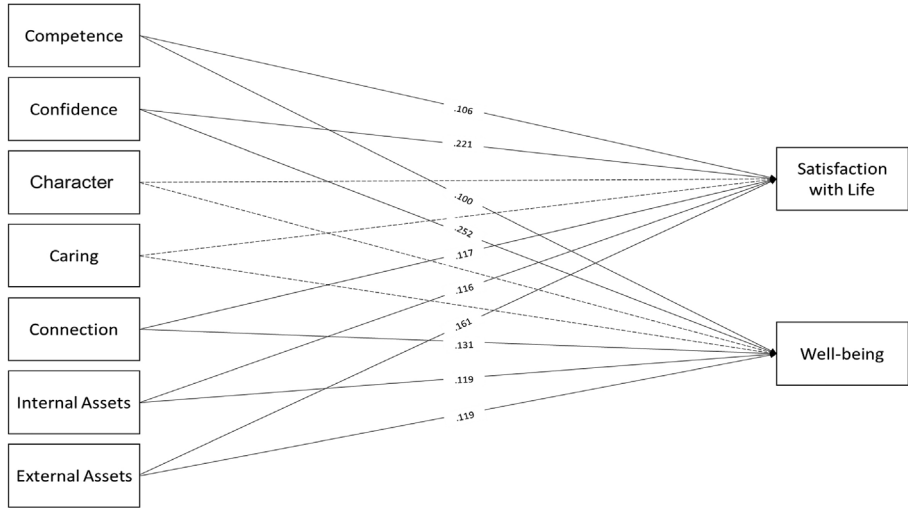


Figure 1. Prediction of satisfaction with life and well-being by the 5Cs of the PYD and internal and external assets. Note: Age, sex, grade and settlement were controlled for. Estimates provided are standardised coefficients. Solid lines indicate significant paths ($p < .05$). Dashed lines indicate non-significant paths ($p > .05$). Model fit: CFI = 1.000, RMSEA = 0.000, SRMR = 0.000. Residual terms, factor loadings, correlations between the independent variables, and variances are omitted for the sake of clarity.

To identify the influence of 5Cs and developmental assets on satisfaction with life and well-being we estimated a path analysis model. All the fit indices showed ideal scores. This model, as visualized in Figure 1, showed that three out of 5Cs together with both internal and external assets positively predicted satisfaction with life and well-being while controlling for one another. Confidence was the strongest predictor of the satisfaction with life ($\beta = .221, p < .001$) and well-being ($\beta = .252, p < .001$). This was followed by competence, which also showed significant effects on the satisfaction with life ($\beta = .106, p = .002$) and on well-being ($\beta = .100, p = .004$). The last one of the 5Cs that showed consistent significant β effects was connection ($\beta = .117, p = .002$; respectively $\beta = .131, p = .001$). On the other side, character

and caring effects were found to be nonsignificant. Further, internal and external assets significantly predicted the two outcomes. The effects of internal assets on the satisfaction with life ($\beta = .116, p = .016$) and well-being ($\beta = .119, p < .016$) were quite small. Similar small effects of external assets on satisfaction with life ($\beta = .161, p = .001$) and well-being ($\beta = .119, p < .012$) were found.

Discussion

This study used Path Models to examine the effects of the 5Cs (competence, confidence, character, connection, and caring) of Positive Youth Development (PYD) and developmental assets (internal and external assets) on well-being and satisfaction with life among youth. Most of the studies worldwide have already confirmed that the PYD framework positively influences numerous positive outcomes such as mental and physical health, academic achievement, including life satisfaction and overall well-being (Beck & Wiium, 2019; Catalano et al., 2019; Kozina et al., 2018; Soares et al., 2019; Shek & Chai, 2020; Zhou et al., 2020). However, the PYD research in Southeastern Europe is relatively rare and to our knowledge this is the first study to specifically investigate the effects of an integrative approach consisting of Lerner's 5Cs (Lerner et al., 2009) and developmental assets (Benson, 2003) on well-being and life satisfaction in Kosovo. All that to provide evidence in a low- to middle-income country such is Kosovo. A country that is overcoming huge social transitions and in which youth values have changed over these 20 post-conflict years. Although speculative, both character and caring and the way how they were perceived among youth in Kosovo may have been prone to change. Thus youth in Kosovo tend to rely more on other values/assets.

Regarding our first hypothesis, we found moderate to strong correlations of 5Cs with the developmental assets. Such results confirm previous studies (see Lerner et al., 2009; Overton, 2015), thus providing strong evidence that these factors interact with one another in a bidirectional way across different settings and cultures. The set of factors constituting 5 Cs and developmental assets are considered pivotal for many positive outcomes, as such it was expected to correlate. Although, strongly correlated the results confirms that 5 Cs and developmental assets are independent factors, thus informing theories and practices in the field of PYD.

Based on the previous evidence, we also expected a positive relation between 5Cs and developmental assets in one hand and life satisfaction and

well-being on the other one. However, we also expected that not all of the 5 Cs will be significant predictors. The results confirmed our expectations, showing that competence, confidence and connection are related to both life satisfaction and well-being, but this is not true for character and caring. The findings are also in the same line with previous studies, which have shown that 5Cs differently predict the outcomes depending on the context they are measured (Årdal et al., 2017; Kozina et al., 2018). A detailed examination of the results provides evidence for an important debate about which factor remains the strongest and persistent contributor to positive youth development. Yet, the findings are diverse. For example, character was associated with higher levels of life satisfaction and contribution in other research (e.g. Pilkauskaite-Valickiene, 2015), but this was not true for the current study. Regarding the effects of caring, our findings confirm the “controversial” of such concept, since in other studies it was shown that high levels of caring among youth are associated with high levels of anxiety (Kozina et al., 2020). Totally different picture is provided for the developmental assets. Our study is just another contribution, which re-confirms that they are both (internal and external assets) significant predictors of life satisfaction and well-being, although with small effect sizes (see Soares et al., 2019; Zullig et al., 2011). All that being said, this is new evidence for a low- to middle-income country such as Kosovo, which is overcoming huge social transitions and in which youth values have changed over these 20 post-conflict years. Although speculative, both character and caring and the way how they were perceived among youth in Kosovo may have been prone to change. Thus, youth in Kosovo tend to rely more on other values/assets.

Although we extended research on the effects of PYD on well-being and satisfaction with life in an understudied population, the findings should be interpreted in light of some limitations.

The first limitation is the cross-sectional nature of the study design, which limits the clear conclusion of the direction of associations and does not allow to identify the leading factor. Thus, future longitudinal studies can help drawing the appropriate conclusions about the bidirectional relations over time. Also, adding qualitative measures (e.g., in depth questionnaires and interviews) would help informing better policies and interventions. Also, our findings are limited to high school populations. As such the findings are not generalizable to other age groups. Future studies with university students or even with older populations can provide evidence for

the stability or changeability of the relations between PYD, well-being and life satisfaction.

Practical Implications

Despite the limitations, these are fundamental findings to design intervention and educational programs, which promote better life satisfaction and well-being. As we argued that context is important, such programs in Kosovo are yet to be developed. To our knowledge, educational and other learning enhancing programs are not based on PYD or any similar framework. Therefore, based on our findings, we believe that programs for at least two target groups can be designed. First, we can promote 5Cs for students which in turn may lead to an increase in wellbeing and life satisfaction. Specifically, we propose to promote students' competence, connection, and confidence as these factors showed clearly bigger significant effects on well-being and satisfaction with life. Second, such programs can also be designed for teachers. As we already know, teachers play a crucial role in education. We believe that by promoting their internal and external assets, as well as their 5Cs, we can contribute to teachers' well-being and satisfaction with life. That can further lead to a sustainable educational system in which both students and teachers are more satisfied.

Conclusion

Based on this study findings, we conclude that both external and internal assets, as well as 5Cs play an important role in students' well-being and their satisfaction with life. Although these are cross-sectional findings and should be interpreted with caution, they showed that three out of 5Cs (confidence, competence, and connection) positively affected well-being and satisfaction with life. Further, both internal and external assets showed similar positive results. In conclusion, promising findings which can lead to practical implications were found.

References

- Årdal, E., Holsen, I., Diseth, Å., & Larsen, T. (2017). The Five Cs of Positive Youth Development in a school context; gender and mediator effects. *School Psychology International*, 014303431773441. <https://doi.org/10.1177/0143034317734416>

- Atkins, L. A., Oman, R. F., Vesely, S. K., Aspy, C. B., & McLeroy, K. (2002). Adolescent tobacco use: the protective effects of developmental assets. *American Journal of Health Promotion*, 16(4), 198-205. <https://doi.org/10.4278/0890-1171-16.4.198>.
- Beck, M., & Wiium, N. (2019, May 9). Promoting academic achievement within a positive youth development framework. *Norsk Epidemiologi*, 28(1-2). <https://doi.org/10.5324/nje.v28i1-2.3054>.
- Benson, P. (2007). Developmental assets: an overview of theory, research, and practice. In R. K. Silbereisen, & R. M. Lerner (Eds.), *Approaches to positive youth development* (pp. 33-58). <https://www.doi.org/10.4135/9781446213803.n2>.
- Benson, P. L. (2003). Developmental Assets and Asset-Building Community: Conceptual and Empirical Foundations. *Developmental Assets and Asset-Building Communities*, 19-43. https://doi.org/10.1007/978-1-4615-0091-9_2.
- Benson, P. L., & Scales, P. C. (2009). Positive Youth Development and the Prevention of Youth Aggression and Violence. *European Journal of Developmental Sciences*, 3(3):218-234. <https://doi.org/10.3233/DEV-2009-3302>.
- Benson, P. L., Scales, P. C., Leffert, N., & Roehlkepartain E. R. (1999). *A fragile foundation, The state of developmental assets among American youth*. Search Institute.
- Bleck, J., & DeBate, R. (2016). Long-Term Association Between Developmental Assets and Health Behaviors. *Health Education & Behavior*, 43(5), 543-551. <https://doi.org/10.1177/1090198115606915>.
- Bonell, C., Hinds, K., Dickson, K., Thomas, J., Fletcher, A., Murphy, S., Melendez-Torres, G. J., Bonell, C., & Campbell, R. (2015). What is positive youth development and how might it reduce substance use and violence? A systematic review and synthesis of theoretical literature. *BMC Public Health*, 16(1). <https://doi.org/10.1186/s12889-016-2817-3>.
- Catalano, R. F., Skinner, M. L., Alvarado, G., Kapungu, C., Reavley, N., Patton, G. C., Jessee, C., Plaut, D., Moss, C., Bennett, K., Sawyer, S. M., Sebany, M., Sexton, M., Olenik, C., & Petroni, S. (2019). Positive Youth Development Programs in Low- and Middle-Income Countries: A Conceptual Framework and Systematic Review of Efficacy. *Journal of Adolescent Health*, 65(1), 15-31. <https://doi.org/10.1016/j.jadohealth.2019.01.024>.
- Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71-75. https://doi.org/10.1207/s15327752jpa4901_13.

- Flynn, R. J., Miller, M., & Vincent, C. (2012). Levels of developmental assets and educational outcomes in young people in transitional living in Canada: *Diskurs Kindheits- und Jugendforschung Heft*, 3, 277–290.
- Geldhof, G. J., Bowers, E. P., Mueller, M. K., Napolitano, C. M., Callina, K. S., & Lerner, R. M. (2014). Longitudinal analysis of a very short measure of positive youth development. *Journal of Youth and Adolescence*, 43(6), 933–949. <https://doi.org/10.1007/s10964-014-0093-z>.
- Gignac, G. E., & Szodorai, E. T. (2016). Effect size guidelines for individual differences researchers. *Personality and Individual Differences*, 102, 74–78. <https://doi.org/10.1016/j.paid.2016.06.069>.
- Guerra, N. G., & Bradshaw, C. P. (2008). Linking the prevention of problem behaviors and positive youth development: Core competencies for positive youth development and risk prevention. *New Directions for Child and Adolescent Development*, (122), 1–17. <https://doi.org/10.1002/cd.225>.
- Holsen, I., Geldhof, J., Larsen, T., & Aardal, E. (2016). The five Cs of positive youth development in Norway. *International Journal of Behavioral Development*, 41(5), 559–569. <https://doi.org/10.1177/0165025416645668>.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1–55. <https://doi.org/10.1080/10705519909540118>.
- Kelloway, E. K. (1998). *Using LISREL for structural equation modeling: A researcher's guide*. Thousand Oaks, CA: Sage.
- Kozina, A., Wiium, N., & Pivec, T. (2020, April). Positive Youth Development Perspective: The Interplay Between the 5Cs and Anxiety. Conference: International Psychological Applications Conference and Trends. <https://doi.org/10.36315/2020inpact001>.
- Kozina, A., Wiium, N., Gonzalez, J.-M., & Dimitrova, R. (2018). Positive Youth Development and Academic Achievement in Slovenia. *Child & Youth Care Forum*. <https://doi.org/10.1007/s10566-018-9457-y>.
- Lerner, R. M., Almerigi, J. B., Theokas, C., & Lerner, J. V. (2005). Positive Youth Development A View of the Issues. *The Journal of Early Adolescence*, 25(1), 10–16. <https://doi.org/10.1177/0272431604273211>.
- Lerner, R. M., Lerner, J. V., & Phelps, E. (2009). Waves of the Future: The First Five Years of the 4-H Study of Positive Youth Development. *Institute for Applied Research in Youth Development Tufts University*. Retrieved from: <http://4h.ucanr.edu/files/13699.pdf>.

- Moore, K. A. (2017). Commentary: Positive Youth Development Goes Mainstream. *Child Development*, 88(4), 1175–1177. <https://doi.org/10.1111/cdev.12874>.
- OECD (2018). *Education at a Glance 2018: OECD Indicators*. Paris, France: OECD Publishing.
- OECD (2016). *PISA 2015 Results (Volume I). Excellence and Equity in Education*. Paris: OECD Publishing. Retrieved December 11, 2016 from <https://doi.org/10.1787/9789264266490-en>
- Overton, W.F. (2015). Processes, Relations, and Relational-Developmental-Systems. In *Handbook of Child Psychology and Developmental Science*, R.M. Lerner (Ed.). <https://doi.org/10.1002/9781118963418.childpsy102>
- Pasha, A., Xhangolli, K., Dundo, J., Gjokuta, B., Tahiri, Z., & Lena, O. (2012). *Kosovo youth study: Forward looking, grounded in tradition*. IDR Kosovo. <https://library.fes.de/pdf-files/bueros/kosovo/09782.pdf>
- Pilkauskaite-Valickiene, R. (2015). The Role of Character, Confidence, and Connection on Contribution and Subjective Well-being. *Procedia - Social and Behavioral Sciences*, 197, 265–270. <https://doi.org/10.1016/j.sbspro.2015.07.134>
- Sanders, J., & Munford, R. (2014). Youth-centered practice: Positive youth development practices and pathways to better outcomes for vulnerable youth. *Children and Youth Services Review*, 46, 160–167. <https://doi.org/10.1016/j.childyouth.2014.08.020>
- Sanders, J., Munford, R., Thimasarn-Anwar, T., Liebenberg, L., & Ungar, M. (2015). The role of positive youth development practices in building resilience and enhancing well-being for at-risk youth. *Child Abuse & Neglect*, 42, 40–53. <https://doi.org/10.1016/j.chiabu.2015.02.006>
- Scales, P. C., Benson, P. L., Leffert, N., & Blyth, D. A. (2000). Contribution of Developmental Assets to the Prediction of Thriving Among Adolescents. *Applied Developmental Science*, 4(1):27-46 https://doi.org/10.1207/S1532480XADS0401_3.
- Scales, P. C., Benson, P. L., Roehlkepartain, E. C., Sesma, A., & van Dulmen, M. (2006). The role of developmental assets in predicting academic achievement: A longitudinal study. *Journal of Adolescence*, 29(5), 691–708. <https://doi.org/10.1016/j.adolescence.2005.09.001>
- Shek, D. T. L., & Chai, W. (2020). The Impact of Positive Youth Development Attributes and Life Satisfaction on Academic Well-Being: A Longitudinal Mediation Study. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.02126>.

- Soares, A. S., Pais-Ribeiro, J. L., & Silva, I. (2019). Developmental Assets Predictors of Life Satisfaction in Adolescents. *Frontiers in Psychology, 10*. <https://doi.org/10.3389/fpsyg.2019.00236>.
- Topp C.W., Østergaard S.D., Søndergaard S., & Bech P. (2015). The WHO-5 Well-Being Index: A Systematic Review of the Literature. *Psychotherapy and Psychosomatics, 84*, 167–176. <https://doi.org/10.1159/000376585>.
- Uka, F., Bërxulli, D., Hasani, A., Peci, B., Taravari, G., & Wium, N. (in press). *Developmental Assets and Youth Outcomes among Albanians in Albania, Kosovo, Macedonia and Serbia*.
- United States Agency for International Development. (2016). *Meta-Review of Positive Youth Development in Low and Middle Income Countries*. Retrieved from: <https://static.globalinnovationexchange.org/s3fs-public/asset/document/Meta-Review%20of%20PYD%20in%20Low-%20and%20Middle-Income%20Countries%20865%20KB.pdf?T1lEu3T9tdjQU8mAy1PouPkEV9AG7sn>.
- Wium, N., & Dimitrova, R. (2019). Positive Youth Development across Cultures: Introduction to the Special Issue. *Child & Youth Care Forum, 48*(2), 147–153. <https://doi.org/10.1007/s10566-019-09488-7>.
- Zhou, Z., Shek, D. T. L., & Zhu, X. (2020). The Importance of Positive Youth Development Attributes to Life Satisfaction and Hopelessness in Mainland Chinese Adolescents. *Frontiers in Psychology, 11*. <https://doi.org/10.3389/fpsyg.2020.553313>.
- Zhu, X., & Shek, D. T. (2020). Impact of a positive youth development program on junior high school students in mainland China: A pioneer study. *Children and Youth Services Review, 114*, 105022. <https://doi.org/10.1016/j.childyouth.2020.105022>.
- Zullig, K. J., Teoli, D. A., & Ward, R. (2011). Not all developmental assets are related to positive health outcomes in college students. *Health and Quality of Life Outcomes, 9*(1), 52. <https://doi.org/10.1186/1477-7525-9-52>.