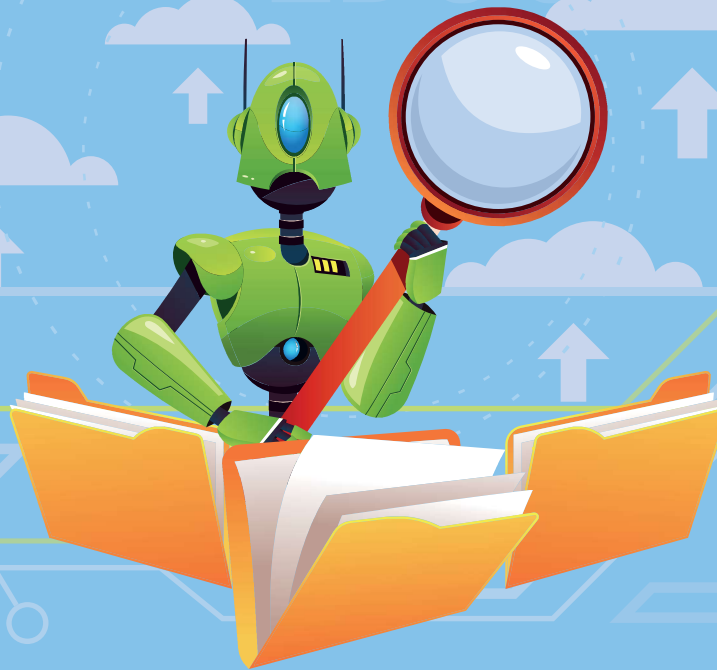




PROBLEMS AND PERSPECTIVES OF CONTEMPORARY EDUCATION

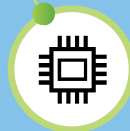
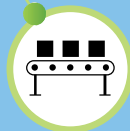


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DEVELOPMENTAL ASSETS MODEL: IMPLICATIONS FOR EDUCATIONAL PRACTICE¹

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INTRODUCTION

The Developmental assets (DA) model is one of the leading framework derived from the Positive Youth Development perspective. It acknowledges the importance of addressing multiple factors in reaching positive development outcomes and the absence of different behaviour problems in children and youth, as well as the necessity of involving several social domains when designing programs and interventions, thus involving relevant subjects that affect the development of children and youth (Benson, 2003; Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2002; Catalano, Hawkins, Berglund, Pollard, & Arthur, 2002; Shek, Sun, & Merrick, 2012). The DA model was developed at the end of 20th and the beginning of 21st century by the Search Institute research team lead by Peter Benson, and it rests on the assumption that all children and youth need quality “building blocks” in order to avoid different risks in their development and later adulthood, and to reach positive development target goals or outcomes (Benson, 1990; Benson,

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Scales, Leffert, & Roehlkepartain, 1999; Benson, Scales, & Mannes, 2003; Mannes, 2006). These building blocks or assets, as identified in this model, are found in the social ecological approach to the development of individuals, taking into account the importance of the interaction between individuals with all their characteristics and the surrounding domains that affect the individual. Effects from family, school, peer and community domains are recognized and the model is focused primarily on the socialization process and the interaction of individual and these ecological factors. The model identifies key developmental assets, which, if possessed, support the individual in reaching positive developmental outcomes: absence of risk behaviors, presence of thriving behaviours and activation resilience in situations of adversity. Developmental assets are defined as significant relationships, skills, opportunities and values that help young people avoid risky behaviors, strengthen resilience, and improve their personal prosperity, and basically reflect the fundamental developmental processes of connectivity, competence, support and efficiency (Benson et al., 2003). They have cumulative effects, which means that more assets lead to more positive outcomes. On the other hand, assets, as protective factors, mitigate risk and serve as protection for individuals, leading to less exposure to risk factors or better adaptation in risk situations.

In the DA model, 40 assets are distributed along eight conceptually coherent categories, four of which are marked by external and four by internal assets. External assets reflect a developmental context consisting of a set of experiences, relationships and activities along multiple domains in which adults, as well as peers, provide young people with support, empowerment, boundaries and expectations, as well as constructive use of free time. These are positive development experiences that are primarily gained through constant informal interactions with caring and principled adults, but also with peers, and then empowered through a wider network of community institutions (Benson et al., 1999; Scales & Leffert, 2004). Internal assets, as an individual construct, include a set of personal qualities, ie values, skills and self-perceptions, which develop gradually over time and help young people become effectively self-regulating in the domain of learning commitment, positive values, social competence, and positive identity. The development of internal assets is the result of the process of self-regulation, and their realization is more complex and slower than is the case

with external assets which are exclusively the result of the action of the social environment.

The DA model has been recognized as a practical, strength-oriented approach, which provides community members with a wide range of possibilities as to how they can improve their asset-building and support youth in their community to have better academic achievement, a stronger sense of belonging, of empathy for others, higher valuing of community service, and positive involvement in the life of the community. At the same time, this approach also supports a decrease in alcohol, tobacco and drug use, decrease in academic failure, increased commitment to school, and reduces the school drop-out rate (Mannes, 2006). The DA model recognizes the school domain as a very important setting and this model has been used in the educational community for transforming different levels of school functioning, such as organizational aspects (ie organization of the school day dynamics and physical space), delivery of educational content (curriculum and instructions), co-curricular programs (extra activities for students), partnership with other relevant subjects in the community (families, neighbors, organisations) and support services (formal institutions, counselling services and support staff) (Edwards, Mumford & Serra-Roldan, 2007; Edwards, Mumford, Shillingford, & Serra-Roldan, 2007; Scales & Taccogna, 2000). Another connection between the DA model and educational practice lies in the research focus of the connection of assets and explaining academic achievement and commitment to learning, while acknowledging the strong long-term negative effects of school drop on students' outcomes in adulthood (Benson, 2003; Mannes, 2006). Assessing the levels of developmental assets in a school community provides it with a basis for mapping positive practices, "sleeping", or inactive resources, important partners and elements of relationship with those partners that students can benefit from the most, and which can serve as a starting point of transformation of the school into a community that truly fosters positive development in youth. Basically, the goal of a community introducing the DA model, including the educational community, is to provide for "all students repeated exposure to caring relationships and challenging opportunities that will allow them to develop their talents, interests, and values in ways that help them reach personal goals and contribute to society" (Scales & Taccogna, 2000:74).

Respecting the current research body on developmental assets and their use in the educational setting, an explorative research was conducted during October

2019 with the goal of assessing developmental assets in students in a specific local community in Serbia. The purpose of the research was to serve as a basis for assessing the implications of the DA model on the educational practice in our context. The starting premisses were that the results would provide relevant data which would allow the mapping of “burning points” in the community, but also acknowledge good practice examples which could serve as a basis for any school to map their key allies in their community.

METHOD

Sample. The research was conducted on a sample of 785 older students from seven primary schools from the territory of the city of Belgrade. The average age of the participants was 13.4 years ($SD = 1.01$), and the age range from 12 to 15 years. The sample consisted of 37.5% of sixth grade students ($N = 294$), 30.5% of seventh grade students ($N = 240$) and 32.0% of eighth grade students ($N = 251$). The sample consisted of 51.3% boys ($N = 403$) and 48.7% girls ($N = 382$).

Instrument. The Profiles of Student Life: Attitudes and Behaviors (A&B) questionnaire was used to assess developmental assets (Leffert et al., 1998), version for youth from 12 to 18. The questionnaire consists of 156 items measuring 40 developmental assets, ten patterns of risky behavior, eight indicators of thriving, and five developmental deficits. For the purposes of this research, only items related to development assets were used, namely 92 items distributed in eight scales. Four scales measure external assets: Support (17 items), Empowerment (11 items), Boundaries and expectations (16 items) and Constructive use of free time (6 items), and four are designed to measure internal development assets: Commitment to learning (10 items), Positive values (13 items), Social competence (11 items) and Positive identity (8 items). The answers to the items are given on a five-point Likert-type scale (1 = not at all, 2 = mostly not so, 3 = not sure, 4 = mostly so, 5 = always so). For all scales and each individual development asset, an average score ranging from 1 to 5 was calculated. A higher score indicates a higher level of presence of development assets. An achieved score of 4 and more indicates that the development asset is present to a sufficient extent to achieve positive development outcomes.

Procedure. The collection of data was realized in a period of regular classes during the first week of October 2019. The collection process was attended by the subject teacher and the researcher, who, after general remarks related to the purpose and manner of filling in the questionnaire, was available to students in terms of providing additional clarifications and eliminating any ambiguities in the wording of items, although there were no such requirements. All students in one class were examined at the same time, and it took an average of up to 30 minutes to complete the questionnaire.

Data processing. Data related to the levels of developmental assets were processed by the methods of descriptive statistics (frequencies, percentages, mean, standard deviation). The normality of the distribution of scores was tested by the Kolmogorov-Smirnov test. For testing gender and age differences, the following tests were used: t-test for independent samples, Pearson's correlation, one-way variance analysis with post-hoc tests, and the calculations of eta squared for effect size estimation. The internal consistency of the scales was tested by Cronbach's reliability coefficient. The data were processed using the software package SPSS, version 19.

RESULTS

Checking the reliability of developmental assets scales, expressed by Cronbach's alpha coefficient of internal consistency, shows that all scales, except for Constructive use of free time (6 items, $\alpha = .48$), have relatively satisfactory reliability, which ranges from .65 to .83. The instrument as a whole has a high internal consistency of items ($\alpha = .93$). This also stands for the scale of external assets ($\alpha = .87$) and internal assets ($\alpha = .91$). The results of the Kolmogorov-Smirnov test show a deviation from the normal distribution of scores on all scales, with only the scale Constructive use of time showing a positively asymmetric trend, while on all other scales there was a negatively asymmetric distribution of scores. The obtained finding indicates that most students have some internal and external developmental assets, with the exception of the assets related to free time, where most students do not use their free time in a constructive way. The results of testing the normality of the distribution and the reliability of the scales of development assets are given in Table 1.

Table 1. Testing the normality of the distribution and the reliability of the scales of development assets

Scale	Sk	Ku	K-S test		Kronbah α
			Statistic	Df	
Support	-0.59	-.13	.08***	693	.83
Empowerments	-0.38	-0.22	.10***	693	.75
Boundaries and Expectations	-0.45	-0.23	.06***	693	.73
Constuctive use of time	0.57	0.35	.10***	693	.48
Commintment to learning	-0.47	0.27	.05***	693	.65
Positive values	-0.99	1.00	.18***	693	.82
Social competences	-0.81	0.92	.10***	693	.67
Positive identity	-0.42	-0.31	.10***	693	.73

*** $p < .001$

The research results show that the developmental asset groups are present in the student population at an average level from 2.48 which refers to Constructive use of time to 4.01 in Positive values. Assets with the highest average score are, besides Positive values, Social competences and Boundaries and Expectations, following by Positive Identity and Support. Slightly lower scores are present in Commitment to learning and Empowerment, while still reaching average scores over 3.50. When it comes to the share of students in each category, results presented in Table 2 show the lowest presence of students in the category Constructive use of time, and the highest in Positive values category. Most of the assets groups are present in less than half of the sample, with only Positive values and Social competences emerging in over half of the students.

Table 2. Average levels of achieved developmental assets in the sample and the share of students with developed asset group

	<i>M (SD)</i>	min – max	<i>N (%)</i>
Support	3.80 (0.59)	1.89 – 4.94	309 (44.0)
Empowerment	3.56 (0.72)	1.56 – 4.96	243 (33.8)
Boundaries and expectations	3.94 (0.50)	2.19 – 4.94	328 (46.1)
Constuctive use of time	2.48 (0.79)	1.00 – 5.00	205 (28.2)
Commintment to learning	3.69 (0.66)	1.65 – 4.97	220 (30.9)
Positive values	4.01 (0.61)	1.92 – 5.00	476 (61.5)
Social competences	3.98 (0.56)	2.00 – 5.00	412 (54.5)
Positive identity	3.85 (0.69)	1.50 – 5.00	369 (48.0)

Regarding external assets, the results presented in Table 3 show that 3 assets from the Support group have an average score above 4: Caring neighborhood, Family support, Positive family communication. Over 60% of students report having these three assets, with three quarters of students having a Caring neighborhood asset. Two assets in this category are present in less than 50% of the sample: Caring school climate and Other adult relationships. Parent involvement in schooling has an average score below 4, but is still present in over 50% of students from the sample. In the Empowerment assets group, none of the assets reach the targeted 4 average score for the whole sample level. Lowest average scores are present in Services to others and the highest in Youth as resources. The only asset present in over 50% of the student sample is Safety. In the group Boundaries and expectations, Adult role models and Positive peer influences are the two assets that are present in the total sample with an average score of over 4. The lowest score is shown in reports on Family boundaries. This is also the only asset which less than 50% of students have developed. The highest percentage of students have the asset Positive peer influences. In Constructive use of time, the lowest percentage of students are engaged in Creative activities – less than one in five students, following with the lowest average score in the group. None of the assets in this group have an average score over 4 and the percentage of the students with developed asset over 50%. The highest score and percentage of students are present in Youth programs, which incorporate different sports activities and other available youth programs in the community.

Table 3. Average levels of achieved external developmental assets and the share of students with developed assets

	Asset	M (SD)	min – max	N (%)
Support	Family support	4.01 (0.61)	1.00 – 5.00	467 (60.3)
	Positive family communication	4.00 (0.90)	1.25 – 5.00	446 (62.2)
	Other adult relationships	3.58 (1.06)	1.00 – 5.00	313 (42.9)
	Caring neighborhood	4.12 (1.13)	1.00 – 5.00	583 (74.3)
	Caring school climate	3.38 (0.83)	1.00 – 5.00	254 (32.8)
	Parent involvement in schooling	3.84 (0.76)	1.50 – 5.00	412 (53.2)

	Asset	<i>M</i> (<i>SD</i>)	min – max	<i>N</i> (%)
Empowerment	Community values youth	3.65 (0.77)	1.00 – 5.00	329 (42.2)
	Youth as resources	3.66 (0.83)	1.00 – 5.00	320 (41.1)
	Service to others	3.23 (1.50)	1.00 – 5.00	315 (43.3)
	Safety	3.56 (1.34)	1.00 – 5.00	436 (56.3)
Boundaries and expectations	Family boundaries	3.68 (0.81)	1.00 – 5.00	323 (41.7)
	School boundaries	3.87 (0.94)	1.00 – 5.00	438 (56.2)
	Neighborhood boundaries	3.94 (1.18)	1.00 – 5.00	519 (66.4)
	Adult role models	4.01 (0.74)	1.00 – 5.00	460 (63.4)
	Positive peer influence	4.12 (0.64)	1.25 – 5.00	554 (74.9)
Constructive use of time	High expectations	3.91 (0.85)	1.00 – 5.00	467 (60.3)
	Creative activities	1.86 (1.03)	1.00 – 5.00	132 (18.2)
	Youth programs	3.35 (1.16)	1.00 – 5.00	379 (48.6)
	Religious community	2.22 (1.30)	1.00 – 5.00	189 (22.9)
	Time at home	3.20 (1.05)	1.00 – 5.00	327 (44.3)

Regarding internal assets, presented in Table 4, group Commitment to learning has two assets with high average scores: Achievement motivation and School engagement. The asset with the lowest score and the lowest percentage of students is Reading for pleasure. From half to three quarters of the students have developed the other four assets from the Commitment to learning asset group, with the highest percentage present in School engagement. In the Positive values group, all assets have high ratings in students. Four out of six assets have average scores over 4: Integrity, Honesty, Equality and social justice, and Responsibility, but scores close to 4 are also present in Caring and Restraint. None of the assets is represented with less than 50% of students, and Honesty has the highest students share. In the Social competences asset group, Planning and decision-making, as well as Resistance skills have the highest average scores, followed by Peaceful conflict resolution and Interpersonal competence. The lowest score is present in Cultural competence, which includes absence of feelings of discomfort in contact with persons of different cultural, racial or ethnic origin and possession of knowledge about these persons. All of the assets in this category have a relatively high percentage of students (60% and more). In the Positive identity assets group, only Positive view of personal future has an average score of over 4, with a very high share of students with this asset. The lowest

score is present in Sense of purpose, while gathering over 60% of students. Self-esteem is present in the lowest percentage of students, slightly below 50%.

Table 4. Average levels of achieved internal developmental assets and the share of students with developed assets

	Asset	<i>M (SD)</i>	min – max	<i>N (%)</i>
Commitment to learning	Achievement motivation	4.14 (0.74)	2.00 – 5.00	539 (69.9)
	School engagement	4.19 (0.45)	3.00 – 5.00	581 (78.6)
	Homework	3.89 (1.30)	1.00 – 5.00	495 (64.0)
	Bonding to school	3.46 (1.38)	1.00 – 5.00	438 (56.0)
	Reading for pleasure	2.74 (1.43)	1.00 – 5.00	223 (30.7)
Positive values	Caring	3.90 (0.74)	1.00 – 5.00	484 (61.7)
	Equality and social justice	4.08 (0.80)	1.00 – 5.00	521 (66.4)
	Integrity	4.21 (0.86)	1.00 – 5.00	580 (73.9)
	Honesty	4.11 (1.03)	1.00 – 5.00	597 (76.1)
	Responsibility	4.01 (0.92)	1.00 – 5.00	530 (67.5)
	Restraint	3.83 (1.25)	1.00 – 5.00	460 (59.4)
Social competences	Planning and decision-making	4.10 (0.79)	1.00 – 5.00	554 (72.9)
	Interpersonal competence	3.86 (0.82)	1.00 – 5.00	456 (60.0)
	Cultural competence	3.67 (1.37)	1.25 – 5.00	496 (65.6)
	Resistance skills	4.04 (0.87)	1.00 – 5.00	541 (69.9)
	Peaceful conflict resolution	3.97 (0.98)	1.00 – 5.00	482 (64.8)
Positive identity	Personal power	3.77 (0.91)	1.00 – 5.00	398 (51.3)
	Self-esteem	3.84 (0.82)	1.50 – 5.00	373 (48.2)
	Sense of purpose	3.72 (1.39)	1.00 – 5.00	476 (60.9)
	Positive view of personal future	4.22 (0.94)	1.00 – 5.00	617 (79.2)

When it comes to the total number of developmental assets in students, the research results show that the average student has over half of all assets, and that none of the students have less than six or more than 37 developmental assets. Regarding gender differences, girls have on average 2.4 assets more than boys, with the difference being statistically significant, but with low effect size. In addition, the results, presented in Table 5, show that there are no girls with less than 8 developmental assets.

Table 5. Average levels of achieved developmental assets within the Social competences asset group and the share of students with developed assets

	Number of developmental assets			Gender differences		
	<i>M (SD)</i>	min – max	<i>N (%)</i>	<i>T</i>	<i>DF</i>	η^2
All students	22.45 (7.04)	6 – 37	785 (100)			
Male	21.65 (7.13)	6 – 37	403 (51.3)	-3.02**	1	0.01
Female	23.26 (6.87)	8 – 37	382 (48.7)			

*** $p < .01$

Research results show that there is a moderate negative correlation between the age of the participants and the number of developmental assets ($r = -.432$, $p < .001$). Table 6 presents the results of ANOVA analysis regarding the number of developmental assets in students of different grades, confirming the steady trend of lowering the number of assets with reaching higher school grades and coming closer to the end of elementary school. The differences are statistically significant between all tested groups, with a high effect size.

Table 6. Results of one-way ANOVA for connection between the number of developmental assets and the students' school level

Grade	Number of developmental assets		Differences between grade groups		
	<i>M (SD)</i>	min – max	<i>F</i>	<i>DFB, DFW</i>	η^2
6 th	26.00 (6.12)1,2	10 – 37	79.67***	2, 690	0.23
7 th	22.03 (6.32)1,3	11 – 36			
8 th	18.68 (6.67)2,3	6 – 34			

In the next step of the analysis, the distribution of students in four quartiles regarding the number of assets they have was tested. The following categories were recognized (Benson, Scales, & Syvertsen, 2011): low-asset youth with up to 10 assets developed, average-assets group with 11 to 20 assets, above-average group with 21 to 30 assets and a high-assets youth group with the number of assets developed from 31 to 40. The results show that in our sample 5.1% ($N = 58$) of youth fall under the category of low-asset youth. 35.6% ($N = 270$) have between 11 and 20 developmental assets, and 44% ($N = 328$) have over half of all assets, but still lower than 31. Only 15.3% ($N = 129$) of youth have a number of developmental assets between 31 and 40.

Collecting all the data regarding the share of students that have each developmental asset brings us to the categorization of developmental assets in our sample, shown in Table 7.

Table 7. Representation of assets in a descending order

Most represented assets (79.2% - 67.5%)	More frequent represented assets (66.4% - 60.3%)	Less frequent represented assets (60.3% - 48.2%)	Least represented assets (44.3% - 18.2%)
Positive view of personal future	Equality and social Justice	Family support	Time at home
School engagement	Neighborhood boundaries	Interpersonal competence	Services to others
Honesty	Cultural competence	Restraint	Other adult relationships
Positive peer influence	Peaceful conflict resolution	Safety	Community values youth
Caring neighborhood	Homework	School boundaries	Family boundaries
Integrity	Adult role models	Bonding to school	Youth as resorses
Planning and decision-making	Positive family communication	Parent involvement in schooling	Caring school climate
Achievement motivation	Caring	Personal power	Reading for pleasure
Resistance skills	Sense of purpose	Youth programs	Religious community
Responsibility	High expectations	Self-esteem	Creative activities

DISCUSSION

The reliability of the measuring instrument used and the associated scales for assessing the constructs of developmental assets range within an acceptable internal consistency (from .65 to .83), which is in line with the results of previous studies (eg Benson, 2003; Popović-Ćitić & Bukvić, 2018; Scales, 1999; Scales et al., 2005) and justifies the use of the results obtained by this research for the purpose of drawing conclusions about the developmental assets of students. The exception is one scale of external development assets, Constructive use of

time, where the values of the reliability coefficient are assessed as insufficiently acceptable ($\alpha = .48$), so the results related to this scale should be taken with reserve. The reason for the absence of internal consent of this scale, also reported in other research regarding DA (Scales, Roehlkepartain, & Shramko, 2016), can be sought in the very nature and character of leisure activities provided by the items of the scale. These are activities that, apart from the common denominator of being carried out in free time, are basically so diverse (from participation in sports and creative activities, through engaging in activities in religious institutions, to going out at night) that it is not necessary to expect that the preference for practicing one activity (eg. playing sports) is interrelated with greater or lesser participation in activities of another character (eg. singing in a church choir). Therefore, it is not surprising that this group of developmental assets is not metrically seen as a unique construct, and in the re-application of this scale the modification of its items would be suggested.

In terms of the normality of the distribution of assets within the sample of students, the obtained results are in line with expectations. The absence of a normal distribution in the direction of negative asymmetry of developmental assets fully corresponds to the findings of previous research studies (eg Benson, Leffert, Peter, & Blyth, 2012; Popović-Ćitić & Bukvić, 2018; Scales, Benson, Roehlkepartain, Sesma, & van Dulmen, 2006). The only development asset that is positively asymmetric is the Constructive use of time, which would imply that a larger number of students do not use their free time in a way that can be assessed as adequate and sufficiently stimulating for development. However, in the interpretation of the findings, one should keep in mind the low reliability of this scale, ie the nature of leisure activities that are included in the development asset itself, which was previously discussed.

The main research results show that, based on our sample, the community in which the students grow up does not have enough developmental assets active to support them with various resources, since of 40 developmental assets only 14 have an average score over 4 in the total sample. On the level of group assets, only one is present with an average score of over 4: Positive values. This whole group is highly rated within the student population, implying that our students have high internal values that can support and guide their decision making and help them in different challenging situations.

Of 14 assets, 5 are based in external assets groups: Family support, Positive family communication, and Caring neighborhood from the assets group Support, and Adult role models and Positive peer influences from the group Boundaries and expectations. None of the assets from the Empowerment group or Constructive use of time is present in the community at a level which can guarantee positive influences on youth. Especially low average scores can be found in most of the assets in the Constructive use of time category in Religious community and Creative activities, thus showing that our students do not engage in these activities at a level which would provide them with asset benefits. The results tell us that our students mostly develop in families where they feel loved and free to seek for advice and comfort from their parents or guardians, that they have quality relations with their neighbors, have available positive adult role models, and are encouraged to be the best they can be by their parents and teachers. Also, the results tell us that our students do not find themselves valued by their community in general, do not have enough participation and responsibilities in the community, and do not feel very safe or useful in their community. On top of that, they do not feel that clear rules and boundaries are present in family, school, or neighborhood. Additionally, as a whole, they are not engaged enough in constructive activities in their free time.

Internal assets are more developed in our students, having at least one asset from every category. Analysis of the developed assets tell us that our students have high achievement motivation and are engaged in school activities, that they highly value equality and social justice, integrity, honesty and responsibility, and they try to act according to these values, so they stand up to what they believe, they tell the truth, and accept personal responsibility. They have planning and decision making skills, and are skilled at resisting peer pressure. In addition, our students in general have a positive view of their personal future. On the other hand, they do not engage in homework activities on a regular basis, do not care a great deal about their school, and spend minimal time reading for pleasure. They do not believe that restraining from sexual activity is something very important, and do not place helping others in top place in their values scale. When it comes to skills, they need support in empowering their interpersonal and cultural competences, as well as supporting their efforts in peaceful conflict resolution. Their personal identity has slightly lower self-esteem, a feeling that they do not control what happens to them, and they do not have a clear sense of purpose. Research data

(Mannes, 2006) indicate that adolescents who grow up in communities rich in developmental assets evidence six times fewer risk behaviours than those who have less stimulating communities. The importance of the development of assets on the community level lies in the need for simultaneous reinforcing of positive experiences of youth in different domains of their social-ecological system, allowing them to feel safe, supported and capable.

When we look at the share of students in developmental assets, their involvement ranges from 18.2% in creative activities on a regular basis to 79.2% of students who have a positive view of their personal future. When it comes to school success as an especially important thriving behaviour from the educational community perspective, existing research body shows that 9 assets are consistently linked to thriving indicators such as attendance, academic self-confidence, effort, sense of belonging to school, grades, and test scores (Benson, Scales, & Syvertsen, 2011). These assets are: Achievement motivation, School engagement, Bonding to school, Reading for pleasure (4 out of 5 assets from the internal assets group Commitment to learning), Caring school climate, Parent involvement in schooling, Service to others, High expectations and Youth programs. In our sample, these assets range from highly present (up to 78.6% for School engagement) with an average score in the whole sample of over 4 (School engagement and Achievement motivation), through a 60% presence in students for High expectations, lower than average presence of around half of the students for Parent involvement in schooling and Youth programs, to a low presence in Service to others and Caring school climate, even involving the asset with the lowest score in the whole sample ($M = 2.74$), Reading for pleasure. Gained data can be used to create priorities for the education community, which would be addressing the school climate, engaging students in different supporting activities in the community, and raising their motivation for reading.

Twenty-eight (28) developmental assets are active in over 50% of the students and higher, while 12 are present in less than half of the sample. On the other hand, the individual number of assets present for every student is on average 22.5, showing that they have in general over 50% of all developmental assets. Compared to other research our students have slightly more developmental assets. For example, in the USA, where continuous exploration of developmental assets levels is followed and measured, results of the aggregated sample from 2012 – 2015 show that the average student has 20.6 assets (Roehlkepartain & Blyth,

2020). The age structure in the Serbian sample may be a reason for such results, considering that most of the comparative data include adolescents from 12 to 18, and there is a recognized pattern of reporting less assets in older youth (Scales, Roehlkepartain, & Shramko, 2016). One of the factors that could also influence the result of the number of developmental assets is that the whole research sample was from the territory of Belgrade, where urbanistic organisation provides many more different opportunities than in other parts of our country. On the other hand, different research examining developmental assets in more- and less-urbanized communities show that there is no significant difference in the results; that is, different demographic factors including the geographical residence and socioeconomic background do sometimes affect the absolute number of assets, but the effect sizes of those differences are usually quite small (Benson, 2003; Benson, Scales, & Syvertsen, 2011; Roehlkepartain & Blyth, 2020). This can be explained by the level of connectedness that is present in smaller communities that can, in the developmental assets framework, compensate for the lack of opportunities that big cities provide.

Even though we have a slightly above average number of assets developed in our youth, this number is still far away from the goal of reaching the high-asset group for most of the students. This is confirmed with having only 15% of students in the category of 31 – 40 developmental assets, and 40% of students in the categories of half developmental assets and less. Early Search Institute aggregated data show that over 60% of American adolescents are in the two categories under 20 developed assets, with 20% of students having a total number of assets under 10, and only 8% with above 30 assets (Benson, 2003; Scales, 1999). More recent research data show the presence of 13% of American adolescents in the category of low-asset youth, and 11% in the asset-rich category, with a balanced distribution between the middle two categories, with 38% of adolescents in each (Search Institute, 2012). Our findings show that we have a quite low percentage of low-asset youth (5.1%), which is a positive finding in comparison with the American sample. The research body consistently shows that adolescents with higher levels of assets report that they were more likely to succeed when it comes to school achievement, overcoming adversity, having a healthy lifestyle, helping others, and demonstrating leadership (Benson, 2003; Benson, Scales & Syvertsen, 2011; Roehlkepartain & Blyth, 2020; Scales, Benson, Leffert, & Blyth, 2000), but also feeling greater life satisfaction (Soares,

Pais-Ribeiro, & Silva, 2019). A special focus for the educational community is the connection between developmental assets and academic achievement. Research data consistently shows strong connections between asset levels and school achievement, showing that the low-assets group of youth are up to 8 times less likely to gain high grades than their peers with more assets (Benson, 2003).

Low-assets youth are at much higher risk of different risk behaviours (Benson, 2003; Benson, Scales, & Syvertsen, 2011), as well as difficulties in their social and emotional functioning (Popović-Ćitić & Bukvić, 2018). Research conducted in Serbia in 2017 shows that students with different emotional and social difficulties have significantly less developmental assets than their peers (Popović-Ćitić & Bukvić, 2018). Literature findings tell us that the number of risk behaviour patterns is directly connected with the category of assets developed. Search Institute (2012) data show that low-asset youth (with 0 – 10 assets) report 8.7 high-risk behaviour patterns, followed by 4.8 risk patterns in youth with 11 – 20 assets, and the number keeps going down, thus young people with 21 – 30 assets report 2.0 high-risk behaviour pattern, while asset-rich youth (with 31 – 40 assets) report 0.6 risk patterns. Percentages of low-asset youth with no anti-social or violent behaviour are 53% and 39% (respectively), compared to 78% and 62% in the average-assets group, 93% and 82% of above-average group and 99 and 94% of the high-assets group (Benson & Scales, 2009). The authors point out that the same patterns are confirmed in different subcultures and different ethnic groups, as well as data that the number of developmental assets tends to be a stronger predictor, explaining larger portions of the variance both in risk behaviours and in thriving behaviours compared to different demographic variables, but also from often used predictors such as school dropout, living in poverty or being from a single-parent family (Benson, 2003; Benson, Scales, & Syvertsen, 2011; Mannes, 2006; Scales et al, 2000).

The research finding also confirm the trend of small but statistically significant differences between boys and girls, showing that girls have a slight advantage in achieving more developmental assets than boys. The continuous research results on US students (Roehlkepartain & Blyth, 2020) show that girls have 21.3 and boys 19.9 assets, which is a smaller difference than in our sample for 1 developmental asset. Gender differences show their tendency to persist, but with a small effect size. When it comes to age differences, research results confirm a steady trend for the developmental stage of questioned students,

showing that with age the number of developmental assets lowers, and showing that there is an average 7 assets drop from 6th to 8th grade. The drop in the number of developmental assets with age concurs with other research findings (eg Roehlkepartain & Blyth, 2020; Search Institute, 2012), but the differences are larger in our sample. In the latest aggregation results from the US sample, from 6th grade (11 – 12 years) to 12th grade (17 – 18 years) there is a drop of 4 assets in total (Roehlkepartain & Blyth, 2020). In our sample, the drop is 7 assets over 2 years. The results can be elaborated with the specifics of our educational system combined with the active adolescence phase and its characteristics, where one of the expected developmental transitions happens in the transfer from elementary to high school. Also, these results support the presumption that the number of assets is changeable over time.

CONCLUSION

There are various implications from the assessments based on the DA model that can support the improvement of educational practice. A wide field for improvement of the level of developmental assets in the community is present, including the school community, since of 40 assets only 14 are developed at a level that provides positive effects on youth in the community. These 14 assets can be used as a good practice example and can serve as a guideline for community members. Applying the DA model and assessing the community can be used to prioritize assets that are underdeveloped in a specific geographic locality. The research results show that the assets in the groups Empowerment and Constructive use of time should be prioritized, emphasizing the need for positively involving youth in a variety of constructive programs and activities and giving them an important role in the life and development of the community. When it comes to the school environment, the priority should be addressing directly the school climate and fostering positive adult-youth relationships. In addition to this, further activities that support bonding to school as well as clear boundaries are areas for improvement when it comes to educational practice. Considering the extensive research on connections between assets number and risk behaviours, the instrument can also serve as a survey identifying youth at risk, mapping average-assets youth as students in moderate risk and low-asset student group as students in high risk. The application of the

DA model also provides an opportunity for mapping various community resources that can contribute to the positive development outcomes of young people. It can serve as a basis for the creation of a network of providers, so some providers (such as parents and school) can actually be unburdened and the responsibility for fostering the development of children and youth can be distributed within different relevant supportive subjects active in the community. Every school can, following assessment results in its community, map these stakeholders and activate them in supporting their students, which will bring multiple benefits for students, schools, and the whole community where those young people live and grow up.

Even though the transformation of a community's mindset to an asset-building one is not an easy task and includes the involvement of multiple sectors in the asset-building process (Benson, Scales, & Syvertsen, 2011; Lorion & Sokoloff, 2003), the DA model offers many advantages and practical opportunities for empowerment of the educational community and is often recognized in this setting. The DA model provides educational practice with the opportunity to implement the strength-oriented approach into their practice and support the transformation of the school paradigm by reaching not only good school achievement in students but supporting the development of successful, thriving, and problem-free individuals. The model can serve as a support in bringing in a strength-oriented approach to the prevention, identification, and even treatment of different emotional and social difficulties in students, and provide the school with valuable information of the resources from the community it can exploit in order to support the positive development of all its students, bringing the school into the community and the community into the school.

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