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Social problem-solving, life satisfaction and well-being among high school and university students

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ABSTRACT

Students face several challenges when transitioning to a new school level. This necessitates an exploration of the personal features supporting their adjustment, which may provide valuable insights for intervention programs and counseling services at institutions. We employed a sample of 9th- to 10th-grade high school students (N = 255) and 1st- to 2nd-year university students (N = 320) and adopted a longitudinal design to examine the relation between their social problem-solving, life satisfaction and school well-being and how they change in a new institutional environment during the first year. The participants answered the Hungarian version of the Social Problem-Solving Inventory–Revised, the Negative Problem Orientation Questionnaire, the Satisfaction with Life Scale and the School Well-being Questionnaire. The results revealed a similar pattern in social problem-solving and negative problem orientation among high school and university students. Positive problem orientation decreased while negative problem orientation and avoidance increased. Negative orientation toward social problems significantly affected life satisfaction and well-being in school. This study then discussed the implications of these findings for interventions supporting students' social problem-solving and well-being.

KEYWORDS
Social problem-solving; life satisfaction; well-being in school; longitudinal study; adolescence; young adulthood

Introduction

Students encounter many difficulties when adjusting to a new institutional setting during their first years in high school or in higher education (e.g., social and intellectual challenges, leaving behind one's home and support system). School transitions are associated with a decline in youth well-being among both high school and university students (e.g., Benner et al., 2017; Conley et al., 2014; Gutman & Eccles, 2007; Roberts & Zelenyanski, 2002). This phenomena has been identified in different educational systems of various countries among adolescents and young adults (Kyndt et al., 2017; Symonds & Galton, 2014). A growing body of evidence suggests that students' well-being is related to their school functioning. Several studies have indicated the relevance of well-being in predicting students' changes in academic functioning, such as their motivational characteristics, self-esteem, school attendance, and grade point average (e.g., Danielsen et al., 2009; Fredricks & Eccles, 2002; Gilman & Huebner, 2006; Skinner et al., 2008; Suldo et al., 2011; Tuominen-Soini et al., 2012). Other studies have suggested that there is a relationship between interpersonal skills and different components of

well-being, like life satisfaction and school well-being (e.g., Gillham et al., 2011). In addition, students often recount problems at school and with peers or teachers, which fundamentally determine their school well-being; specifically, they often report feeling uncomfortable at their school or with their classmates (D'Zurilla & Nezu, 2007; Konu et al., 2002).

In light of these findings, enhancing students' social competence may help them adapt to the new circumstances in a healthy way and mitigate the deterioration of their well-being. While new challenges frequently take the form of social problems (e.g., Konu et al., 2002), social relationships can support the transition process (e.g., Benner et al., 2017). Our study investigated this complex process among first-year high school and university students, and aims to analyze the features of and relations between three areas – social problem-solving, life satisfaction and school well-being – among high school and university students who have just started studying in a new institutional environment. We focused on a general construct of social problem-solving and subjective well-being in both age groups and a context-specific construct that is directly linked with school among high school students. Mapping these

associations may inform intervention programs and counseling services at institutions.

We collected data in 2017 and 2018 from 9th- to 10th-grade high school students and 1st- to 2nd-year university students in Hungary. The findings from the first two years of the three-year longitudinal study (2017–2019) reflected those of previous international and Hungarian surveys suggesting that problems substantially affect an individual's satisfaction with life and specifically with school, especially when adjusting to a new institutional environment (e.g., D'Zurilla et al., 2004; Kasik et al., 2018a).

Theoretical frameworks and previous research findings

Social relationships and well-being

Subjective well-being refers to an individual's cognitive and affective evaluation of their life (Diener, 1984, 2000), and one of its most important cognitive components is life satisfaction, which is a key indicator of positive development in adolescence. Studies have provided enough evidence of links between low life satisfaction and social and adjustment problems and between high life satisfaction and good adaptation and optimal mental health (for review, see Park, 2004). Life satisfaction may help reduce the stress a person usually feels when going through difficult life events or situations that involve change, making it relevant for this study. Life satisfaction is also related to the school's social environment. Several studies (Casas et al., 2013; Piko & Hamvai, 2010) have confirmed the strong link between one's life satisfaction and the relationships they foster with school friends and classmates. Earlier findings (Poulou, 2017; Sorlie & Ogden, 2015) have suggested the positive impact of a supportive and encouraging learning atmosphere on young people's social behavior, which may then facilitate their life satisfaction.

Diener (2000) found that life satisfaction has a strong positive association with self-efficacy even as early as adolescence. Together, self-efficacy and life satisfaction are protective factors against anxiety, which is partly caused by social problems (e.g., D'Zurilla et al., 2004; Pikó & Dobos, 2016). Vecchio et al. (2007) argued that when adolescents can successfully overcome their interpersonal issues, of which positive problem orientation is a key prerequisite, they are more likely to perceive their academic social life as adequate, themselves as happy and their life as well-balanced. An adequate social life, which is linked to subjective well-being, is determined by, among others, the social dimension of self-efficacy, which is the extent of one's ability to form, nurture and

end relationships. The family provides a model for this, with roles increasingly played by peers for adolescents and by groupmates, close friends and significant others for university students.

School well-being, which can be defined within the subjective well-being construct, is a complex emotional state largely formed from affective and cognitive evaluations of school experiences but also influenced by students' social relationships, self-image and academic achievements. It includes a student's personal connection with their school (e.g., its environment, domains, individuals) and constantly changes depending on certain school situations (Hascher, 2010). Studies on adolescents have found that their school well-being is most influenced by the relationships they form in school (e.g., emotional ties and conflicts between students as well as student–teacher relationships) as well as the opportunities provided by the school that enable them to self-actualize (e.g., evaluations and encouragement) (Blaskova & McLellan, 2017; Konu et al., 2020; Poulou, 2017). Furthermore, Vedder et al. (2005) highlighted the effect of available teacher support and learning-related problems on school well-being while Kökönyei et al. (2002) found that students' well-being is also determined by their attachment to family, their parents' school assessment and the way they relay it to their children.

Survey findings (e.g., D'Zurilla et al., 2004; Hascher, 2010; Kasik, 2015; Konu et al., 2002) have shown that outcomes of school social problems significantly influence both short- and long-term school well-being. These outcomes also play an important role in students' life satisfaction. Adolescents who are less successful in resolving social issues with their peers feel less strongly attached to their school and classmates, list fewer positive school experiences, and see themselves as less effective and less satisfied with their lives (e.g., Vecchio et al., 2007).

Social problem and social problem-solving

A social problem (whether interpersonal or more broadly social) is defined as any life situation, relationship or social task that is generally negative or considered negative and requires an adaptive response that involves several roadblocks (Jacobson & Margolin, 1979). These obstacles may originate from the individual (e.g., their own thoughts, actions or situation) or their environment (e.g., others' behaviors, incidents within a group or certain features of the environment). According to Chang et al. (2004), a social problem may be any social task, situation or relationship, in the past, present or future, that the individual deems worthwhile

to address to achieve effective social functioning, success and optimal accommodation for the environment as well as accomplish goals although they can also decide not to deal with the problem at all.

Social problems trigger a complex (cognitive, affective and behavioral) and mostly conscious process called social problem-solving, which aims to resolve an interpersonal issue or mitigate or eliminate the ensuing unpleasant or negative thoughts and feelings (D'Zurilla et al., 2002). This process is generally separated into two subprocesses: problem orientation and problem-solving itself. Problem orientation refers to one's sensitivity to the problem, commitment to a solution and self-efficacy, which can be positive (adaptive) or negative (maladaptive). Maydeu-Olivares and D'Zurilla (1996) distinguished between three negative problem orientation dimensions and five positive problem orientation dimensions. Besides negative self-efficacy, one other dimension of negative problem orientation is a pessimistic approach to problem-solving and a low tolerance for frustration. Meanwhile, positive problem orientation entails an understanding of the problem as a challenge, confidence in a positive outcome, positive self-efficacy, positive thoughts on the time and energy invested in a solution and a belief in the self with regard to the necessity – indeed, the inevitability – of the solution.

A central element of problem orientation is self-efficacy (D'Zurilla & Nezu, 2007), which concerns "people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives" (Bandura, 1994, p. 71). It is the belief that one can achieve their desired effect through their actions and that they can influence their own decisions, their endeavors toward a solution, and the extent of their efforts with such actions.

Meanwhile, during problem-solving, one defines the problem itself, searches for alternative solutions and evaluates them in terms of their consequences, decides on a solution and finally applies it. A person's problem-solving style is determined by how they orientate and deal with information as well as their emotions. D'Zurilla et al. (2002) identified three general problem-solving styles (rational, impulsive and avoidant), which may be combined depending on the features of a problem situation, that is, the problem itself and the participants. A rational problem-solver focuses on facts, considers several options, considers positive and negative consequences and takes responsibility for their actions. Meanwhile, an impulsive problem-solver espouses negative emotions, makes haphazard decisions, considers few alternatives and rarely if ever takes

potential consequences into account. Finally, an avoidant problem-solver is characterized by a low sense of responsibility and either cannot start dealing with the problem or, if they do start, gives up immediately.

Based on Hungarian and international studies (e.g., D'Zurilla et al., 2004; Kasik, 2015), children ages 10–11 usually begin to experience a negative orientation to social problems and problem-solving alongside a less prevalent positive orientation. Negative orientation is most common among 13- to 15-year-olds and among girls within the 10–18 age group while the association with avoidance increases steadily at ages 13–14. Based on the results of correlation analyses (Kasik, 2015), boys primarily show a rare pattern in which negative orientation is associated with a high level of rationality and a third element, avoidance.

Empirical study

Aims and hypotheses

The study intended to investigate the characteristics of and relations between social problem-solving, life satisfaction and school well-being. The participants were 9th- to 10th-grade high school students and 1st- to 2nd-year university students. Data were collected from the participants, who had just started their studies in a new institutional environment, at the beginning of their first and second years. While previous empirical works have already established the relations between the constructs examined in this study, to the best of our knowledge, studies have yet to investigate these variables together or compare their changes at the beginning of high school and higher education. Moreover, life satisfaction among adolescents and young adults has never been examined using both the Social Problem-Solving Inventory–Revised and the Negative Problem Orientation Questionnaire (an extended instrument of the negative problem orientation factor of Social Problem-Solving Questionnaire, see Kasik et al., 2018b). We then designed a three-year longitudinal study to determine the factors that facilitate or obstruct the learning processes of adolescents and young adults to effectively support them in their adaptation to the new institutional environment. This study discusses the measurements of the first and second years of the three-year research.

Social problem-solving in the Hungarian context provides a rich amount of data. In the theoretical background, we hypothesized familiar patterns of age-related changes in social problem-solving. Based on data from foreign studies and the construct features, we expected close associations between problem

orientation and self-efficacy and school well-being; however, methods to solve social problems were more closely related to the social behavior factors of the School Well-being Questionnaire.

Sample

Participants were from a number of high schools in several Hungarian counties and from various faculties at the University of Szeged. Although they were recruited via convenience sampling, we made an effort to ensure heterogeneity. The sample of high school students, for instance, represented all available secondary institutions (grammar school, secondary vocational schools, vocational school) for the investigated age group. Meanwhile, the university sample mainly consisted of preservice teachers; here, the aim was to ensure heterogeneity of school domains (e.g., social sciences, sciences, arts). Both age groups were in their first years in their respective institutions when we conducted the initial measurement.

The first measurement was held in 2017 and included 267 high school students (M_{age} = 14.79 years, SD = .9 years; 150 girls, 117 boys) and 334 university students (M_{age} = 19.6 years, SD = 1.2 years; 228 women, 106 men) who completed the questionnaires. We selected the age groups in line with the trends of national and international studies in the field (e.g., D'Zurilla et al., 2004; Kasik, 2015). The second measurement, which took place in 2018, involved largely the same sample as that of the first: 257 high school students (M_{age} = 15.9 years, SD = .8 years; 144 girls, 113 boys) and 323 university students (M_{age} = 21.1 years, SD = 1.3 years; 220 women, 103 men). Since we aimed to compare data from the two measurements, we analyzed only the responses of those who had completed the questionnaires on both occasions. The second measurement included participants who had not been involved in the first (e.g., they were new to the class or year or were sick when the first measurement was conducted). Therefore, we analyzed data from 255 high school students and 320 university students (attrition rates were 1% in both age groups).

Measurements

Participants filled out a questionnaire that mapped their socioeconomic status and other background factors that may influence their social characteristics and well-being (e.g., age, gender, academic achievement, parents' educational attainment and marital status). They also completed a ladder task to supplement the Satisfaction with Life Scale (see below). The study used four measures: the

Social Problem-Solving Inventory–Revised (SPSI–R; D'Zurilla et al., 2004; Hungarian version: Kasik et al., 2010), the Negative Orientation Questionnaire (NEGORI; Kasik et al., 2018b), the Satisfaction with Life Scale (SWLC; Diener et al., 1985; Hungarian version: Martos et al., 2014) and the Student Well-being Questionnaire (SWBQ; Hascher, 2004; Hungarian version: Nagy, 2017). The high school students completed all four questionnaires while the university students completed three; the SWBQ focuses exclusively on students' current high school environment and thus did not apply to university students.

Although the abovementioned studies have confirmed the structural validity of the Hungarian questionnaires in this research, we also checked each instrument's validity in the two age groups under investigation. After running a factor analysis, we found that the Hungarian versions had the same factor structures as the original questionnaires for both age groups. Our results were consistent with previous findings in Hungary.

SPSI–R

The questionnaire contains 25 statements that measure social problem-solving based on five factors: positive orientation (e.g., "Whenever I have a problem, I believe that it can be solved".) and negative orientation (e.g., "I feel afraid when I have an important problem to solve".), and rational (e.g., "Before I try to solve a problem, I set a specific goal so that I know exactly what I want to accomplish".), impulsive (e.g., "I am too impulsive when it comes to making decisions".) and avoidant (e.g., "I spend more time avoiding my problems than solving them".) problem-solving styles. The statements are assessed on a five-point Likert-type scale from 0 (not at all true of me) to 4 (extremely true of me). As with past measurements, the questionnaire showed good reliability for all age groups (KMO = .81–.87; Bartlett's test = 3867.80–4317.51; Cronbach's α = .73–.92; p < .001 in all cases; the explained variance of the factors was between 62.34% and 66.67%).

NEGORI

The questionnaire includes 21 statements (which all start with "I do not solve my peer related problems because …") grouped into 6 factors: negative self-efficacy (e.g., " … I am sure I cannot solve the problem".), negative consequences (e.g., " … I am afraid that my attempt might go wrong".) and positive consequences (e.g., " … this is how I calm down".), fending off the problem (e.g., " … I did not cause the problem".), habit/pattern (e.g., " … my friends usually do not solve

theirs either".) and waiting (e.g., " … I am waiting for our problem to solve itself".). The statements use the same five-point Likert-type scale of the SPSI–R. This questionnaire also exhibited good reliability for all age groups (KMO = .88–.91; Bartlett's test = 2015.28–2683.53; Cronbach's α = .73–.92; $p < .001$ in all cases; the explained variance of the factors was between 65.84% and 68.11%).

SWLC

This scale has only one factor and five items (e.g., "I am satisfied with my life".) and demonstrated good reliability as well (Cronbach's α = .88–.91). Its statements are rated using a seven-point Likert-type scale from 1 (strongly agree) to 7 (strongly disagree).

SWBQ

This measure contains 33 items with 6 factors: positive attitude (e.g., "I like to go to school".), school achievement (e.g., "During the last few weeks did it happen to you that you have had the feeling of doing important things in school?"), self-image in school (e.g., "I don't have problems to meet the standards in school".), social problems/conflicts (e.g., "During the last few weeks did it happen to you that you had problems with your classmates?"), physical complaints (e.g., "During the last few weeks did it happen to you that you suffered from heartache because of school?") and worry (e.g., "During the last few weeks did you worry about handling the school reality?"). The statements are evaluated using a six-point Likert-type scale from 1 (never) to 6 (very frequently), and the questionnaire was found to be sufficiently reliable (KMO = .82–.92; Bartlett's test = 2234.45–4251.14; Cronbach's α = .75–.83; $p < .001$ in all cases; the explained variance of the factors was between 61.19% and 62.34%).

Data collection and statistical procedures

All participants volunteered for the study. Before collecting data from the high school students, we obtained permission from their headmasters and parents. The high school students completed the questionnaires in two periods with teacher supervision. Meanwhile, the university students answered the questionnaires as part of a lecture course. Approval for this study was provided by the Hungarian Ethical Committee (ethical approval number: 2017/125).

The study data underwent t-test and regression analysis. A significant number of studies focusing on the relations between the present study's variables have considered life satisfaction as a central variable (e.g., Vecchio et al., 2007), so we modeled the percentiles based on them (25, 50, 75) and then separately examined the effect of problem-solving and negative problem orientation on life satisfaction as an independent variable for each group. Since there was no significant difference between the measurements for the two high school student groups and the two university student groups, we analyzed only the data from the 10th graders and the 2nd-year university students.

Results

Age-specific features of social problem-solving and negative problem orientation

Figure 1 shows the SPSI–R data by age group. The data from the high school students reflect the findings of earlier cross-sectional and longitudinal studies (e.g., Kasik, 2015). Based on the one-sample t-test, negative orientation (9th grade: M = 2.15, SD = .80; 10th grade: M = 2.49, SD = .76; t = 55.5, $p = .03$) and avoidance (9th grade: M = 2.16, SD = .84; 10th grade: M = 2.45, SD = .83; t = 30.82, $p = .04$) significantly increased among the 10th graders compared to the previous year; simply put, their negative orientation to social problems and to solving them increased, with several possible manifestations (e.g., they feel they lacked the capacity for and/or a belief in positive change).
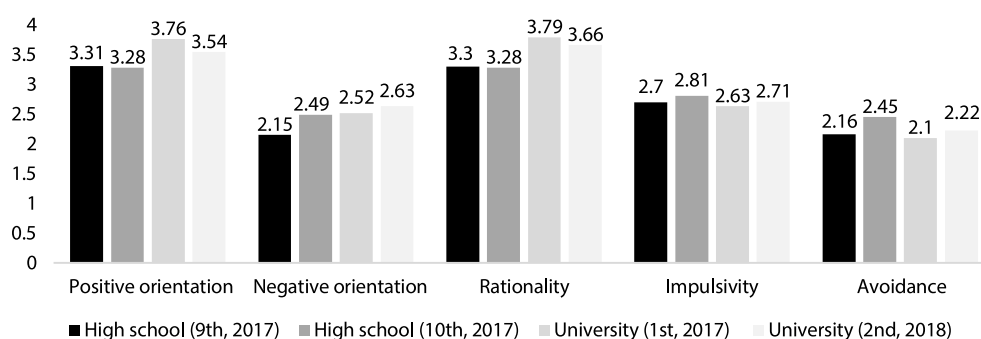

Figure 1. Features of social problem-solving by factor and age group (mean).

We observed no significant changes in the other three factors (positive orientation, rationality and impulsivity). The students achieved a high value in both years for rationality (9th grade: M = 3.33, SD = .89; 10th grade: M = 3.28, SD = .81) and impulsivity (9th grade: M = 2.72, SD = .91; 10th grade: M = 2.81, SD = .71), which indicates their strong emotional involvement, negative emotions and problem-solving via facts. In addition, no significant differences were found for any of the factors based on the responses of the 1st- and 2nd-year university students (Figure 1).

Figure 2 shows the features of negative problem orientation for the six factors and the age groups. For the high school students, the average values differed significantly in two factors: negative consequence (9th grade: M = 1.43, SD = 1.05; 10th grade: M = 1.68, SD = .94; t = 16.4, p = .02) and waiting (9th grade: M = 1.24, SD = 1.07; 10th grade: M = 1.59, SD = .99; t = 14.7, p = .02) increased by the 10th grade; that is, the potential negative consequences of the solution (e.g., it will not work out, and they will be disappointed with themselves, and/or others will be disappointed with them) prevent them from solving the problem, or they believe it will solve itself.

The university students' data in Figure 2 show a significant change in that the values for three factors declined after one year: fending off the problem (1st year: M = 1.54, SD = 1.05; 2nd year: M = 1.24, SD = .78; t = −21.1, p = .01), habit/pattern (1st year: M = .89, SD = .99; 2nd year: M = .69, SD = .88; t = −14.6, p = .02) and waiting (1st year: M = 1.33, SD = 1.04; 2nd year: M = 1.21, SD = .95; t = −16.7, p = .01). The lower value for fending off the problem corresponds to a greater shouldering of responsibility, which is reinforced by the decreased value of the waiting factor (expressed by "it will solve itself"). These results also show a weakening of habits, which also determine negative orientation, and of the influence of family and friends as models.

Features of well-being in school and life satisfaction

As stated above, only the high school students completed the SWBQ because of content limitations. The difference in data between the 9th and 10th graders was significant for two factors: problems/conflicts (9th grade: M = 2.15, SD = 1.27; 10th grade: M = 3.01, SD = 1.12; t = 44.7, p = .001) and worry (9th grade: M = 2.93, SD = 1.22; 10th grade: M = 3.12, SD = 1.17; t = 56.1 p = .001) were greater for the 10th graders, with smaller standard deviations. The average values for positive attitude toward school, school achievement, school self-image and physical complaints did not significantly vary although the standard deviations for these factors suggest significant individual differences.

The life satisfaction values were similar in each age group (around 5 on the 7-point scale) (9th grade: M = 4.86, SD = 1.22; 10th grade: M = 4.69, SD = 1.34; 1st year: M = 4.91, SD = 1.16; 2nd year: M = 4.85, SD = 1.23). Although no significant differences were observed between the averages, the higher standard deviations for the 10th graders and the 2nd-year university students (compared with those of the participants one year below them) suggest greater individual differences.

Links between the variables

A total of 26.5% of the high school students (M = 3.8) and 28.9% of the university students (M = 4.2) comprise the first percentile; these participants were the least satisfied with their lives. Meanwhile, 28.4% of the high school students and 21.9% of the university students (M = 5 for each) fall into the second percentile, and the largest proportions of both groups, 45.1% of the high school students and 49.2% of the university students, are in the third percentile (M = 5.8 for each). These participants were the most satisfied with their lives at the time of the survey.
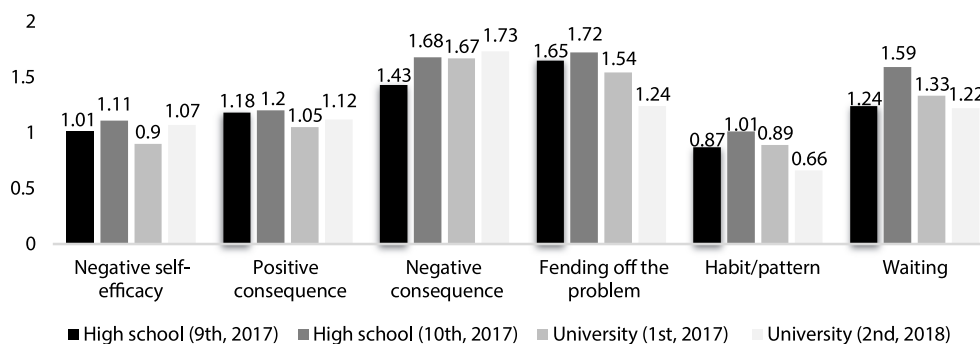

Figure 2. Features of negative problem orientation by factor and age group (mean).

Table 1. SPSI–R and NEGORI factors (independent variables) that determine life satisfaction (dependent variable) in percentiles for 10th graders and 2nd-year university students.

High school students (10th graders)	Factor	r	ß	t (p)	R² (%)
First percentile	negative self-efficacy	.37	.51	1.63 (.02)	18.7
Second percentile	negative self-efficacy	−.40	−.82	−2.23 (.03)	31.7
	impulsivity	−.28	−.47	−2.07 (.05)	12.9
Third percentile	negative self-efficacy	−.32	−.49	−2.42 (.01)	14.2
	positive orientation	−.52	−.63	−2.19 (.04)	31.8
	rationality	.57	.70	2.6 (.02)	34.2
University students (2nd year)					
First percentile	negative self-efficacy	.50	.36	1.66 (.05)	18.1
Second percentile	negative self-efficacy	.23	.45	2.72 (.001)	10.3
Third percentile	negative self-efficacy	.16	.31	1.34 (.04)	6.5
	rationality	.49	.74	2.4 (.04)	36.3

Table 1 shows data from the regression analysis on the percentiles. It contains only the SPSI–R and NEGORI factors, which significantly explain life satisfaction as a dependent variable.

Negative self-efficacy is predominant in each group (Table 1), and this is largely true for the high school or university student group showing the least life satisfaction. Among the high school students, impulsivity (12.9%) influenced life satisfaction for those in the second percentile, positive orientation (31.8%) and rationality (34.2%) greatly affected those in the third percentile and rationality (36.3%) also influenced university students in the third percentile.

We also analyzed the data from the SWLS. The background questionnaire, which contained the ladder task described in the introduction (about participants' degree of life satisfaction), not only showed thought-provoking results but also shed light on the details of the measure itself. In autumn 2017, 38.2% of the 9th graders gave ratings of 4 or lower (out of 10) while 35% of them provided scores of 6 or higher. In 2018, these figures were 42.4% and 31.3%, respectively. In 2017, 29% of the university students were the least dissatisfied with their lives; this increased to 36% after one year, which means the proportion of satisfied students dropped from 43% to 34%. We also performed a regression analysis on these groups. While negative self-efficacy remains a vital factor, avoidance also significantly accounts for 15.3% of the 10th graders and 12% of the 2nd-year university students, with smaller proportions for positive orientation and rationality compared with those in the questionnaire analysis (24% and 26%, respectively).

Discussion

Our study sought to demonstrate the features of and relations between social problem-solving, life satisfaction and school well-being among 9th- to 10th-grade high school students and 1st- to 2nd-year university students. Based on our results, we intend to develop an intervention program that supports and enhances the affective factors of the learning process (i.e., social problem-solving, self-efficacy and subjective well-being).

Our data substantially confirmed previous findings (e.g., D'Zurilla et al., 2004; Vecchio et al., 2007) and supported our hypotheses. A comparison of the SPSI–R and NEGORI data between 15-year-olds and 18- to 19-year-olds showed an interesting trend: similar to the early secondary school years, a decrease in positive problem orientation is observed in the early university years while negative problem orientation and avoidance show an increasing trend. As we have seen, the strong link between negative orientation and avoidance is one of the most prevalent patterns in adolescence (Kasik, 2015). In the first year, high school and university students are characterized by high rationality, which remains steady alongside impulsivity. Considering these features, the high school and university years seem to start similarly, which may be due to the environmental factors of the new institution and the new peer interactions. Many international studies (e.g., D'Zurilla et al., 2004) have confirmed this trend, but future research would be prudent to analyze such initial similarity based on high school type since the majority of university students come from grammar schools rather than vocational and secondary vocational schools (KSH, 2018) and because the students in these schools have different social backgrounds that affect their social problem-solving (Kasik et al., 2018a) and many other characteristics (Bradley & Corwyn, 2002). If we want to better understand this initial similarity, we also need to consider that both the 15- and 18- to 19-year-olds were entering a new social environment and thus had considerably less experience with peers, peer situations and social problems in the first measurement than in the second. With this in mind, a future research area may involve determining how the new environment

affects the measured variables. In Hungary, only a few students can start grammar school in grade 5 or 7 (instead of grade 9), which opens the opportunity to compare 15-year-olds who have experienced adjusting to a new environment with those who have not.

Like the SPSI–R and NEGORI, the SWLS proved to be reliable, and life satisfaction, considered by the regression indicators as a dependent variable, provides a clearly interpretable result: one of its key factors is the extent to which one perceives their own self-efficacy in a particular problem situation. Concurrently, from the comparisons between these data and the ladder task responses, this factor is clearly subject to change under the strong effect of the "now" because of the varying proportions for satisfaction indicators that are below average, average and above average, especially the number of dissatisfied students, based on the two measurement procedures.

A more precise exploration of area-specific life satisfaction may require an instrument that measures the concept with a level of detail similar to that of the SWBQ, which can determine the associations between life satisfaction and social problems more precisely and which may be used to develop specific intervention goals for both high school and university students. Nevertheless, our limited understanding of the "now" will thus merely be refined and not entirely clarified.

This study has several practical implications that may benefit both teachers and school counselors. The results highlighted aspects of school success that are associated with such noncognitive skills and can be enhanced. The direct and indirect development of certain self-efficacy and social problem-solving features both in and out of the classroom may help students adopt better self-regulation strategies. Developing these features may also lead to positive school functioning and better interpersonal relationships, which are important factors in subjective well-being (Diener, 2000; Steinmayer et al., 2015). Based on our results, high school and university students who need to adapt to a new environment may require similar support. In the case of both age groups, interventions must focus primarily on enhancing rationality and reducing negative self-efficacy.

Besides direct interventions, structured after-school activities (e.g., arts, sports, hobbies, community service) may also cause positive changes in the examined constructs. According to Larson's (2000) theory of initiative, the experience gained from these activities is a key factor in positive youth development. Through structured voluntary activities, young people can experience a combination of intrinsic motivation and deep attention, which helps develop their initiative. Several empirical studies (e.g., Bohnert et al., 2007; Hattie et al., 1997;

Mahoney et al., 2002) have demonstrated the benefits of these activities with respect to variables related to self-control (e.g., self-efficacy), well-being (e.g., depressed mood) and interpersonal skills and relationships (e.g., friendship quality).

To gain a deep insight into school transition and offer meaningful support, future studies may benefit from exploring social environment characteristics and their relations with the constructs examined in this study. For example, parental support, like peer support, may be an important protective factor in students' well-being (e.g., Piko & Hamvai, 2010). Moreover, although this study did not examine teachers' self-efficacy, future research must investigate its associations with the constructs in this study. Because high school teachers' perceptions of their own self-efficacy directly and indirectly affect the perception and management of problematic classroom behaviors (e.g., Gibbs & Miller, 2014), they may be crucial to the quality of the learning environment as well as students' school well-being.

Compliance with Ethical Standards

Disclosure statement

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Most relevant publications in the field of psychology of education

Kasik, L., Gál, Z., & Tóth, E. (2018). Development and psychometric properties of NEGORI (Negative Orientation Questionnaire). *Journal of Relationships Research*, 9(8), 1–13.

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