



The Relationship between Social Competence and Quality of School Life¹

Andrej Maras

Primary school Lotrščak, Croatia, andrejmaras24@gmail.com

Marina Đuranović

University of Zagreb Faculty of Teacher Education, Croatia, marina.duranovic@ufzg.hr

Irena Klasnić

Corresponding author, University of Zagreb Faculty of Teacher Education, Croatia,
irena.klasnic@ufzg.hr

The aim of the research was to explore the relationship between adolescents' self-perceived social competence and the quality of school life, as well as to examine potential gender and age differences in these perceptions. The research sample consisted of 1,009 students from 14 primary schools in the City of Zagreb and Zagreb County, the Republic of Croatia. The findings revealed that there is a positive relationship between the social competence dimensions and some dimensions of the quality of school life. Gender and age differences were determined in the assessment of social competence and the quality of school life and the findings indicate that female adolescents tend to be more competent in regulating their emotions. However, at the same time they are less integrated, they express more negative feelings about school and believe that their prosocial communication skills are poorer than those of male adolescents. The findings also indicate that sixth-graders assess better their own social competence and positive dimensions of the quality of school life than seventh- and eighth-graders. The final part of the paper presents considerations about theoretical and practical implications.

Keywords: adolescents, age differences, gender differences, quality of school life, social competence

INTRODUCTION

The contemporary education system is greatly influenced by global, economic, political, and social factors, and as such, it is subject to various changes. Nowadays, more than ever before, educational policies and experts in the field of education are making efforts to explain what quality education actually is.

¹ This paper is a part of doctoral dissertation of the first author.

Citation: Maras, A., Đuranović, M., & Klasnić, I. (2025). The relationship between social competence and quality of school life. *International Journal of Instruction*, 18(4), 231-248.

A contemporary view of quality education implies not only educational achievements and meeting the expectations but also the affective experiences of students, that is, the quality social relationships in the school environment (Kyriacou, 2001; Pastuović, 2009; Pigozzi, 2006). For that reason, there is a scientifically justified reason to carry out research on the school life phenomenon. Buterin-Mičić (2019) states that the school life phenomenon is a relevant research topic, as it has a powerful impact on the social and emotional aspect of a person's development. Vojtová (2008) argues for more systematic research on the quality of school life, relying on research findings which indicate that the quality of education cannot be determined only by viewing it through a prism of academic achievement and qualifications. She also emphasizes the importance of considering the level of satisfaction gained during the learning process and skills acquisition, sharing of experiences, the sense of achievement and social relationships in the school community. This research was conducted to examine the relationships between the social competence and the quality of school life dimensions, placing the emphasis on gender and age differences in student perceptions.

Social Competence at School Age

The social competence phenomenon has been a frequently researched topic in various social sciences, so diverse terminology can be found in the relevant literature. Rubin et al. (2015) define social competence as an individual's ability to engage in peer interaction within the relevant culture, while Markuš (2010) describes it as a complex construct implying an effective functioning of an individual in various social environments, at the same time fulfilling personal goals.

Having analyzed social competence as a key competence of the modern age, Đuranović and Klasnić (2022) and Wu et al. (2021) point out that it is a starting point for realizing the full potential of an individual in the family, school and peer environment, and the adult world later on. A group of authors, Magelinskaitė-Legkauskienė et al. (2016), came to a conclusion that the dimensions of social competence (prosocial communication skills and emotion regulation skills) are a significant pedagogical and psychological indicator of students' adaptability to the school environment. As a dimension, prosocial communication skills can be defined as any pattern of behaviour exhibited to increase the level of another person's well-being (Schaffer and Kipp, 2010). Emotion regulation skills enable a person to adjust the expression of their emotions according to the demands of their environment so as not to endanger their social functioning and to protect themselves from negative feelings (Čudina-Obradović & Obradović, 2006). Research shows that social competence dimensions, such as prosocial communication skills and emotion regulation skills, facilitate and improve the learning process significantly, and that they are necessary for adaptation to the school environment (Legkauskas & Magelinskaitė-Legkauskienė, 2019; Lim et al., 2013; McClelland et al., 2006). Social-emotional competence helps individuals engage with others confidently and learn more effectively while working with their peers (Ahmed et al., 2020).

In line with research findings, students with a higher level of social competence tend to have better academic achievements (Tabassum et al., 2020; Yan & Quispe, 2022).

Students with better social patterns find it easier to build a social network of support with more competent peers and adults from their surroundings, are more successful in establishing and maintaining better relationships with their peers and teachers, and strive towards higher academic achievements. They have more positive attitudes to school and are more motivated in general (Caprara et al., 2002; Legkauskas & Magelinskaitė-Legkauskienė, 2019; Magelinskaitė-Legkauskienė et al., 2018). Analysing the correlation between social competence and the quality of school life, Fejzić (2017) and Bubić Goreta (2015) came to a conclusion that adolescents with more developed social competence have better assessment of the quality of school life.

The Quality of School Life

School, as an educational institution, is a place which is not only responsible for students' academic development but it also shapes the social and emotional world of students with its activities. Students in modern schools tend to spend more time in the school environment than with their parents, which is one of the reasons why the quality of school life has become a frequent research topic in the world of scientific research.

The quality of school life is a multidimensional construct which cannot be defined in simple terms. Malin and Linnakylä (2001) define it as an affective outcome, that is, as all positive and negative experiences that students gain while performing various tasks in school. Yoon and Järvinen (2016) define the quality of school life as a perception of general satisfaction with school, which stems from the feeling of belonging to school, the quality of social relationships, the feelings experienced in the course of the learning process and the relationships between students and teachers.

Considering the importance of school for academic, psychological, social and emotional development of students, research on students' reactions, experiences and attitudes are very significant, as they have an impact on students' (dis)satisfaction with school. While studying the quality of school life as a construct, Raboteg-Šarić et al. (2009) pointed out that it is important to differentiate between a general impression of school, which includes both positive and negative feelings about school, and specific areas of school life, which include a feeling of being competent in school, the quality of student-teacher rapport, and the perceived joy of studying.

The findings of research carried out by Erez et al. (2020) and Ereş & Bilas (2017) emphasize the need for further research on the quality of school life, since it indicates the effectiveness of the entire education system. These researchers provide clear guidelines for education policies to help create a school culture in which each student has a sense of belonging to his/her school and feels satisfied while engaging in various school activities. Scientific literature suggests that the quality of school life has a significant impact on student motivation and perseverance, their cognitive and emotional engagement, and academic achievement, and that it is also reflected in an individual's total life satisfaction (Leite et al., 2024; Ferdosipour & Mousavi, 2020; Havik & Westergård, 2020; Suldo et al., 2013). The importance of the quality of school life has also been pointed out by Akhlaghi & Ganji (2019), who state that the quality of school life is a significant factor in physical and psychological status of students and their general vitality.

Gender and Age Differences

As far as gender and age differences in social competence are concerned, there are contradictory research findings. Girls tend to pay more attention to interpersonal relationships and have more empathy than boys. They also tend to form their self-image according to the quality of these relationships (Spruijt et al., 2019). In addition, girls exhibit more prosocial and less antisocial behaviour in comparison with boys (Junttila et al., 2006). Some research findings indicate that girls have significantly better developed social competence skills than boys (Jašarević et al., 2016; Selimović et al., 2018). Also, the results of some research reveal that boys had better results in social competence measurement (Longobardi et al., 2016; Pal & Misra, 2019). There are also studies which show no difference between boys and girls in terms of social competence development (Ahirrao, 2023; Salavera et al., 2019). In terms of age differences, there is a common belief that social competence develops gradually throughout childhood and adolescence, as a result of interaction of many factors (Tuerk et al., 2020).

In line with empirical research, some significant factors of the quality of school life are: classroom environment (Mok & Flynn, 2002), experiences gained during the teaching and learning process in the classroom (Kong, 2008), individual student characteristics, such as age and gender (Linnakylä & Brunell, 1996; Mok & Flynn, 2002), and the level of social competence development (Fejzić, 2017). With regard to gender as a factor of the quality of school life, a vast body of research indicates that girls tend to express a higher level of school satisfaction, i.e., satisfaction with the quality of school life (Bayram & Ekşioğlu, 2020; Bosakova et al., 2020). It should be pointed out that in some studies, differences in terms of gender were not identified (Huebner et al., 2001; Weintraub & Bar-Haim Erez, 2009). In addition, research findings indicate that younger students achieve higher values on the quality of school life scale (Bayram & Ekşioğlu, 2020; Buterin-Mičić, 2019).

METHOD

The research aims were to examine how adolescents perceive their own social competence and the quality of school life, to determine if dimensions of social competence are related to the quality of school life dimensions, as well as to determine if there are gender and age differences in the assessment of social competence dimensions and dimensions of the quality of school life.

Based on the research aims, the following hypotheses were formed:

H1. There is a statistically significant positive correlation between the social competence dimensions and all specific dimensions of the quality of school life, except the *negative feelings about school* dimension, where there is a negative correlation.

H2. Female adolescents have a more positive assessment of their own social competence dimensions and the quality of school life dimensions in comparison with male adolescents, except the *negative feelings about school* dimension, which is negatively assessed by female adolescents.

H3. Sixth-graders have a more positive assessment of their own social competence dimension and the quality of school life dimension in comparison with students in Grades 7 and 8, except the *negative feelings about school* dimension, which they assessed as negative.

Participants and Procedure

The research sample consisted of 1,009 participants, of which 520 were males (51.5%) and 489 were females (48.5%). Convenience sample included students in Grade 6 ($n = 333$; 33%), Grade 7 ($n = 381$; 37.8%) and Grade 8 ($n = 295$; 29.2%) from primary schools in the City of Zagreb and Zagreb County, the Republic of Croatia. The respondents' age was between 11 and 16 years with the mean value 12.9, standard deviation 0.87, median and mode 13. The research was conducted in the period from March to May 2023.

In agreement with the principals of these schools and class teachers of the students participating in the research, written consent forms were distributed to students. These forms were signed by parents or legal guardians of the students participating in the research, as well as participants themselves. As participants were primary school students in Grades 6 - 8, all phases of research were carried out in line with the Ethical Code for Research with Children (2020), with prior consent obtained from parents/legal guardians. Research participants were informed that the questionnaire was anonymous and voluntary, and that they could withdraw from it at any time. It took about 20 minutes for students to fill out the questionnaire.

Measuring Instruments

With the aim of validating the applied measuring instruments, factor analyses were conducted. Two scales were used in the research.

The Social Competence Scale - Parent Version (Conduct Problems Prevention Research Group [CPPRG], 1995; Corrigan, 2002) was adapted and used to self-assess social competence of adolescents on the Croatian sample (Brajša-Žganec et al., 2019). The questionnaire administered to a sample of adolescents yielded satisfactory results. The principal component analysis of adolescents' reports yielded a two-factor solution: Prosocial/Communication Skills (46.3% of the variance) and Emotional Regulation Skills (56.1% of the variance). The internal consistency of the whole scale based on the adolescents' reports was .89 (Brajša-Žganec et al., 2019). The mentioned questionnaire has already been validated on a Croatian sample of respondents, so it was used in this research. The scale consists of 12 items and 2 subscales. The items were assessed on a five-point Likert scale, a larger number indicating a higher level of agreement with the item. The first subscale, Prosocial Communication Skills, contains 6 manifest items and measures how friendly students are to one another (item example: *I share my things with others*). The second subscale, Emotion Regulation Skills, contains 6 items and assesses how students cope with their own emotions and how skilful they are at recognizing and understanding other people's emotions (item example: *I face failure well*). The obtained factor analyses and tests revealed that the factors obtained for these

variables were satisfactory (KMO = 0.833; Bartlett's test of sphericity $\chi^2(55) = 1822.87$, $p < .01$).

The Quality of School Life Questionnaire (Leonard, 2002) was translated and adapted to Croatian sample according to Raboteg-Šarić et al. (2009). It contains 40 items which make up seven factors. The factors General school satisfaction and Negative feelings about school were used to examine the general positive and negative attitude of students to school. The factor Preparation for the future implies the perception of the relevance of schooling, while the Social integration factor was used to examine the quality of students' relationships with other people and students in school. The factor School achievement examines students' perceptions of school competence, the factor Teachers examines the perception of the quality of teacher-student relationships, while the factor Perception of the learning process examines how much students enjoy the process of self-learning. The content of items was assessed on a five-point Likert scale, where 1 means *I completely disagree*, and 5 means *I completely agree*. After factor analysis had been conducted, the Kaiser-Guttman criterion was used to identify 6 factors with characteristic roots larger than 1, which explain 64.72% of the school life satisfaction variance. The factor analysis obtained a good result and there were no items with saturation below 0.4 nor those with saturation larger than 0.4 on several items. As per other features, the obtained factor analyses and tests revealed that the factors obtained through these variables were satisfactory (KMO = 0.960; Bartlett's test of sphericity $\chi^2(666) = 24320.75$, $p = 0.000$). All factors had high reliability values; the first and the second factors were so high that at a certain point the reduction of the two subscales was considered (DeVellis, 1991). Unlike the original questionnaire, in this questionnaire the items from two factors merged (General school satisfaction and Feelings about the learning process), and, according to the content of the manifest items, the factor was named *School and learning satisfaction*. Some examples of items were: *For me, school is the place where teachers are fair to me*, and *For me, school is a place where I feel lonely*.

FINDINGS

Table 1 presents the descriptive indicators of the average value of total factors and reliability scales. After testing normality distribution using the Kolmogorov-Smirnov test, it was determined that all result distributions were statistically significantly different from normal distributions. However, considering a great number of participants in the research, skewness and kurtosis of distributions were also taken into account. Skewness indices were lower than 3, while kurtosis indices were lower than 10 and were acceptable as such (Kline, 1998). Values like these make the application of parametric statistics possible.

Table 1
Descriptive statistics

| | M | C | D | SD | KS | Skew | Kurt. | Cronbach α |
|----------------------------------|-----|-----|-----|------|--------|-------|-------|-------------------|
| School and learning satisfaction | 2.6 | 2.6 | 1.0 | 0.98 | 0.05** | 0.20 | -0.71 | .93 |
| Negative feelings about school | 2.7 | 2.8 | 2.8 | 0.98 | 0.06** | 0.17 | -0.60 | .90 |
| Preparation for the future | 3.5 | 3.7 | 5.0 | 1.04 | 0.08** | -0.49 | -0.48 | .93 |
| Social integration | 3.0 | 3.1 | 3.3 | 0.70 | 0.07** | -0.49 | 0.10 | .84 |
| School achievement | 3.5 | 3.6 | 3.8 | 0.93 | 0.09** | -0.54 | -0.11 | .87 |
| Teachers | 3.5 | 3.6 | 4.0 | 0.99 | 0.10** | -0.57 | -0.30 | .81 |
| Prosocial communication skills | 3.4 | 3.5 | 3.8 | 0.74 | 0.09** | -0.38 | 0.12 | .62 |
| Emotion regulation skills | 4.0 | 4.0 | 4.1 | 0.55 | 0.09** | -0.55 | 0.29 | .71 |

LEGEND: *M* – arithmetic mean, *C* – central value, *D* – dominant value, *SD* – standard deviation, *KS* – Kolmogorov-Smirnov test, *Skew.* – skewness, *Kurt.* – kurtosis, ** $p < 0.01$ (significant at the 1% level), *Cronbach α* – factor reliability coefficient ($N = 1009$)

Results in Table 1 show the highest result for Emotion regulation skills and repeated measures ANOVA is statistically significant ($F(7/1008) = 403.6$, $p < .01$). The Bonferroni comparison between Emotional regulation skills and all other variables is statistically significant so it is perceived as significantly the highest. Also, School and learning satisfaction is significantly the lowest of all the variables except Negative feelings about school, from which it is not statistically significantly different.

In order to determine if there is a statistically significant correlation between the social competence dimensions and specific quality of school life dimensions, Pearson's correlation coefficient was used. The results are presented in Table 2.

Table 2
Pearson's correlation coefficient between the social competence dimensions and the quality of school life dimensions

| | Prosocial communication skills | Emotion regulation skills |
|----------------------------------|--------------------------------|---------------------------|
| School and learning satisfaction | .30** | .40** |
| Negative feelings about school | -.16** | -.16** |
| Preparation for the future | .23** | .46** |
| Social integration | .27** | .39** |
| School achievement | .34** | .51** |
| Teachers | .30** | .42** |

LEGEND: ** $p < 0.01$ (significant at the 1% level) ($N = 1009$)

The findings indicate that there is a positive correlation between the dimensions School and learning satisfaction ($r = .30$, $p < .01$; $r = .40$, $p < .01$), Preparation for the future ($r = .23$, $p < .01$; $r = .46$, $p < .01$), Social integration ($r = .27$, $p < .01$; $r = .39$, $p < .01$), School achievement ($r = .34$, $p < .01$; $r = .51$, $p < .01$), and Teachers ($r = .30$, $p < .01$; $r = .42$, $p < .01$) in both social competence dimensions. The Negative feelings about school dimension, as was expected, is negatively related to both social competence dimensions ($r = -.16$, $p < .01$; $r = -.16$, $p < .01$). All correlations have the normal direction and are mostly low. In line with what has been said, the first research hypothesis was confirmed.

Furthermore, to examine if there are statistically significant differences in the perception of social competence and the quality of school life in terms of students' gender, a t-test was used for each dimension. Before that, variance homogeneity had been checked to enable the selection of the t-test for the tested variables. The results are presented in Table 3.

Table 3

T-test for testing the difference in results in dimensions according to gender

| | <i>F</i> | <i>t</i> | <i>df</i> | <i>d</i> | male | | female | |
|----------------------------------|----------|-----------------|-----------|----------|----------|-----------|----------|-----------|
| | | | | | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> |
| School and learning satisfaction | 2.65 | - 0.80 | 1005 | .05 | 2.6 | 1.00 | 2.6 | 0.95 |
| Negative feelings about school | 1.32 | - 4.36** | 1005 | .27 | 2.6 | 0.94 | 2.9 | 0.99 |
| Preparation for the future | 4.29* | - 4.55** | 1004.1 | .29 | 3.4 | 1.08 | 3.7 | 0.98 |
| Social integration | 0.01 | 2.24* | 1005 | .14 | 3.1 | 0.70 | 3.0 | 0.69 |
| School achievement | 6.80** | - 0.98 | 1004.1 | .06 | 3.5 | 0.97 | 3.5 | 0.89 |
| Teachers | 2.13 | - 1.04 | 1005 | .07 | 3.5 | 1.03 | 3.5 | 0.95 |
| Prosocial communication skills | 0.05 | 2.48* | 1005 | .16 | 3.5 | 0.74 | 3.4 | 0.73 |
| Emotion regulation skills | 5.08* | - 5.56** | 1002.5 | .35 | 3.9 | 0.57 | 4.1 | 0.51 |

LEGEND: *F* – variance homogeneity, *t* – t-test, *df* – degrees of freedom, *d* – Cohen's *d*, *M* – arithmetic mean, *SD* – standard deviation, ** $p < 0.01$ (significant at the 1% level), * $p < 0.05$ (significant at the 5% level) ($N = 1009$)

The second hypothesis assumed that there is a statistically significant difference in the assessment of one's own social competence dimensions and the quality of school life dimension between female and male adolescents. It was also assumed that female adolescents would assess these dimensions more positively, except the dimension Negative feelings about school.

Statistically significant differences between male and female adolescents were identified in dimensions Negative feelings about school ($t(1005) = - 4.36, p < .01$), Preparation for the future ($t(1004.1) = - 4.55, p < .01$), Social integration ($t(1005) = 2.24, p < .05$), Prosocial communication skills ($t(1005) = 2.48, p < .05$), and Emotion regulation skills ($t(1002.5) = - 5.56, p < .01$). Cohen's *d* reveals that the results have a small size effect for the variables Social integration and Prosocial communication skills, and moderate size effect for all other variables for which statistically significant differences were identified. Statistically significant differences were not identified in the following variables: School and learning satisfaction ($t(1005) = 0.80, p > .05$), School achievement ($t(1004.1) = -0.98, p > .05$), and Teachers ($t(1005) = -1.04, p > .05$). The results show that girls have significantly more negative feelings about school, and higher perception of preparation for the future and emotion regulation skills than boys. On the contrary, boys have significantly higher results about social integration and prosocial communication skills factors in comparison with girls. Since statistically significant differences were found in some dimensions in favour of female adolescents, while in other variables they show higher values in male adolescents or differences were not found at all, the second hypothesis was partially confirmed.

In order to examine if there are statistically significant differences in the perceptions of social competence and the quality of school life in terms of students' age (grade), Levene's test for variance equality was used. It was found that the application of

ANOVA in finding the solution to the posed research problem was justified. The results of a simple variance analysis are presented in Table 4.

Table 4

Simple variance analysis in testing the differences between the obtained scale results according to students' grade

| | LV | F | df | η^2 | M6 | M7 | M8 |
|----------------------------------|------|---------|--------|----------|-----|-----|-----|
| School and learning satisfaction | 2.20 | 5.95** | 2/1006 | .01 | 2.7 | 2.6 | 2.5 |
| Negative feelings about school | 0.02 | 4.38* | 2/1006 | .01 | 2.6 | 2.8 | 2.7 |
| Preparation for the future | 1.37 | 30.21** | 2/1006 | .06 | 3.8 | 3.5 | 3.2 |
| Social integration | 0.23 | 8.57** | 2/1006 | .02 | 3.1 | 3.0 | 2.9 |
| School achievement | 0.17 | 7.36** | 2/1006 | .01 | 3.7 | 3.5 | 3.4 |
| Teachers | 2.52 | 14.55** | 2/1006 | .03 | 3.7 | 3.5 | 3.3 |
| Prosocial communication skills | 1.40 | 1.52 | 2/1006 | .00 | 3.5 | 3.4 | 3.4 |
| Emotion regulation skills | 0.65 | 8.22** | 2/1006 | .02 | 4.1 | 4.0 | 3.9 |

LEGEND: LV – Levene's test for variance homogeneity test, F – ratio, df – degrees of freedom, η^2 – effect size, M6-8 – arithmetic means in Grades 6 – 8, ** $p < 0.01$ (significant at the 1% level), * $p < 0.05$ (significant at the 5% level) ($N = 1009$)

The results presented in Table 4 reveal that all differences exhibit statistical differences, except Prosocial communication skills, for which no statistically significant difference was determined in adolescents' assessment in terms of age. Effect sizes were small for the dimensions School and learning satisfaction, Negative feelings about school, and School achievement; they were medium for Social integration and Emotion regulation skills, and high for Preparation for the future and Teachers. Scheffe's test was applied to test the differences between certain groups, and it resulted in various data, depending on a dimension, as it is more suitable for exploring all possible contrasts and minimizing the risk of Type I error in comparison with the Bonferroni test. Generally, they were all in line with the set hypothesis, as can be seen in Table 5.

Table 5

Scheffe's test for differences between groups while determining the differences in scales results for variables with significant F ratio test, according to students' grade

| | Differences between pairs |
|----------------------------------|---------------------------------|
| School and learning satisfaction | G 6 > G 8 |
| Negative feelings about school | G 6 < G 7; G 6 < G 8 |
| Preparation for the future | G 6 > G 7; G 6 > G 8; G 7 > G 8 |
| Social integration | G 6 > G 8 |
| School achievement | G 6 > G 7; G 6 > G 8 |
| Teachers | G 6 > G 7; G 6 > G 8 |
| Emotion regulation skills | G 6 > G 7; G 6 > G 8 |

LEGEND: G 6 = Grade 6; G 7 = Grade 7; G 8 = Grade 8; > significantly higher result; < significantly lower result ($N = 1009$)

The third hypothesis assumed that students in Grade 6 would have more positive assessment of their own social competence dimensions and dimensions of the quality of school life in comparison with students in Grade 7, except the Negative feelings about school dimension, which they assessed negatively. Since statistically significant

differences were found in all dimensions, and the direction of the differences was expected, the third hypothesis was confirmed.

DISCUSSION

The aims of this research were to examine how adolescents perceive their own social competence and the quality of school life, to determine if there is a correlation between the social competence dimensions and dimensions of the quality of school life, and to determine if there are gender and age differences in the assessment of social competence and the quality of school life.

Among all dimensions, adolescents had the highest assessment of Emotion regulation skills ($M = 4.0$; $SD = 0.55$). This dimension has the lowest standard deviation, which indicates the lowest dispersion of responses. Adolescents feel that they can accept something even when it is against their wishes, they cope well with failure, they can calm down when they are upset and can stay calm during verbal arguments. The dimension which was given the lowest assessment was School and learning satisfaction ($M = 2.6$; $SD = 0.98$). The items comprising this dimension were written in affirmative form and they described school as a place where students like to be, where they want to go to every day, where they enjoy what they do, and where they can have fun and pursue their interests. Unfortunately, low assessment given to this dimension reveals that students do not perceive school in this way.

The findings also suggest that as the values of the results increase in the School and studying satisfaction, Preparation for the future, Social integration, School achievement and Teachers dimensions, the values of the results in both dimensions of social competence increase as well. It was also determined that as the values of the results in the Negative feelings about school dimension decrease, the values of the results in both dimensions of social competence decrease as well. The obtained results are in line with previous studies on these relationships (Bubić & Goreta, 2015; Fejzić, 2017; Saneie & Raeeisoona, 2020). These research findings can be viewed through a prism of contemporary pedagogical and didactic approaches, which state that schools are social and creative communities based on interactions and which abound in both positive and negative emotional experiences. The obtained results can rely on the knowledge in the areas of pedagogy and educational psychology, as the aspects of social competence (self-regulation, collaboration and prosocial type of behaviour) facilitate the adaptation process in the educational environment and make the learning process pleasant and easier (Legkauskas & Magelinskaitė-Legkauskienė, 2019; Lim et al., 2013; McClelland, 2006). The results obtained in this research are in line with the results of previous research which confirms that students with more developed social competence tend to have better academic achievements (Markus et al., 2017; Selimović et al., 2018; Tabassum et al., 2020; Yan & Quispe, 2022), which is frequently associated with a better quality of school life. The quality of both students' and teachers' social interaction in the educational environment has a beneficial effect on student academic achievements, school satisfaction, the perception of the learning process and the perception of school as a relevant community which prepares students for professional development and life in the community. The findings of Holder and Coleman (2009) support the obtained results, as they state that social integration of students is a

significant factor in the quality of school life. Furthermore, research results indicate that female adolescents had better values of the results in dimensions Emotion regulation skills and Preparation for the future, in comparison with their male counterparts. It is surprising that female adolescents had a higher result in the Negative feelings about school dimension and a lower result in the Social integration and Prosocial communication skills dimensions in comparison with male adolescents. The obtained results, which point to the fact that female adolescents have better emotion regulation skills, were confirmed in previous studies (Patel, 2017; Sanchis-Sanchis, 2020). They had higher values of the result in the Preparation for the future dimension than their male colleagues. This result is in line with the findings obtained by Filiz & Demirhan (2018) and Raboteg-Šarić et al. (2009), which indicate that in comparison with male adolescents, female adolescents are more oriented toward future plans and preparation for the future professional roles. The obtained result in this research showing that female adolescents express more negative feelings about school than male adolescents is contrary to the results of previous studies (Bayram & Ekşioğlu, 2020; Bosakova et al., 2020; Hajovsky et al., 2017). As it is a dimension of the quality of school life which is conditioned by various social and emotional experiences, there are various and numerous reasons why it was given higher assessment by female participants. A possible explanation could be found in previous research by Eriksen et al. (2017) and Anupam & Sarad (2023), who state that female adolescents are more susceptible to academic stress in general. Academic stress causes various problems for students, sometimes even behavioural disorders, such as anxiety, withdrawal, timidity and depression, which are undoubtedly reflected in negative feelings about school.

The expected differences in favour of female adolescents in dimensions School and studying satisfaction, School achievement and Teachers were not identified. Previous research on school satisfaction does not reveal consistent results on gender differences, so in the study carried out by Bayram & Ekşioğlu (2020) and Bosakova et al. (2020), female adolescents were more satisfied with school in general, while in the studies carried out by Weintraub & Bar-Haim Erez (2009) and Huebner et al. (2001) no gender differences in school satisfaction were found. No statistically significant differences in favour of female adolescents were found in dimensions School achievement and Teachers either. Previous research points to the fact that female adolescents establish a more emotional and affectionate relationship with teachers than male adolescents, and they tend to have better academic achievements (Hajovsky et al., 2017; Raboteg-Šarić et al., 2009). As these results are inconsistent, it can be concluded that there is space for scientific research in the future on gender differences in factors which influence the quality of school life. Based on the results, the second hypothesis was partially confirmed.

The third hypothesis assumed that students in Grade 6 would have more positive assessment of their own social competence and more positive dimensions of the quality of school life in comparison with students in Grades 7 and 8. The results revealed that all differences were statistically significant, except those for Prosocial communication skills. The obtained result, that younger students tend to be more satisfied with school and learning, are in line with reports on previous studies (Bayram & Ekşioğlu, 2020; Buterin-Mičić, 2019; Kong, 2008). Okun et al. (1990) state that the reason accounting

for this is that older students believe they are not sufficiently involved in the decisions about their education. If the School achievement dimension is analysed in more detail, it can be seen that as the students' age increases, they exhibit lower results. This is not surprising, taking into consideration the particularities of the vertical structure of primary education. In the final grades of primary school (Grades 7 and 8), students work on more complicated materials which differ in intensity and scope, and they cope with new subjects, Chemistry and Physics. Accordingly, demands in mastering the new subject areas might have a great association with students' school achievements. According to the obtained results, students in Grade 6 feel that their relationship with teachers is closer than students in Grades 7 and 8 do. These results are in line with previous research which revealed a constant decrease in the quality of student-teacher rapport as students' age increases (Coelho et al., 2020; Thornberg et al., 2023). One of the reasons for the deteriorated student-teacher rapport, according to Eccles et al. (1993), is that older students demand more autonomy, and teachers often respond to this need with restrictions, which often leads to conflicts. A possible explanation of this result is that students in Grades 7 and 8 have more teachers, as they have more school subjects. The results obtained in a study carried out by Šimić-Šašić (2016) show that changes in the number of subject teachers imply a lower level of social integration, emergence of inappropriate patterns of behaviour, increased aggressiveness in students, and students' withdrawal. Furthermore, the obtained results indicate that students in Grade 6 have more positive assessment of their social competence in comparison with students in Grades 7 and 8. Similar results were obtained by Malkić-Aličković (2017), who states that younger students have developed their social competence more than students in Grades 7 and 8. Higher assessment of social competence in younger students, according to the obtained results, is associated with better social relationships and better social integration. The analysis of previous body of research makes it clear that student beliefs about their own social and academic self-efficacy have a significant impact on academic achievement and the quality of social interaction in the educational environment (Bubić & Goreta, 2015; Leonard, 2002; Shim et al., 2013). The results obtained by Lang (2010) show that students who have better social skills are more successful in initiating social interaction, they can adapt to school environment better and more easily, they are more successful in recognising and understanding the social norms of their peers, and are more socially responsible. In the educational context, these aspects of social competence are considered socially desirable behaviour, which has a powerful relationship with the quality of social interaction and peer integration, as has been implied by the obtained results. In line with the obtained results, the third hypothesis was confirmed.

However, this research has some limitations. The sample was purposive, so the results cannot be generalized. Another limitation is the fact that additional variables, such as school size, school location (urban or rural), student school achievement, the number of siblings and friends, etc., were not taken into consideration. This paves the way for new, more comprehensive research.

CONCLUSION

School environment is significant and extremely influential, as it is a place where adolescents gain and develop numerous competences. Nowadays, there is a growing

number of studies on non-academic achievements of students, while this paper focuses on social competence and the quality of school life of adolescents.

The research results emphasize relatively consistent, although moderate correlations between the dimensions of social competence and all dimensions of the quality of school life of adolescents. Apart from that, our results suggest that in some dimensions, there is a statistically significant gender difference in the assessment of students' own social competence and dimensions of the quality of school life. As far as students' age is concerned, differences were found in almost all dimensions, in favour of younger participants. Future research could be focused on determining the causal relationships between dimensions of social competence and the quality of school life.

The obtained findings have some practical implications as well. They extend our understanding of social competence and the quality of school life of adolescents in the primary school context, which could help develop programmes for the improvement of social competence and the quality of school life of adolescents, as well as plan various interventions. Developed social competence could become a protective factor which helps students cope well in the school environment, as well as outside the school context. The findings could also be taken as a starting point for designing pedagogical workshops which can help teachers and pedagogues in their work, by focusing the activities on the specific dimensions of social competence and the quality of school life. In addition, older students give lower assessment of their own social competence and the quality of school life, so they should be the target group that school management should take more care of.

REFERENCES

- Ajduković, M. & Keresteš, G. (eds.) (2020). *Etički kodeksa istraživanja s djecom* [Ethical code of research with children]. <https://mrosp.gov.hr/UserDocsImages/dokumenti/Socijalna%20politika/Obitelj%20i%20djeca/Eti%C4%8Dki%20kodeks%20istra%C5%BEivanje%20s%20djecom%20-%20integrirani%20tekst%20s%20prilozima.pdf>
- Ahirrao, K. D. (2023). Gender differences in social skill. *International Journal of Indian Psychology*, 11(1), 591-597. <https://doi.org/10.25215/1101.061>
- Ahmed, I., Hamzah, A. B. & Abdullah, M. N. L. Y. B. (2020). Effect of social and emotional learning approach on students' social-emotional competence. *International Journal of Instruction*, 13(4), 663-676. <https://doi.org/10.29333/iji.2020.13441a>
- Akhlaghi, M. & Ganji, A. M. (2019). Studying the relationship between the quality of school life and academic buoyancy of second grade students of high school. *Specialty Journal of Knowledge Management*, 2(4), 14-19. <https://sciarena.com/storage/models/article/JTaQt0EKepTcl5lqm9K6PgQsrpFuCmHG HJdcI9CAgBNMGWSaVxQ48boY2pLc/studying-the-relationship-between-the-quality-of-school-life-and-academic-buoyancy-of-second-grade.pdf>
- Anupama, K. & Sarada, D. (2023). Academic stress and levels of life skills among high school children. *IP Indian Journal of Neurosciences*, 6(4), 241-246. <http://dx.doi.org/10.18231/j.ijn.2020.047>

- Bayram, G. & Ekşioğlu, S. (2020). The relationship between the quality of school life perceptions of the secondary school students and their lifelong learning tendencies. *International Journal of Psychology and Educational Studies*, 7(3), 81-88. <http://dx.doi.org/10.17220/ijpes.2020.03.008>
- Bosakova, L., Geckova, A. M., van Dijk, J. P. & Reijneveld, S. A. (2020). School is (not) calling: The associations of gender, family affluence, disruptions in the social context and learning difficulties with school satisfaction among adolescents in Slovakia. *International Journal of Public Health*, 65(8), 1413 - 1421. <https://doi.org/10.1007/s00038-020-01474-4>
- Brajša-Žganec, A., Merkaš, M. & Šakić Velić, M. (2019). The relations of parental supervision, parental school involvement, and child's social competence with school achievement in primary school. *Psychology in the Schools*, 56(8), 1246-1258. <https://doi.org/10.1002/pits.22273>
- Bubić, A. & Goreta, I. (2015). Akademske i socijalne odrednice općeg zadovoljstva školom [The role of academic and social factors in explaining school satisfaction]. *Psihologijske teme*, 24(3), 473-493. <https://hrcak.srce.hr/149105>
- Buterin-Mičić, M. (2019). Quality of school life in primary school: Students' perception, *Pedagogika*, 134(2), 135-150. <https://doi.org/10.15823/p.2019.134.9>
- Caprara, G. V., Barbaranelli, C. & Pastorelli, C. (2002). Prosocial behavior and aggression in childhood and pre-adolescence. In D. J. Bohart, & D. J. Stipek (eds.), *Constructive & destructive behavior - implications for family, school, & society*. (pp. 187-205). American Psychological Association. <https://doi.org/10.1037/10433-009>
- Coelho, V. A., Romão, A. M., Brás, P., Bear, G. & Prioste, A. (2020). Trajectories of students' school climate dimensions throughout middle school transition: A longitudinal study. *Child Indicators Research*, 13(1), 175-192. <https://link.springer.com/article/10.1007/s12187-019-09674-y>
- Conduct Problems Prevention Research Group (CPPRG) (1995). Social Competence Scale (Parent Version). Pennsylvania State University. <https://effectiveservices.my.site.com/s/measure/a007R00000v8QgqQAE/social-competence-scaleparent>
- Corrigan, A. (2002). Social Competence Scale - Parent version, grade 1/year 2 (Fast Track Project technical report). <http://www.fasttrackproject.org/techrept/s/scp/scp3tech.pdf>
- Čudina-Obradović, M. & Obradović, J. (2006.). *Psihologija braka i obitelji [Psychology of marriage and family]*. Golden Marketing - Tehnička knjiga.
- DeVellis, R. F. (1991). *Scale development*. Sage Publications.
- Đuranović, M. & Klasnić, I. (2022). Osnaživanje dječje socijalne kompetencije igrom u razdoblju srednjega djetinjstva [Empowering children's social competence through play in the period of middle childhood]. In M. Cindrić, & K. Ivon (eds.), *Nova promišljanja o djetinjstvu [Rethinking Childhood]* (pp. 151-162). Sveučilište u Zadru.

- Eccles, J. S., Midgley, C., Wigfield, A., Buchanan, C. M., Reuman, D., Flanagan, C. & Mac Iver, D. (1993). Development during adolescence: The impact of stage-environment fit on young 116 adolescents' experiences in schools and in families. *American Psychologist*, 48(2), 90-101. <https://psycnet.apa.org/doi/10.1037/0003-066X.48.2.90>
- Ereş, F. & Bilasa, P. (2017). Middle school students' perceptions of the quality of school life in Ankara. *Journal of Education and Learning*, 6(1), 175-183. <http://dx.doi.org/10.5539/jel.v6n1p175>
- Erez, A. B. H., Kuhle, S., McIsaac, J. L. & Weintraub, N. (2020). School quality of life: Cross-national comparison of students' perspectives. *Work*, 67(3), 573-581. <https://doi.org/10.3233/wor-203310>
- Eriksen, I. M., Sletten, M. A., Bakken, A. & Von Soest, T. (2017). *Stress og press blant ungdom. Erfaringer, årsaker og utbredelse av psykiske helseplager*. Metropolitan University-OsloMet: NOVA. <https://hdl.handle.net/20.500.12199/5115>
- Fejzić, S. (2017). Povezanost kvaliteta školskog života i socijalnih kompetencija kod srednjoškolaca [The correlation between the quality of school life and social competences among high school students]. In I. Pehlić (ed.), *Zbornik radova Islamskog pedagoškog fakulteta u Zenici [Proceedings of the Islamic Pedagogical Faculty in Zenica]* (pp. 107-128). Islamski pedagoški fakultet Univerziteta u Zenici. <https://www.ipf.unze.ba/wp-content/uploads/2018/07/Senada-Fejzic-proceedings15.pdf>
- Filiz, B. & Demirhan, G. (2018). Examining the relationship between academic and sports success motivation. *Journal of Physical Education and Sports Sciences* 16(2), 138-152. https://doi.org/10.1501/Sporm_0000000361
- Hajovsky, D. B., Mason, B. A. & McCune, L. A. (2017). Teacher-student relationship quality and academic achievement in elementary school: A longitudinal examination of gender differences. *Journal of School Psychology*, 63, 119-133. <https://psycnet.apa.org/doi/10.1016/j.jsp.2017.04.001>
- Havik, T. & Westergård, E. (2020). Do teachers matter? Students' perceptions of classroom interactions and student engagement. *Scandinavian Journal of Educational Research*, 64(4), 488-507. <http://dx.doi.org/10.1080/00313831.2019.1577754>
- Huebner, E. S., Ash, C. & Laughlin, J. E. (2001). Life experiences, locus of control, and school satisfaction in adolescence. *Social Indicators Research*, 55(2), 167-183. <https://doi.org/10.1023/A:1010939912548>
- Jašarević, V., Jašarević, H. & Hadžić, S. (2016). Razvijenost kompetencija kod učenika osnovne škole [Development of competencies in primary school students]. In I. Radžo (ed.), *Zbornik radova Prve međunarodne naučne konferencije InSSED* (pp. 187-196). Edukacijski fakultet u Travniku.
- Junttila, N., Voeten, M., Kaukiainen, A. & Vauras, M. (2006). Multisource assessment of children's social competence. *Educational and Psychological Measurement*, 66(5), 874-895. <https://psycnet.apa.org/doi/10.1177/0013164405285546>

- Kline, R. B. (1998). *Principles and practice of structural equation modeling*. Guildford Press.
- Kong, C. K. (2008). Classroom learning experiences and students' perceptions of quality of school life. *Learning Environments Research*, 11(2), 111-129. <https://doi.org/10.1007/S10984-008-9040-9>
- Kyriacou, C. (2001). *Temeljna nastavna umijeća [Essential teaching skills]*. Educa.
- Legkauskas, V. & Magelinskaitė-Legkauskienė, S. (2019). Importance of social competence at the start of elementary school for adjustment indicators a year later. *Issues in Educational Research*, 29(4), 1262-1276. <https://www.iier.org.au/iier29/legkauskas.pdf>
- Leite, C., Monteiro, A., Sampaio, M. & Silva, A. (2024). The whole-school approach and transformative learning: The case of a Portuguese school. *International Journal of Instruction*, 17(2), 635-650. <https://doi.org/10.29333/iji.2024.17235a>
- Leonard, C. (2002). *Quality of school life and attendance in primary school*. University of Newcastle.
- Lim, S. M., Rodger, S. & Brown, T. (2013). Model of social competence in an early childhood environment. *Occupational Therapy in Mental Health*, 29(2), 114-133. <https://doi.org/10.1080/0164212X.2013.788975>
- Linnakylä, P. & Brunell, V. (1996). Quality of school life in the Finnish and Swedish-speaking schools in Finland. In M. Binkley, K. Rust, & T. Williams (eds.), *Reading literacy in an international perspective* (pp. 203-217). Office of Educational Research and Improvement. <https://www.iea.nl/publications/study-reports/international-reports-iea-studies/reading-literacy-international>
- Longobardi, E., Spataro, P., Frigerio, A. & Rescorla, L. (2016). Gender differences in the relationship between language and social competence in preschool children. *Infant Behavior and Development*, 43, 1-4. <https://doi.org/10.1016/j.infbeh.2016.03.001>
- Magelinskaitė-Legkauskienė, Š., Legkauskas, V. & Kepalaitė, A. (2018). Teacher perceptions of student social competence and school adjustment in elementary school. *Cogent Psychology*, 5(1), 1-15. <https://doi.org/10.1080/23311908.2017.1421406>
- Magelinskaitė-Legkauskienė, Š., Legkauskas, V. & Kepalaitė, A. (2016). Relative importance of social factors linked to academic achievement in the 1st grade. *Social Welfare: Interdisciplinary Approach*, 6(2), 30-41. <https://doi.org/10.21277/sw.v2i6.265>
- Malin, A. & Linnakylä, P. (2001). Multilevel modelling in repeated measures of the quality of Finnish school life. *Scandinavian Journal of Educational Research*, 45(2), 145-166 <http://dx.doi.org/10.1080/00313830120052732>
- Markus, H., Stangor, C., Jhangiani, R., Tarry, H., Williams, K., Helm, C. & Bandura, A. (2017). Developing schemas for assessing social competences among unskilled young people. *International Journal for Research in Vocational Education and Training*, 4(1), 47-67. <https://doi.org/10.13152/%20IJRVET.4.1.3>

- Markuš, M. (2010). Socijalna kompetentnost - jedna od ključnih kompetencija [Social competence – one of the key competences]. *Napredak: Časopis za interdisciplinarna istraživanja u odgoju i obrazovanju*, 151(3-4), 432-444. <https://hrcak.srce.hr/82719>
- McClelland, M. M., Acock, A. C. & Morrison, F. J. (2006). The impact of kindergarten learning-related skills on trajectories at the end of elementary school. *Early Childhood Research Quarterly*, 21(4), 471-490. <https://doi.org/10.1016/j.ecresq.2006.09.0>
- Mok, M. & Flynn, M. (2002). Determinants of students' quality of school life: A path model. *Learning Environment Research*, 5(3), 275-300. <https://doi.org/10.1023/A:1021924322950>
- Okun, M., Braver, M. & Weir, R. (1990). Grade level differences in school satisfaction. *Social Indicators Research*, 22(4), 419-427. <https://doi.org/10.1007/bf00303835>
- Pal, S. & Misra, K. S. (2019). Study of social competence with reference to gender. *International Multidisciplinary Research Journal*, 9(9), 5-10. <http://dx.doi.org/10.5958/2249-7137.2019.00097.1>
- Pastuović, N. (2009). Kvaliteta hrvatskog obrazovanja [The quality of the Croatian educational system]. *Napredak*, 150(3-4), 320-340. <https://hrcak.srce.hr/82823>
- Pigozzi, M. J. (2006). What is the “quality of education?” A UNESCO perspective. In K. Ross & I. J. Genevois (eds.), *Cross-national studies of the quality of education: planning their design and managing their impact* (pp. 39-50). UNESCO, International Institute for Educational Planning.
- Raboteg-Šarić, Z., Šakić, M. & Brajša-Žganec, A. (2009). Kvaliteta života u osnovnoj školi: povezanost sa školskim uspjehom, motivacijom i ponašanjem učenika [Quality of school life in primary schools: relations with academic achievement, motivation and students' behavior]. *Društvena istraživanja*, 18(4-5), 697-716. <https://hrcak.srce.hr/42593>
- Rubin, K. H., Bukowski, W. M. & Bowker, J. C. (2015). Children in peer groups. In M. H. Bornstein, T. Leventhal, & R. M. Lerner (eds.), *Handbook of child psychology and developmental science: Ecological settings and processes* (pp.175-222). John Wiley & Sons Inc.
- Salavera, C., Usán, P. & Teruel, P. (2019). The relationship of internalizing problems with emotional intelligence and social skills in secondary education students: gender differences. *Psicologia: Reflexão e Crítica*, 32(1), 4-10. <https://doi.org/10.1186/s41155-018-0115-y>
- Sanchis-Sanchis, A., Grau, M. D., Moliner, A. R. & Morales-Murillo, C. P. (2020). Effects of age and gender in emotion regulation of children and adolescents. *Frontiers in Psychology*, 11, 946. <https://doi.org/10.3389/fpsyg.2020.00946>
- Saneie, E. & Raeisoon, M. (2020). Role of social skills in predicting the students' sense of coherence and quality of school life. *Quarterly Journal of Child Mental Health*, 7(2), 96-107. <http://dx.doi.org/10.29252/jcmh.7.2.9>

- Selimović, Z., Selimović, H. & Opić, S. (2018). Development of social skills among elementary school children. *International Journal of Cognitive Research in Science, Engineering and Education*, 6(1), 17-30. <http://dx.doi.org/10.5937/ijcrsee1801017S>
- Shaffer, D. & Kipp, K. (2010). *Developmental Psychology: Childhood and Adolescence*. Cengage Learning.
- Shim, S. S., Kiefer, S. M. & Wang, C. (2013). Help seeking among peers: The role of goal structure and peer climate. *The Journal of Educational Research*, 106(4), 290-300. <http://dx.doi.org/10.1080/00220671.2012.692733>
- Spruijt, A. M., Dekker, M. C., Ziermans, T. B. & Swaab, H. (2019). Linking parenting and social competence in school-aged boys and girls: differential socialization, diathesis-stress, or differential susceptibility? *Frontiers in Psychology*, 9, 2789. <https://doi.org/10.3389/fpsyg.2018.02789>
- Suldo, S. M., McMahan, M. M., Chappel, A. M. & Bateman, L. P. (2013). Evaluation of the teacher-student relationship inventory in American high school students. *Journal of Psychoeducational Assessment*, 32(1), 3-14. <http://dx.doi.org/10.1177/0734282913485212>
- Tabassum, R., Akhter, N. & Iqbal, Z. (2020). Relationship between social competence and academic performance of university students. *Journal of Educational Research*, 23(1), 111-130. <https://jer.iub.edu.pk/journals/JER-Vol-23.No-1/7.pdf>
- Thornberg, R., Hammar Chiriac, E., Forsberg, C. & Wänström, L. (2023). The association between student-teacher relationship quality and school liking: A small-scale 1-year longitudinal study. *Cogent Education*, 10(1), 2211466. <https://doi.org/10.1080/2331186X.2023.2211466>
- Tuerk, C., Anderson, V., Bernier, A., & Beauchamp, M. H. (2020). Social competence in early childhood: An empirical validation of the SOCIAL model. *Journal of Neuropsychology*. <https://doi.org/10.1111/jnp.12230>.
- Vojtová, V. (2008). Quality of school life from the pupils' perspective: research thesis. In O. Řehulková, E. Řehulka, M. Blatný & J. Mareš (eds.), *Quality of life in the context of health and illness* (pp. 78-89). Masarykova Univerzita.
- Wang, M. T. & Degol, J. L. (2015). School climate: A review of the construct, measurement, and impact on student outcomes. *Educational Psychology Review*, 28(2), 315-352. <http://dx.doi.org/10.1007/s10648-015-9319-1>
- Weintraub, N. & Bar-Haim Erez, A. (2009). Quality of life in school (QoLS) questionnaire: Development and validity. *American Journal of Occupational Therapy*, 63(6), 724-731. <https://dx.doi.org/10.5014/ajot.63.6.724>
- Wu, W. C. V., Manabe, K., Marek, M. W. & Shu, Y. (2021). Enhancing 21st-century competencies via virtual reality digital content creation. *Journal of Research on Technology in Education*, 2(2), 1-22. <http://dx.doi.org/10.1080/15391523.2021.1962455>
- Yan, C. & Quispe, Q. (2022). Social skills and academic performance in educational institutions of high Andean Puno-Peru in 2020. *Journal of Positive School Psychology*, 6(8), 1574-1583. <https://journalppw.com/index.php/jpsp/article/view/9991/6495>