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Original research paper

SELF-ASSESSMENT OF RESILIENCE OF FUTURE EDUCATORS IN CRISIS*

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ABSTRACT

Future educators will face various challenges in their careers that will require a resilient response, and the covid-19 epidemic is just one of many. In this regard, we wanted to find out how students, future educators, assess their own resilient protective factors, how those relate to each other and which of them play a central role. The in-person survey involved 249 students who completed an anonymous questionnaire by self-assessing twelve protective factors of resilience. We used the Pearson correlation coefficient to determine the correlation between resilient factors and establish a network of interconnectedness between them. The results revealed that solution-focused behaviour (which is related to ability to identify challenges) has a central role in students' resilience. We assumed that one protective factor could contribute to the creation of new protective factors (e. g. focused on identifying challenges correlates with focus on finding solutions to them by using creative approaches, experiencing competence and success and orientation towards lifelong learning). However, this assumption should be further explored.

Key words:
Students, future educators, resilience, protective factors, challenging conditions.

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INTRODUCTION

The Covid-19 epidemic represents an extraordinary situation that created unorthodox circumstances the entire world had to face simultaneously. Demanding conditions created under such circumstances were consequentially extended far into the various aspects of our social life. The field of education was also put to the test along the entire vertical; from preschool education to higher education. Under such circumstances, the students', future educators', a proactive stance is key, since they were forced to adapt more or less effectively to the different teaching approaches (e.g. Lei & Medwell, 2021; Piccolo, Livers & Tipton, 2021; Zilka, 2021). On the other hand, the covid epidemic represents only one of the potentially arduous situations that require teaching staff to behave proactively, flexibly, adaptively, and sustainably, i.e. resiliently. In theory, resilience is defined as a psycho-social construct, which is expressed in the individual's psychological and social functioning. Consequently, the protective factors representing the building blocks of an individual's resilience are also divided into external and internal (Masten & Wright, 2009). Various studies analyse the resilience of future educators, especially teachers (e.g. Castro, Kelly & Shih, 2010; Gu & Day, 2013; Mansfield, Beltman, Broadly & Weatherby-Fell, 2016; Mansfield, Beltman, Price & McConney, 2012). It is defined as a dynamic construct that emphasises the educator's way of working within the context of the educational process and work, while at the same time expresses their ability to cope with situations that are recognized as challenging (Gu & Day, 2013). The resilience of educators can also be understood as a multidimensional construct, which according to Mansfield, Beltman, Price & McConney (2012) consists of four key intertwining dimensions; these are: professional, emotional, motivational and social. The intricate network of the mentioned dimensions, i.e. resilient resources, combined with the use of specific strategies forms a resilient response (Mansfield *et al.*, 2016). Resilience is also a permanent, lifelong process and the result of interactions of various (protective) factors within a particular context, which cannot be predicted in advance nor can their impact on the individual be changed. On the other hand, resilience also implies a particular usage of various strategies by given teaching staff when faced with a challenge and its possible negative effects (Castro, Kelly & Shih, 2010).

Protective factors of resilience as an integral part of the teaching staff can be related to the socio-emotional aspects of action, which include the ability to maintain focus on the future or an optimistic view of events, the ability to cope with problems, critical thinking, and flexibility, adaptability and proactivity (Beltman, Mansfield & Price, 2011; Benders & Jackson, 2012; Ee & Chang, 2010; Tait, 2008). Alongside these, their ability to connect and reach out to others while maintaining stable interpersonal relationships, establishing productive interpersonal communication and being able to empathise with others (Bobek, 2002; Mansfield *et al.*, 2016;). These factors are

understood as internal, as they arise from the individual. External protective factors are defined as various components of the teaching staff's social environment. These factors thus relate to the family and their support, the educational institutions, in which the teaching staff is involved, the community, etc. (Bernshausen & Cunningham, 2001; Castro, Kelly & Shih, 2010; Knight, 2007). Protective factors (both external and internal) play two main roles, i.e.: (1) reversing the impact of risk factors, to stop negative reactions triggered in difficult circumstances for an individual, and (2) creating a situation in which they can maintain their self-esteem and experience self-efficacy, further enabling them to open up and accept new challenges (Rutter, 1987). In the latter role, we recognize the so-called multiplicative effect of resilient action (Fredrikson, 2004). Resilient protective factors, such as humour, creative exploration, relaxation, and optimistic thinking, foster positive emotions (joy, interest, contentment, and hope) that cyclically contribute to building resilience (ibid.). The ability to create and maintain reciprocity in relationships in which each participant develops is also crucial from the point of view of building resilience. This kind of development is possible because it requires dialogue and trust in one another. Thus, establishing a dialogue aimed at creating a constructive connection with another is an antonym of self-esteem that is turned only toward the individual and their well-being (Jordan, 2013).

Resilience of future educators, similarly to the resilience of active staff, is defined as a lifelong and ever-changing process that begins in the period of initial education and is the result of various interactions between students and other important people within the learning context of higher education institutions. It is expressed in their capacity to act and respond, motivation, devotion to the chosen profession, satisfaction with it, learning together and managing high expectations (Drljić, Štemberger & Kiswarday, 2019). The higher education teacher has a key role in building the resilience of students, future educators (students), in the process of initial education. Namely, within the study process, the latter creates conditions for providing peer support and opportunities for building professional skills and developing professionally supported opinions (Le Cornu, 2009), which enable students to act autonomously. Key skills certainly include the ability to adapt, which cannot be understood in terms of a passive state, on the contrary, it can be understood as an individual's proactive behaviour. Developing the ability of proactive behaviour is based on their profound understanding of the pedagogical discipline. Various forms of proactive behaviour can also be identified in the student's ability to seek support in their environment (e.g. study colleagues, mentors, higher education teachers and administrative professionals) (Paquette & Rieg, 2016). Protective factors of resilience of students are thus divided into (1) personal and professional characteristics, (2) social contextual support, and (3) constructive approach to challenges (Drljić, Štemberger & Kiswarday, 2019).

The protective factors of personal and professional characteristics combine both the personal and professional aspects of the educator's life and reflect in their ability to maintain a balance between the two (Gu & Day, 2007; Klusmann, Kunter, Trautwein, Lüdtke & Baumert, 2008; Mansfield *et al.*, 2016; Tait, 2008). Socio-emotional competencies (Ee & Chang, 2010), a sense of humour (Bobek, 2002), and the general well-being (Mansfield *et al.*, 2016) as personal characteristics of educators allow them to master the requirements of the pedagogical profession. While professional qualities, such as motivation for their profession (Beltman *et al.*, 2011), devotion to it (Gu & Day, 2013; Mansfield *et al.*, 2016), experiencing affiliation with professional identity (Gu & Day, 2013), and the ability to take a reflective approach to their work (Sumsion & Patterson, 2004), encourage a reflective understanding of their role to improve their (future) professional performance. Social-contextual support or protective factors located in the social environment of students also contribute to their professional activities. In the context of initial education, an important source of support is the higher education teacher (Beltman, Mansfield & Price, 2011; Bobek, 2002; Le Cornu, 2009; Sumsion & Patterson, 2004). Higher education teachers play the role of connecting students into a learning community, within which different views on learning, teaching, the teaching profession, and the role of (future) educators can be created (Benders & Jackson, 2012; Le Cornu, 2009;). Cooperation and discussion with others enable, inter alia, the studentsto build constructive approaches to challenges by developing the ability to formulate expertly supported arguments and further make autonomous decisions (Sumsion & Patterson, 2004). In this way, they also develop the ability to act proactively in circumstances recognized as challenging (Benders & Jackson, 2012; Bowles & Arnup, 2016; Klusman *et al.*, 2008; Mansfield *et al.*, 2016;), and consequently the student experience the feeling of changing the course of events with their proactive behaviour (Bernshausen & Cunningham, 2001; Bobek, 2002), at least at the micro (individual, class, school), if not at the macro-level (educational policy of the state).

Since individual resilience is expressed under the circumstances deemed as challenging, we were further interested in the ways resilience was expressed in students during the epidemic.

Resilience in students, future educators, in challenging conditions

Resilient responses are anticipated in a situation deemed by individuals as challenging and are expressed in their ability to face adversities, which further promotes personal and professional development (Gu & Day, 2007; Mansfield *et al.*, 2016). In this sense, the covid-19 epidemic and the conditions associated with it can be understood as a challenging situation that affects the implementation of the educational process, and thus encourages the students to develop a response, which is resilient at best. Challenging conditions from the perspective of resilience, therefore, represent an opportunity for one's own integrated development. At the same time, it is important to experience positive emotions. Educators who experience more positive emotions are also more resilient compared to their colleagues, who experience such emotions to a lesser extent (Gloria, Faulk & Steinhardt, 2013). Similarly, it can be concluded that this also applies to students. Social circumstances, caused by the Covid-19 epidemic, consequently had a profound impact on their well-being. Studies report that they have faced opportunities and challenges related to both the study process (Lei & Medwell, 2021; Piccolo, Liversin & Tipton, 2021; Zilka, 2021) and the implementation of practical training (Hill, 2021; Jin, 2022; Piccolo, Livers & Tipton, 2021).

Study programmes in pedagogical fields usually involve practical training, as it represents an opportunity to build competencies, which are mainly clearly defined due to the regulation of the pedagogical profession. During the epidemic, practical training was often carried out remotely. The implementation of remote practical training, for which students and higher education institutions were not prepared in advance, has, however, curtailed the experience of students. The absence or reduction of the possibilities for implementing the learning process and its observation in person further influenced the students' ability to build their competencies. During their practical training, they were faced with challenges, such as adapting the learning process to learners with special needs and learning difficulties, taking into account the pupil's socio-cultural background and thus providing equal learning opportunities, and maintaining discipline and motivation to work (Hill, 2021). Similar challenges were faced by students who as part of their remote practical training faced reduced attention from children and the inability to provide gradual support in the learning process (Jin, 2022). On the other hand, this experience has encouraged them to develop flexibility and adaptability in unpredictable circumstances, as they have been forced to look for different resolution strategies. They had to show a greater degree of patience with children, and they were more consistently implementing child-centred approaches, as they were able to demonstrate learnt skills with the help of ICT. In this way, they thus demonstrated their resilience (Jin, 2022). The

forced use of ICT was important in terms of the development of such competencies since although students are generally in favour of using ICT, they are less adept at its actual use (Štemberger & Konrad, 2021). We can also recognize some advantages in conducting practical training, for example, the opportunity to learn and strengthen the understanding of the importance of cooperation, enhanced commitment to the teaching profession, willingness to adapt to new circumstances and further develop pedagogical competencies (Piccolo, Livers & Tipton, 2021). We can conclude that these advantages are in fact factors that we have previously outlined and that contribute to building resilience. The implementation of remote practical training has also enabled students to build new skill sets (e.g. approaches to learning using ICT). On the other hand, students may have been deprived of concrete practical experience, especially when it was not possible to conduct practical training either remotely or in person. They also had to face a changed role, which was primarily aimed at providing "mere" support to pupils (answering questions, motivating them to work), but not in educating and teaching (Piccolo, Livers & Tipton, 2021).

Executing the remote learning process, especially when it came to mirroring the in-person approach, additionally burdened the students to the point of experiencing the so-called Zoom fatigue (Zilka, 2021). At the same time, it represented an opportunity to develop and promote cooperation and collaborative learning (Lei & Medwell, 2021). Establishing and maintaining communication through forums, i.e. remotely, has made it easier for students to work (Zilka, 2021), which shows the extraordinary importance of collaboration and participation in the process of adapting to changed or extraordinary circumstances. Through participation, students develop important professional skills, such as the ability to create discussions about different professional views and approaches, the ability to reflect on their professional development (ibid.), and, indirectly, to build resilience. The importance of cooperation amongst students in terms of building their resilience has previously been discussed (see Jordan, 2013; Le Cornue, 2009 etc.) In addition to cooperation, experiencing the social support of their families, higher education teachers, and peers during the covid-19 epidemic (Permatasari, Ashar & Ismail, 2021) also plays a key role in terms of resilience in students.

Aims of the study

During the covid-19 epidemic, student resilience has proved to be important (Jin, 2022; Piccolo, Livers & Tipton, 2021). Extreme circumstances were at the same time limiting (e.g. Jin, 2022) and heightening (e.g. Piccolo, Livers & Tipton, 2021) the process of building pedagogical competencies. Based on the analysis of some articles, we identified both (1) personal and professional characteristics (e.g. enhanced commitment to the teaching profession), (2) social-contextual support (e.g. social integration, experiencing support from the environment) and (3) constructive

approaches to challenges (e.g. the ability to adapt and be flexible) as key protective factors in building resilience during the Covid-19 epidemic infectious disease in students. These, however, do not differ from the protective factors reported in the literature before the Covid-19 epidemic (e.g., Gu & Day, 2013; Mansfield, *et al.*, 2016). We were therefore interested in how students generally assessed their resilient protective factors, and which protective factors were considered to be more relevant compared to others. Our aim was also to find out how the individual resilient protective factors are interconnected and which of them play a key role in the resilience of students.

METHODOLOGY

Sample

The sample consisted of 249 students at bachelor's and master's level[1] from all three public Slovenian universities (University of Ljubljana, University of Maribor, University of Primorska). As expected, a high percentage of respondents were female students (94.4%), 55.2% of students were aged between 22 and 25, followed by students (42.3%) aged up to 21. The smallest percentage (2.4%) was represented by students aged 26 and over. The majority of respondents (44.6%) were enrolled in the Pre-School Education study programme, and just under a quarter (23.3%) in the Elementary Education programme. There were 12% of students enrolled in Pedagogy and Andragogy programme, followed by students of Educational Sciences (1.4%) and Pedagogy (9.2%). While 85.9% of the respondents studied at the bachelor level; namely 50% attended the 3rd year, 39.3% the 2nd year, 9.8% the 4th year, at least (.9%) attended the 1st year. 14.1% of students studied at the master's level. The latter were students of the UP PEF Elementary Education programme.

Data collection and processing

Data was collected in-person and as part of a broader study in April and May of 2017. For the purpose of this paper, we used the data derived from the first of a set of three sections of the questionnaire which was designed for the purpose of the study and based on the choice of general resilient protective factors from the previous research (e.g. Beltman, Mansfield & Price, 2011; Bobek, 2002; Gu & Day, 2007; Klusman *et al.*, 2008; Le Cornu, 2009; Mansfield *et al.*, 2016; Sumsion, 2004; Tait, 2008). The data

[1] Pre-school Education, Elementary Education, Pedagogy, Pedagogy and Andragogy and Educational sciences.

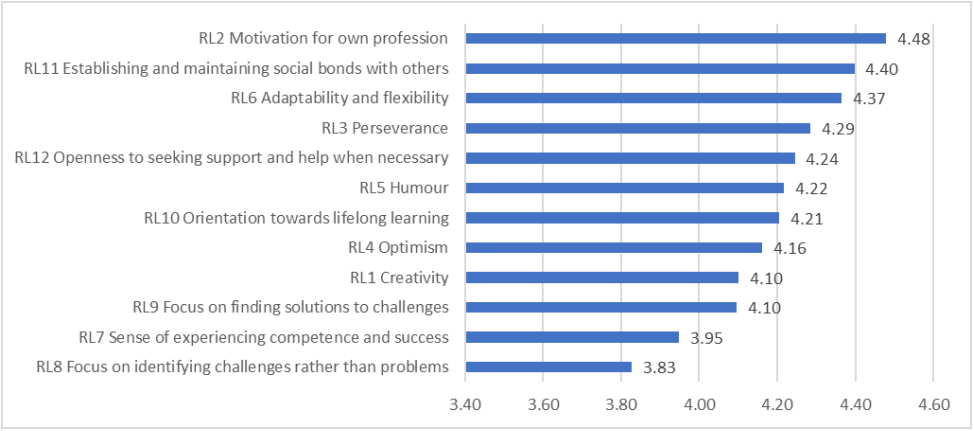
were collected with closed-ended questions, which, in addition to the demographic data presented above (gender, age, study programme, and year of study), consisted of 12 items (creativity, motivation for own profession, perseverance, optimism, humour, adaptability and flexibility, sense of experiencing competence and success, Focus on identifying challenges rather than problems, focus on finding solutions to challenges, orientation towards lifelong learning, establishing and maintaining social bonds with others, openness to seeking support and help when necessary). Participants were asked to rate each item in terms of how indicative they were for them on a scale of 1 to 5, where 1 meant that the specific protective factor was entirely indicative of them and 5 meant that it was not indicative at all.

Data was processed at the level of basic descriptive statistics (mean value - $\underline{X}$) and standard deviation – SD) and statistical inference. In the context of statistical inference, we used the Pearson correlation coefficient to determine the correlation between individual self-assessments of resilient factors. We accepted the fact that the correlation is weak when $r \geq .1$, moderately strong when $r \geq .3$, and strong when $r \geq .5$ (Field, 2009). Furthermore, we checked the reliability (internal consistency) of the items using Crombach alpha. The coefficient was .773 showing a relatively high covariance among the items and thus making the internal consistency of the scale acceptable.

RESULTS

We were first interested in the self-assessment of students about their own general resilient protective factors. The average values of the responses and the corresponding standard deviations concerning individual general resilient protective factors are shown in Graph 1.

Graph 1: Self-assessment of general resilient protective factors of students' future educators



Broadly, students included in this research provided high self-assessments of their general resilient protective factors (M = 4.20; SD = .68). The overall average of the standard deviation was below 1, from which we conclude that the dispersion of responses was relatively small.

On average, those included in the research provided the highest assessment of motivation for their profession, in which they were the most uniform compared to other protective factors (M = 4.48; SD = .62). Students also highly self-assessed their ability to establish and maintain social bonds with others (M = 4.40; SD = .72), and flexibility and adaptability (M = 4.37; SD = .63) as very characteristic protective factors of resilience. The lowest rates were self-assessed on average for their focus on finding solutions to challenges (M = 4.10; SD = .65), creativity (M = 4.10; SD = .67), their sense of experiencing competence and success (M = 3.95; SD = .67), and their focus on identifying challenges rather than problems (M = 3.83; SD = .66).

We were further interested in how the individual general resilient protective factors are related to each other (Table 1).

Table 1: Relationship between general characteristics of resilience

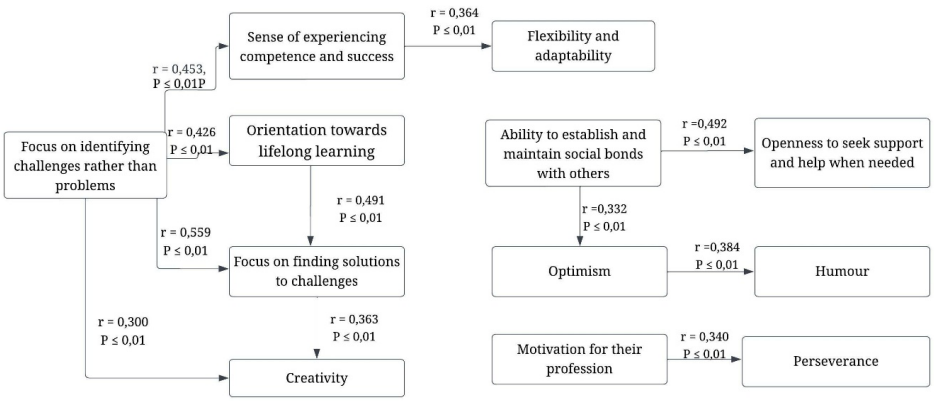
Correlations	RL1	RL2	RL3	RL4	RL5	RL6	RL7	RL8	RL9	RL10	RL11	RL12
RL1 Creativity	1											
RL2 Motivation for own profession	.137*	1										
RL3 Perseverance	.158*	.340**	1									
RL4 Optimism	.156*	.242**	.287**	1								
RL5 Humour	.106	-.018	.093	.384**	1							
RL6 Adaptability and flexibility	.170**	.068	.111	.282**	.258**	1						
RL7 Sense of experiencing competence and success	.200**	.277**	.253**	.323**	.155*	.364**	1					
RL8 Focus on identifying challenges rather than problems	.300**	.281**	.155*	.262**	.151*	.229**	.453**	1				
RL9 Focus on finding solutions to challenges	.363**	.156*	.205**	.208**	.168**	.199**	.299**	.559**	1			
RL10 Orientation towards lifelong learning	.286**	.174**	.222**	.202**	.177**	.265**	.254**	.426**	.491**	1		
RL11 Establishing and maintaining social bonds with others	.050	.196**	.103	.332**	.217**	.274**	.261**	.093	.115	.290**	1	
RL12 Openness to seeking support and help when necessary	.108	.229**	.030	.171**	.070	.190**	.167**	.115	.130*	.185**	.492**	1

*. Correlation is significant at the .05 level (2-tailed).

**. Correlation is significant at the .01 level (2-tailed).

Result analysis (Table 1) showed that students' individual resilient protective factors are correlated weakly to moderately strongly (.106 ≤ r ≤ .559). The weakest correlation was found between factors: (1) openness to seeking support and help when necessary and self-assessed focus on finding solutions to challenges (r = .13. p < .05), (2) openness to seeking support and help when necessary and focus on finding solution on problems (r = .13. p < .05) and between (3) creativity and students' motivation for their profession (r = .137, p < .05). On the other hand, a fairly strong correlation was found between (1) students' focus on identifying challenges rather than problems and their focus on finding solutions to challenges (r = .559, p < .01), (2) openness to seeking support and help when necessary and their self-assessed ability to establish and maintaining social bonds with others (r = .492, p < .01) and finally between (3) students' orientation towards lifelong learning in their focus on finding solutions to challenges (r = .491, p < .01). From the obtained results, we inferred the potential existence of a network of connections between individual resilient factors. Such a network of connections Drljić, prompts a profound understanding of its interconnection, which can also have further applied value, since it helps us to understand how we can indirectly promote specific factors (Damij, Levnajić, Rejec Skrt & Suklan, 2015). Therefore, we further decided to establish a network of interconnectedness for the general resilient factors of students (Figure 1) by including only links that ranged from moderately strong to strong (.3 ≤ r ≥ .5) and are statistically significant (.01 ≤ p ≤ .05).

Figure 1: Network of connections of resilient factors seen in students, future educators



The student's attitude towards identifying challenges proved to be a central protective factor that is, directly and indirectly, related to some other protective factors. The latter had a moderately strong connection with the sense of experiencing competence

and, which was further associated with the students' self-assessment of their own adaptability and flexibility. The students' tendency to recognise challenges was also expected to be linked to their orientation toward lifelong learning and their focus on finding solutions to. At the same time, a direct connection was also found between their orientation toward lifelong learning and their focus on finding solutions to identified challenges. The last-mentioned protective factor was also associated with students' self-assessment of creativity, which was furthermore related to self-assessment of their ability to identify challenges. The ability of the students to establish and maintain social bonds with others was expected to be linked to their openness to seeking help and support when necessary but also to their optimism, the letter has correlated with students' self-assessed humour too. Their motivation for the profession, however, was associated with their self-assessment of their perseverance. With the help of the network of connections among protective factors we found that the orientation in identifying challenges, which can be classified as a set of protective factors (Drljić, Štemberger & Kiswarday, 2019), plays a key role among resilient protective factors, as it indirectly promotes the students' adaptability and flexibility, their focus on finding solutions to identified challenges and creativity.

Additionally, we conducted the Exploratory Factor Analysis (EFA). The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .768, thus greater than .60 allowing us to proceed with EFA, since the sample used was adequate. In our case, also Bartlett's test of sphericity was significant ($p < .05$), also showing a green light to proceed with the EFA. The analysis showed us that there are four underlying concepts with Total Initial Eigenvalues greater than 1. The four components explain 43.41% of the variance. Therefore, we concluded that there are four factors in this dataset.

Table 2: Factor Loadings for Exploratory Factor Analysis

Items		Factor 2	Factor 3	Factor 4
RL9 Focus on finding solutions to challenges	.767			
RL8 Focus on identifying challenges rather than problems	.685			
RL10 Orientation towards lifelong learning	.574			
RL1 Creativity	.429			
RL7 Sense of experiencing competence and success	.374			
RL11 Establishing and maintaining social bonds with others		.795		
RL12 Openness to seeking support and help when necessary		.59		

RL4 Optimism	.63	
RL5 Humour	.545	
RL6 Adaptability and flexibility	.376	
RL2 Motivation for own profession		.771
RL3 Perseverance		.422

Note. Factor Loadings with Principal Axis Extraction Method and Varimax Rotation

The dimensionality of our data can be further reduced to address concepts like (1) solution-focused behaviour, (2) social network and support, (3) positive perspective on life and (4) persistence.

DISCUSSION

Students consider important protective factors related to their persistence (motivation for their profession and perseverance), positive perspective on life (optimism, humour and adaptability and flexibility), as well as social network and support (establishing and maintaining social bonds and proactively seeking support in the environment) and their ability to creatively approach challenges through life-long (solution-focused behaviour). Similarly, various studies show the importance of protective factors that students highly assessed (e.g. Bernshausen & Cunningham, 2001; Bobek, 2002; Castro, Kelly & Shih, 2010; Ee & Chang, 2010; Howard & Johnson, 2000; Mansfield *et al.*, 2016). However, recognising challenges in their educational environment proved to be the central protective factor. This is also further supported by previous research, which emphasizes the importance of the students' proactive orientation in the context of their resilient activity (Benders & Jackson 2012; Drljić & Kiswarday 2021; Drljić, Štemberger & Kiswarday 2019; Gu & Day 2013; Mansfield *et al.*, 2016). Their ability of so-called creative adaptation behaviour, which enables them to identify challenges and find thought out and structured responses (Bowles & Arnup, 2016), can contribute to experiencing, or effectively approaching them and, consequently, building a sense of competence. By experiencing that their competencies are evolving, they can also adapt to different more or less predictable circumstances with flexibility. However, the students' ability to identify challenges may be more focused on their professional development that takes place throughout their lives and begins with initial education. The willingness to implement such continuous learning allows them to look for different solutions to the challenges they identify, including establishing a distance to the initial idea, which further enables them to approach the challenges carefully (Klusmann *et al.*, 2008).

Additionally, this also reflects their creative approach to identifying challenges and possible solutions to them. Motivation for their profession is also one of the key protective factors of resilience (Gu & Day, 2013; Mansfield *et al.*, 2012), which also helps them maintain perseverance in the process of achieving set goals. Their ability to form and maintain social bonds, on the other hand, enables them to seek help and support in their environment and thus reinforce their understanding that collaborative relationships strengthen the learning of their interpersonal and social-emotional skills (Le Cornu, 2009). At the same time, forming and maintaining social networks can also strengthen their optimism. Various studies report on the importance of the support the students receive from their social environment, and that it represents one of the key protective factors of resilience (Howard & Johnson, 2000; Le Cornu, 2009), showing the student's active response to environmental challenges. Above all, this kind of support enables them to adapt to different circumstances (Mansfield *et al.*, 2012) and to take the responsibility for their decisions through their autonomous activities, thereby enhancing their belief in the fact that they can master the requirements of the teaching profession (Bobek, 2002; Howard & Johnson, 2000).

Regarding some results, we may conclude that resilience protective factors can be grouped into four concepts that are manifested in students' solution-focused behaviour, positive perspective on life and persistence and experiencing a supportive environment. These main concepts of resilience have an informative role in the understanding of the construct of resilience protective factors, which are also supported in previous research. (Benders & Jackson, 2012; Mansfield *et al.* 2012).

CONCLUSION

In this paper, we emphasised that resilience is an important characteristic of students which enables them to respond to the demands of the teaching profession even during emergencies, which certainly include the Covid-19 epidemic. In doing so, we pointed out that protective factors play a key role in the construction of individual resilience, which we assume are stable regardless of whether the student responds to the challenging situations associated with the Covid-19 epidemic or to other difficult circumstances that they encounter under normal circumstances since the underlying assumption of resilience assumes the presence of challenging circumstances. In the future, it would make sense to investigate whether our assumption of stability within these protective factors is actually true. However, the findings of the survey suggested that it is important to focus on developing resilience in the education of future educators while knowing that the promotion of one protective factor could contribute to the creation of new protective factors (Fredrikson, 2004; Rutter, 1987).

The results of the survey carried out among students show that the key protective factors connected to the personal and professional qualities of students, future educators, effectively influenced their ability to function constructively in challenging circumstances and the support that is present in both their domestic and study environments. Students provided the highest assessments for motivation for their profession, their ability to establish and maintain social bonds, and their ability to adapt to different circumstances with flexibility. Despite the above, the central role in the student's resilience is their ability to identify challenges, which have a stimulating effect on some other protective factors of resilience and create the conditions for solution-focused behaviour. Their ability to find solutions to the identified challenges may also indicate their creativity, and willingness for lifelong learning and additionally permits them to approach finding solutions analytically, which is crucial from the point of view of autonomous activity in the teaching profession. Experiencing successes and thus feeling competent (or building competencies) brings forth their adaptive skills. In terms of building resilience in students, their ability to socially integrate and seek help within their social network is also important, which can be seen as a sign of proactive action. We can conclude that protective factors of resilience may have a multiplicative potential, as already reported in the literature (Fredrikson, 2004; Rutter, 1987), which would be worth exploiting in the process of initial education of students. Nevertheless, it should be noted that the sample represented a limitation of this study, so it would make sense to conduct it on a larger and more heterogeneous sample than the present study sample. Another limitation of the survey is the questionnaire, which is designed on the basis of a theoretical framework and was not adopted from other research, therefore it was not validated. Furthermore, results are based on students' self-assessment of resilience protective factors, which does not support the actual presence of resilience in students.

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