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A Message from the Editors in Chief

Dear Colleagues,

We are delighted to include your paper in this book of proceedings. This issue covers the papers presented at the 12th International Adult Education Conference – "Balance in the Context of Strategic Changes" (IAEC 2022), held on 22nd and 23rd November 2022 in Prague, Czech Republic, under the auspices of Prof. Milena Králíčková, the Rector of Charles University. This year we built on the success of the 2020 and 2021 Virtual Conferences, and also enabled a combination of virtual and face-to-face presentations. The conference was traditionally organized by Czech Andragogy Society in main cooperation with Charles University in Prague. We have cooperated with Matej Bel University in Banská Bystrica (Slovakia) and University of Warsaw (Poland).

Charles University is the oldest university in Central Europe. The university traditionally supports and implements excellent science in the field of humanities and other sciences. The Czech Andragogy Society is the largest professional organization in the Czech Republic, dealing with the development and research in adult learning and education. The 12th edition of the conference was also heavily influenced by the ongoing war in Ukraine. As part of the conference, Prof. Larysa Lukianova and Prof. Nataliya Lazarenko, who in their reports reflected on the current state of education in Ukraine. Other contributions deal with the ever-accelerating digitization in education and the increasing demands on educators. The content of the book of proceedings thematically corresponds with the main topics of the conference:

- Innovation and digitization,
- Cooperation, wellbeing and resilience,
- The potential of social capital,
- Current educational needs of the school environment.

Issues related to factors that affected both formal and non-formal education were addressed. The workshop Foreign trends in the field of further education of teaching staff was also held as the part of the conference, and was attended by secondary school teachers from four countries (Finland, France, the Netherlands and Germany). In addition to leading European experts in the field of adult education, students of the follow-up Master's program in Andragogy and Educational Management from the Faculty of Education of Charles University also participated. At the same time, a workshop focused on the use of virtual reality in education took place as the part of the conference, where all participants had the opportunity to try out this learning tool.

The articles should be original, so far unpublished, and not in consideration for publication elsewhere at the time of submission. The book of proceedings is guided by its editors, reviewers, and advisory committee. This conference proceedings volume published as an e-book will be submitted for evaluation and possible coverage in Web of Science: Conference Proceedings Citation Index.

May 2023
Jaroslav Veteška & Jaroslav Kříž, editors
Charles University, Prague, Czech Republic
Czech Andragogy Society

Czech Andragogy Society has sent complete papers to two members of the program committee for full blind peer review and a summary of review back to the author(s).

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Empathetic environment and openness of the educator on the way to inclusion

Jana Balážová, Mira Tagar

Abstracts:

Through this research, we enter the environment of an educational institution and, in an empathic setting, uncover themes that preoccupy educators in the face of pupils who are representations of inclusion within a narrowed group of pupils with disabilities, disorders and threats. A significant finding of the research is the fact that in all the participants' statements we found an 'educator's interpretation of the pupil' – they think they know the pupil and therefore do not see possible avenues of resolution.

Key words:

empathy, empathic environment, inclusion, inclusive school, teacher, teacher difficulties

Introduction

According to Flieger and Schőnwiesen (2011), a school in the concept of inclusion is a school that is for all pupils. Its task *"is to provide all learners with unique personalities, manifesting a variety of personality traits, abilities, skills, with an educational environment in which they will find optimal stimuli for their development..."* (Balážová, 2012, p. 12). Educants (children, pupils) and educators (educators: teachers, special educators, pedagogical assistants, educators, etc.) acquire not only new knowledge, but above all they learn to live: to live with themselves, to live together, they learn to learn; they learn to value and accept themselves and others. Are we ready for such a school?

1 Empathy and the inclusive school

Inclusive environments place high demands on educators to manage heterogeneity and difference (not only in relation to children and pupils with disabilities, disorders, and threats). Sodak, Podel's (1993) research indicates that an educator with a higher sense of self-efficacy, which faithfully mirrors the educator's competence, is less likely to refer students with disabilities, disorders, and threats to special schools than an educator with a lower degree of self-efficacy. At the same time, Yeung, et. al. (2014) pointed to the strong influence of teachers' self-concepts and values on teaching and their perceptions of students' ability to learn. Nwosu, et. al. (2020) in their study provided a model that explained the relationship between teachers' self-perceptions and their willingness to accept pupils/children with disabilities, disorders, and threats into mainstream classrooms precisely through their empathy.

For the educator, empathy is a lifesaver, because the moment he or she encounters something that he or she cannot approach, cannot understand, has antipathy towards, then there is a natural tendency to reject it (Balážová & Tagar, in press). Empathy is an evolving concept (Wispé, 1987). It is an effort to identify with another's mental state and respond to it with appropriate emotion (Baron-Cohen & Wheelwright, 2004). According to Tagar (2018), to be empathetic is to consciously cultivate the skill of perceiving a person from his or her own point of view. Decety, Jackoson (2018) recall three different perspectives of psychologists: to feel what the other person feels; to know what the other person feels; and to respond consciously empathically, emphasizing that empathy involves not only some minimal acknowledgement and understanding of the other person's emotional state, but also the affective experience of the other person's actual or inferred emotions. Tagar (2018, p. 5) reminds us that empathy for the other begins in empathy with oneself *"To know the other, I need to know myself."* Pedersen (2007) emphasized that without acknowledgement of subjective contribution, empathy is not possible. Empathy can be seen as the

key to more effective implementation of inclusive education (Balazova & Tagar, in press) in a school that lives inclusive values. An empathic environment clearly fosters openness and opens possibilities for finding solutions on the path to inclusion.

2 Methodology

The aim of the research was to summarize the difficulties in the educational process from the perspective of educators and to define the common features. The research sought to answer three **research questions**:

1. What types of situations trouble educators in the educational process?
2. What difficulties arising from the description of situations do educators have?
3. What are the common features of this difficulties of educators?

The research was carried out during autumn 2022. We sent out an offer to participate in the research to 30 institutions in the Bratislava region. The offer was voluntarily responded by our **research sample** consisted of 65 participants from nine public and private educational institutions within the Bratislava region in the Slovak Republic – a state-run kindergarten, a private kindergarten, a state-run and private primary school, a private primary school, a forest club, and a home-schooling school. The participants (9 participants brought the situation and 56 participants provided an active empathic environment) formed nine cumulative groups (teachers, educators, special educators, teaching assistants and school psychologists).

In the first phase of the meeting, we consciously created a safe empathic environment for the research participants through three activities, during which everything that was experienced was also accepted – received with respect and with an effort to find a way to take care of the feeling and inner wounds:

a. participants were informed with the course of the activity;
b. participants were introduced to the Safety contract proposed by Tagar (2019) and used in the Empathy School trainings (confidentiality, respect, freedom);
c. we went through the Enter-Exit-Behold exercise (In Steele, 2011) with the participants, which as Tagar (ibid) states has an impact on changing the interaction.

In the second phase of the meeting, we asked one educator in the group to present a (prepared) situation from the educational process that was very difficult for him/her, when he/she did not know how to deal with it, he/she felt that he/she was not competent to solve it. The participants' statements were carefully recorded on a recording device and then subjected to qualitative analysis in accordance with the defined objectives. In the process of axial coding, we were interested in the relationships between the different categories of difficulties.

3 Interpretation of research results and discussion

Adams and Martray (1980) at Western Kentucky University identified problems perceived by teachers in relation to students in the areas of: homework completion, discipline, relationships with teachers, and teaching students with disabilities, disorders, and threats. Poulou and Norwich (2000) identified the following as the most problematic for pupils from the perspective of primary education teachers in Greece: avoidance of work, depressed mood, negativity, physical aggression, and lack of focus.

In our research, based on interviews with participants, we found that educators **are concerned about 3 types of situations** in the educational process:

- the pupil/child repeatedly fails to do what he/she is supposed to do;
- the pupil/child is doing something other than what he/she is supposed to be doing;
- the pupil/child has strong expressions of emotion.

Table 1 Problematic manifestations of pupils/children from the perspective of teachers

pupil/child expression	situation	the efforts of the educator influence the situation
ignoring the rules	- the pupil/child does not respect the rules - the pupil interrupts the class, does his own thing, and influences others - the pupil does not have homework, and he doesn't mind it	- repeated warnings do not help - it does not help to declare rules repeatedly - negotiation does not help;
aggression	pupil swears, hits teacher	warning does not help
low self-esteem	the child shows sadness, self-blame	general reassurance that she's smart – doesn't help
reluctance to embrace change and cling to rituals	the pupil shows stress from the pressure of not being prepared for the situation	staying active didn't help – the pupil got sick
polarity (all or nothing)	the child shows a strong desire to do something that doesn't make sense	she can't explain that it's useless, unnecessary
reluctance to be active (passivity/demotivation)	the pupil verbally expresses resistance, attempts to escape, motor restlessness	it doesn't help to start with the sharing in the group

Source: own elaboration

With the exception of one case, these were recurrent situations in which the participant felt that he was failing: *"A lot of them happen during the day and ... They don't in themselves sound somehow serious, but by having so many of them, so it starts to become quite a problem."* These were situations where **educators felt it was a problem when pupils/children displayed** (Table 1) ignorance of rules, hidden shame about their own actions, aggression, low self-esteem, a need to seek meaning of their existence, a reluctance to embrace change and cling to rituals, polarity, and a reluctance to be active.

Table 4 Weaknesses and strengths of teachers

Weaknesses – teacher´s difficulties	Strengths of the teachers
critical view of the pupil (7)	correction of teacher's actions (1)
admonishing the pupil (7)	teacher self-reflection (4)
transfer of stress and pressure to the pupil (9)	the teacher's desire to change his or her actions (2)
social pressure on the pupil (2)	teacher appreciation (2)

Source: own elaboration

Drawing on the participants' descriptions of the situations, we identified **categories of difficulties of educators:** acting, feelings and emotions, induction, and interpretation (Table 2, 3). In all cases, there was a **description of both the** participant's **action** and the pupil/child's **action**. We also included descriptions of verbal exchanges in the category – action: *"Then I screamed at him, it was so extreme ... my voice came out of me out of both fear and anger".* It was difficult to decide whether a given description was a description of emotional experience or action. However, we categorised the above as action, as we understood this to be part of setting boundaries for the pupil. But the statement, *"because then came out of me the stress as well as complete anger at him ..."* we placed in the category of **feelings and emotions**, which was very varied, diverse (helplessness, dismay, stress, anger, despair, restlessness) – helplessness was repeated most often.

Participants' emotions appeared in all the speeches, somewhere stronger and somewhere only hinted at. In five of the speeches, participants also mentioned the emotions/experiences of the pupil/child. In two cases there were also a description of the pupil/child behavior, e. g. "*she droops her shoulders and down her head, she's all withdrawn into herself like that*". Pupil/child experiencing touches teachers, they cannot separate themselves well enough and protect their experiencing from that of the pupil/child.

Table 3 Educators' interpretations and inductions

interpretations	examples	inductions	examples
The teacher knows what the pupil thinks/remembers. (4)	▪ *the boy shrugs his shoulder -so he doesn't care* ▪ *the child remembered a situation from the past and therefore reacted as follows*	reflection on the trigger of the reaction in the pupil (1) – previous conflict with classmates	▪ *the girls have something together, then the pupil always comes to me and tells me something inappropriate*
The teacher knows what the pupil feels. (7)	▪ *the pupil does not want to perceive his feelings of guilt* ▪ *the pupil is sad, disappointed when he is not the first*	connection-return after the holiday consequence-repeated work with rules (1)	▪ *emotionally challenging situations always arise after the holidays*
The teacher knows what the pupil wants/wants. (4)	▪ *the pupil wants to influence others to disturb*	the relationship between teacher pressure and student writing (1)	▪ *on certain assignments, time-consuming tasks- the pupil's writing is choppy*
The teacher knows what the pupil expects. (1)	▪ *the pupil waits what the teacher will do*		
The teacher knows what the pupil needs. (1)	▪ *the pupil needs to experience the rule repeatedly, to be warned*		
The educator thinks the student knows the impact of his actions. (3)	▪ *he knows he's doing wrong* ▪ *the pupil does not perceive how others have it, he acts without thinking,*		

Source: own elaboration

Most striking and present in all statements was the category that reflected the participant's attempt to interpret the pupil/child's thinking, experiencing, feelings, and motives for action – **interpretations** (Table 3). Here we see a significantly weak moment – it seems to cause the main problem in all cases: the participant guesses the pupil/child but does not perceive how the pupil/child really are, does not empathically capture the pupil/child's current inner state, and is therefore unable to respond in a relevant way. In only four situations out of nine did participants provide a basis for their assertion about the pupil/child, which we have termed **teacher induction** (Table 3), i. e., the participant was inductively reasoning about how the pupil/child was doing based on visible, observable signs.

From the situations described by the participants in our research, we summarize the **weaknesses and strengths of the educators** (Table 4). In addition to the weaknesses of educators

mentioned above, participants in two situations mentioned the role of the collective in the problem situation. In the words of the participants, it was right that the collective of other pupils sided with the educator and put pressure on the pupil: "*And then some classmates will say to the pupil – well hey Miško, but the important thing is the duties first and then something else can be done. They still actually sort of understand that answer from Miško, that he really doesn't actually sort of have a point in his, in those arguments of his.*" It seems that when the educator is weakened, he or she welcomes the pressure of the collective on the pupil.

Table 4 Weaknesses and strengths of teachers

Weaknesses – teacher´s difficulties	Strengths of the teachers
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social pressure on the pupil (2)	teacher appreciation (2)

Source: own elaboration

It is striking that only in one situation did the teacher mention that he would like to change his behaviour based on the observation of the impact on the pupil (**correction of the teacher's action**): "*there was another exercise in which I could already see that he was not coping, so I stood up, walked around the classroom looking for the other pupils and came back to him again*". But we perceive that the educator can percive his or her part in the situation and name it. The issue of **self-reflection of** one's actions is very important in the case of an educator's strengths. Yet, in only four interviews were there statements that demonstrate that the educator simply evaluated their actions, e.g., "*it was not good*" or "*when I calmed down, I explained that it wasn't that I wanted to hurt him, it was the fear and the responsibility...*" And only two participants expressed a **wish to change their behaviour,** e.g. "*Next time I would like to react completely differently*". We perceive as positive that the participants were able to verbally express their statement (**teacher's appreciation of the pupil**) that the pupil was intelligent, tried to follow the instructions…

The analysis of the statements of the participants in our research confirmed that teachers are personally involved in their work – they care about what they do, they strongly experience the presented situations. However, it seems as if they cannot separate themselves well enough from experiencing and they act sometimes even reactively, which confirms that experiencing and acting are closely linked (experiencing influences and determines subsequent action and action influences subsequent experiencing). At the same time – they think, they know what pupils/children are experiencing, what their motives are and what they want – that's why educators lose them and therefore educators feel lack the competence to guide them (creating further social misunderstandings and inappropriate interactions) – educators lack empathy.

Educators need empathy training to be able to interpret the pupil/child less and understand them more. Booth and Ainscow (2016, p. 43) state: "*B becoming empathic also means replacing punitive approaches to rule-breaking in school with kindness and resourcefulness. It means that adults need to take responsibility when failures occur in their relationships with children and young people. No matter how fractured a young person's relationship with their environment, professionals must continue to ask questions: How can we support this young person to build relationships and engage with learning in school? When we educate with empathy, we can admit mistakes regardless of our position, we can accept apologies, we can step forward to make amends, and we know that it is possible to forgive.*" Continuing education for educators should focus on strengthening empathy skills (one of the pillars to support the creation of inclusive environments). It could be a programme to help teachers to be more empathetic and to see the situation from a different perspective. A study by Tuyakova, et. al. (2022) reports a direct positive impact of an empathic teacher approach and a change in classroom discipline. Scanlon and

Barnes-Holmes (2013) confirm that a targeted training program for educators, largely increases their implicit positivity towards students with emotional and behavioural problems. There is no doubt that training educators brings significant improvements in empathic skills (Kourmousi, Amanaki, Tzavara, Merakou, Barbouni & Koutras, 2017). According to Campbell (2022), fostering empathy in educators will also foster collaboration, thereby positively impacting the living of inclusion in practice. Peck, et. al. (2014) stated that empathy training for teachers will become increasingly important precisely because of the increasing diversity in the composition of individual classrooms in schools.

Conclusion

Educators who experienced an empathic environment- it means- all their experiences were accepted, they were able to speak openly about what was troubling them - their accounts were authentic. A significant finding of the research is that this was a clear insight from the educator's own perspective, but they are making their own interpretations of pupil/child and therefore not seeing possible avenues of resolution.

Our research could be followed up by efforts to prepare training that develops empathic skills, so that educators see the situation from another point of view and gradually learn to cope with a school environment that tries to live in line with the inclusive trend.

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Motivating students to learn using active learning methods

Lucia Baránková, Gabriela Gabrhelová

Abstract:

The paper presents theoretical-empirical research focused on ways of motivating students to learn using active learning methods. Active learning methods support interest in learning, intensify experience, thinking and action. The field of motivation is the subject of constant research by educators and academics. We focused our research on the investigation of psychological causes of human behavior that can be guided and worked with. Our examination of motivation from the perspective of secondary school teachers offers several important findings.

Introduction

Learning is one the basic needs of mankind. The high speed of globalisation should be considered and included into the education. Learning is connected to a transmission of information (Hafeez et al., 2020; Kalantarrashidi et al., 2015; Yuzulia, 2020). The successful implementation of learning plan depends on teacher's ability to include modern styles, approaches and methods into the learning process, (Asyari et al., 2016; Merchie & Keer, 2016). Traditional approaches to teaching like presentation or lab works do not develop critical thinking. Teachers must use modern teaching methods with focus on development of learning skills of all students as well as the entire society (Kawka et al., 2021; Nkulikiyinka et al., 2020). Efficient teaching and learning is important for cognitive development of students in all areas (Aina, 2020; Zhu et al., 2020).

The majority of psychologists state that there are still serious gaps in learning processes, such as passivity of children or lack of feedback related to their work. They prefer active approaches and self-learning activities in both environments, at school as well as at home. The modern didactics emphasizes the appropriate targets of this activity, its application for reaching of learning goals as well as tasks included in curricula (Višnić et al., 2017). Learning activities can be logical, psychological, pedagogical, social and didactical. Lekić (1985) considered active participation of students as a basis of education, because it is a building block of the entire educational process. Activity of students can be defined as integration of knowledge, thoughts, working and technical activities into the learning process (Plaić, 2012).

The goal of this thesis is to analyse the impact of active learning methods on motivation of students based on the available literature and own survey.

1. Motivation of students to learn

Motivation is defined as power or dominancy which enforces specific behaviour. Motivated students are focused, work on given tasks, ask questions, answer questions and in general seem to be happier (Palmer, 2007). To be motivated to learn, to work, to be able to learn, manage critical situations and to be able to organize work and free time are important skills for everyday life. Compared to technical skills or literacy, these skills are not so much in focus of schools. Research indicates that lifelong learning will be important part of successful life. In order to prevent burnout, people should be able to split work and free time. Current research confirms, that personal happiness is a precondition for successful learning, achieving of goals as well as management of stressful situations (Hall et al., 2019).

Options for motivation increase in a learning process

One of the variables contributing to motivation of students is teacher's personality as well as his professional skills. Beside family, a school is the second most important institution for

socialization. Beside parents, a teacher has the biggest influence on the personality development in academic as well as social sphere (Uhláriková, 2018).

Motivation is intrapsychic process, which is sourced from internal and external situation of an individual. A person acts in order to achieve a goal which has its psychological reason. Usually it is a satisfaction of needs, which reflect specific deficiencies in one's life. The final goal of human behaviour is achievement of internal state, generally called satisfaction. There are a lot of theoretical approaches to motivation based on different principles. Some of them focus on content which means that they deal with basic motives and relationships between them. The principles of a process are explored through impacts of motives on behaviour. Every individual has different way of development which creates specific structure of his needs (Nakonečný, 2015).

2. Methods

The goal of this study was to research the impact of active learning methods on student's motivation to learn. The main point of interest was the opinion of teachers on this topic. The data in quantitative research are teachers from high and vocational schools.

The survey was completed by actively working teachers. The resulting dataset consists of 39 woman (76.47%) and 12 men (23.53%). The results of this survey confirmed general statement, that there is more woman than men in the educational system. The respondents could choose one out of five age groups. The majority of high school teachers are 51 or more years old, making up to 41.18 % of the total number of respondents. The second biggest group consists of teachers between 31 and 40 years, which is 33.33%. In the age group between 41 to 50 years we collected 19.61% of answers. The smallest group were teachers up to 30 years (5.88%). Based on the survey we can say, that majority of respondents have a long teaching praxis of more than 10 years (70.59%).

3. Results

The following chapter summarizes the results collected from the survey completed by teachers from vocational schools. The information was obtained by both, open as well as closed questions related to the effectiveness of learning methods. We were interested in the opinion of the teachers with regard to the contribution and efficiency of active learning methods in terms of motivation increase of high school students.
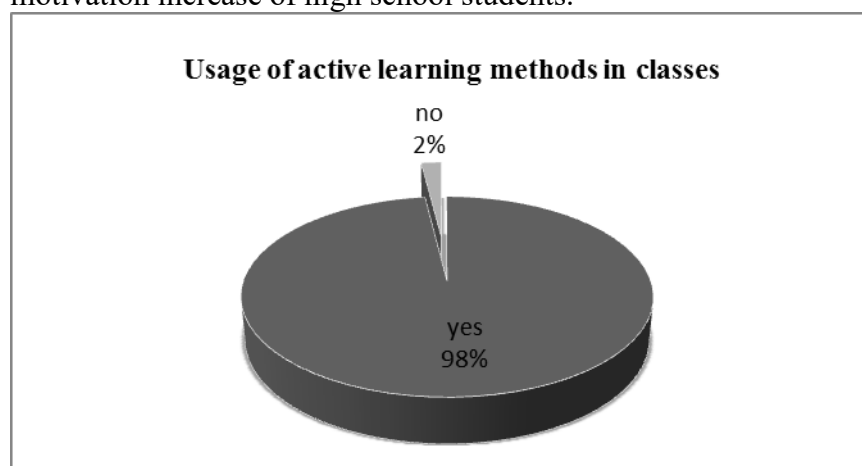
Graph 1: The usage of active learning methods in high school classes (source: own research)

The teachers stated in the survey that 98.04% of them use active learning methods in their classes (Graph 1). Only one teacher stated that he / she is not using these methods. Due to the anonymous character of the survey, we could not contact the teacher in order to specify his answer in more detail. However, later in the survey it was mentioned, that he / she uses active learning methods (discussion and self-study) which is combined with methods collected from colleagues as well as own approaches. Based on this fact we can say that also this respondent uses these

methods in his classes. We can conclude that every teacher who participated in the survey uses active learning methods.

Interest of students in classes with active learning method

yes
5,88%

no
94,12%
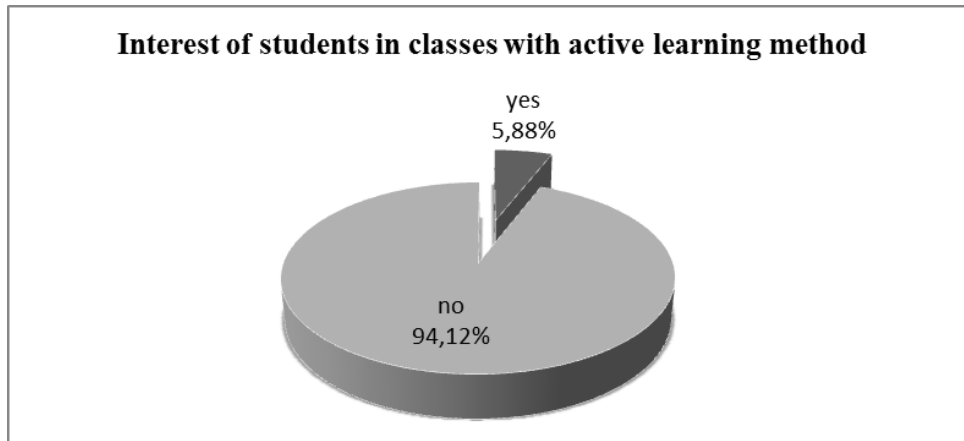
Graph 2: Interest of students in classes with active learning methods from teacher's point of view (source: own research)

The majority of respondents evaluate the classes with active learning methods as more interesting (94.12 %). Additionally, students have higher motivation to participate in these classes (Graph 2).

The difference of activity based on various learning methods

yes
5,88%

no
94,12%
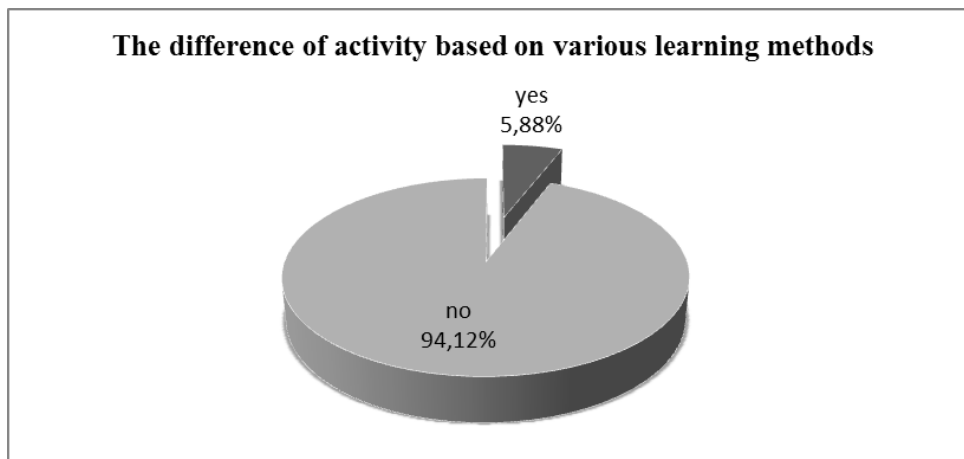
Graph 3: The increase of student's activity in lectures by usage of traditional and active learning methods (source: own research)

By comparison of graph 2 and 3 we can state that respondents answered both questions consistently. The same number of teachers (94.12%) stated that students are more interested in classes with active learning methods as well as are more active than in standard classes. In this case only 5.88% of teachers didn't see any positive impact with regard to interest and activity of students.

Graph 4: Opinion of teachers on student's motivation increase in classes with active learning method (source: own research)
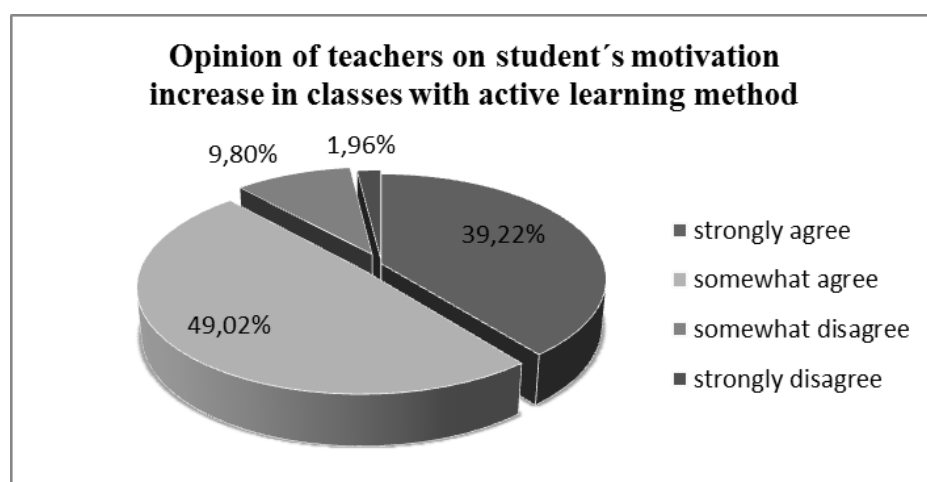
From the teacher's point of view, students are motivated to learn in classes with active learning methods. This was stated by 88.24% of teachers (graph 4). Despite the fact that majority of teachers use active learning methods, 11.46% of them stated in the survey that they don't see increased motivation of students.

4. Discussion

The majority of teachers know that in order to attract student's interest, it is important to include different learning methods into the lectures, which can make learning process more interesting. The selection of proper active method, its frequency and inclusion into the learning process depends on different determinants, which must be considered by the teacher. The selection and usage has big impact on the speed and durability of learning. There can be different results based on the selected method such as prepared learning content or active participation. The interest and engagement of students are not given only by content of the lecture, its importance and presentation but also by possibility to contribute and show of student's personality. These are factors of mutual creativity. Active learning methods help to overcome the isolation of different areas, teach how to discuss, argument, defend opinions, come up with own ideas as well as increase ability to cooperate. This involves not only how to critically accept other opinions but also how to adjust persons own opinion. The main prerequisite for introduction of active learning methods is to change student's attitude to education.

Based on the presented facts we tried to find out, whether students prefer active learning methods to classical methods. This survey was conducted from teacher's point of view. The results indicate that 94.12% of teachers in high schools see positive impact of implementation of at least one active learning method on student's activity in classes. Learning strategy helps students to decide what knowledge and in which order he / she has to use in order to achieve specific goal. Learning strategies are highly impacted by motivation and its intensity, which determines performance.

Positive motivation in conjunction with success supports student's self-confidence. It is important to manage that motivation in connection to success doesn't freeze students' progress. The important factor is the intensity of motivation. In case of low intensity, student can lose focus which is consequently shifted to another subject. On the other hand, high intensity creates psychical pressure which leads to decrease in focus followed by lower performance. In order to achieve optimal performance it is necessary to have optimal level of motivation, which is based on individual characteristics as well as current state of mind. One of the questions in the survey was focused on motivation in classes. 88.24% of teachers stated that active learning methods increase student's motivation to study.

Conclusion

Every learning method has advantages and disadvantages. It is up to the teacher to select the most suitable method for a specific situation in order to deliver the best possible result. There is no general rule for method selection. It is hard to decide on the proper method, however the positive results brings more joy due to the fact that teacher is able to successfully merge multiple learning factors. Correct selection of the method is the only way how to achieve expected results (Orbánová, 2019).

Active learning methods give students important motivational impulse, because it provides them a chance to try and explore different things, select learning approach and make own conclusions (Krpálová Krelová & Dohnalová, 2019).

Based on the survey we can state that high school teachers use active learning methods in their classes. These methods have positive impact on student's motivation. The main reasons are increased interest in learning, higher activity in classes and motivation to perform additional activities.

Active participation is nowadays very important, because it is the only way how to efficiently develop student's competencies. Active learning methods play major role in competencies of students (Krpálová Krelová & Dohnalová, 2019).

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Education of pre-service biology teachers in scientific skills: curriculum and graduates' view

Adam Nejedlý, Karel Vojíř

Abstract:

The research aim was to characterize the professional training of pre-service biology teachers in scientific skills. A (1) content analysis of annotations and syllabus of discipline-specific courses and (2) a questionnaire survey focused on students' perceptions of the importance, self-competence, and higher education preparation were conducted. Students perceived scientific skills as important, however their preparation as insufficient. This is matched by the low proportion of courses considering these skills (14% and 26%).

Key words:

biology education, higher education, pre-service teachers, professional training, scientific skills

Introducion

To be effective in society, to maintain their current standard of living and to develop further, people need to acquire specific skills. Thus, promoting the development of skills related to science, technology, engineering and mathematics in education is becoming increasingly important (cf. Li et al., 2020). This has been matched by changes in the field of education policy across different countries (see Council recommendation of 22 May 2018, 2018). In this context, not only general skills, but discipline-specific skills play a key role. In science education, there is thus a need to emphasize not only factual knowledge but also specific scientific process skills (Stone, 2014).

The change in thinking about science education is manifested in the creation of a large number of teaching materials to support students' active learning (e.g. Rusek & Vojíř, 2018), as well as in the monitoring of students' scientific skills in primary and secondary education through measurement tools (Pedaste et al., 2021; Tosun, 2019) and the evaluation of students' inquiry-based tasks solutions (e.g. Nejedlý & Vojíř, 2022). However, the essential role of the teacher, who is responsible for the selection and transformation of educational content, cannot be neglected in the learning process. Therefore, change in education cannot be achieved without effectively equipping teachers with the necessary knowledge and skills. As stated by Shulman (1986), for successful professional work, a teacher needs both pedagogical and content knowledge, and these two components should be effectively integrated.

Although prospective science teachers are largely prepared in discipline-specific fields as part of their undergraduate studies, it appears that content knowledge is only marginally addressed when they thinking about teaching and its assessment (see Honskusová et al., 2022; Pavlasová, 2017). If teachers are to encourage the development of specific scientific skills in students, it is essential that they themselves are sufficiently competent in this area. This must be matched by their training and the emphasis placed on these skills in their undergraduate studies. At the same time, teachers must be convinced of these skills usefulness and their own competence in order to be sufficiently motivated to incorporate them into their teaching (cf. Tosun, 2014).

Research aim and questions

The main aim was to characterize the professional training of pre-service biology teachers in scientific skills. The research purpose was made concrete through the research questions:

- How are scientific skills reflected in the intended curriculum of discipline-specific courses in the undergraduate preparation of pre-service biology teachers?
- How do pre-service biology teachers perceive their competence in scientific skills?

- How do the pre-service biology teachers perceive the importance of scientific skills for students and teachers?
- To what extent do pre-service biology teachers consider their higher education preparation in science skills to be sufficient?

Methodology

A qualitative-quantitative approach was used to characterize the professional training of pre-service biology teachers and to determine their attitudes towards scientific skills. The research conducted at the end of the 2021/2022 academic year consisted of two parts. The analysis of scientific skills in the intended curriculum of discipline-specific courses for prospective teachers was conducted using closed coding. Pre-service teachers' view was obtained through a questionnaire in electronic form.

Curriculum content analysis

An analysis of the characteristics (syllabus, objectives, and annotations) of all courses in the curricula of the training of pre-service biology teachers at the Charles University, Faculty of Education was conducted. Namely, the curricula of the bachelor's degree study programme (ISCED 6) Biology, Geology and Environmental Studies for Teacher Education and the follow-up master's degree study programme (ISCED 7) Teacher Education of Biology for Lower and Upper Secondary Schools were analysed.

Within these programmes, 36 courses of the bachelor's degree study programme and 27 courses of the master's degree study programme were analysed. The analysis focused on the main objectives of each course highlighted for the students, therefore the characteristics of the courses that are provided to students as part of the course registration were analysed. These are the course annotations and syllabuses that capture the objectives and content of each course. In the first step of the analysis, all parts of the analysed texts related to graduates' skills were identified. These were then classified using closed coding.

The scientific skills categories established by the American Association for the Advancement of Science (see Fugarasti et al., 2019) were used for the assessment. This classification identifies 6 basic scientific skills (observing, measuring, classifying, communicating, predicting and inferring) and 9 integrated scientific skills (using space/time relationships, questioning, identifying and controlling variables, hypothesizing, defining operationally, formulating models, experimenting, designing experiments and interpreting and valuing data). To increase the reliability of the results, all characteristics were independently assessed by two researchers.

Pre-service teachers' attitudes

To determine attitudes, a pilot questionnaire survey was carried out with a sample of pre-service biology teachers at the end of their undergraduate studies (master's degree) before entering teaching practice. 19 students (15 women and 4 men) in full-time study and 12 students (7 women and 5 men) in combined study participated in the research.

A questionnaire focusing on attitudes towards scientific skills of pre-service teachers was designed for the research. The questionnaire was constructed in a structure analogous to the Intrinsic Motivation Inventory (McAuley et al., 1989; Ryan, 1982). The questionnaire consisted of 20 statements that were rated on a 7-point Likert scale (1 – definitely true, 7 – definitely false). The statements were divided into five scales related to specific attitudes toward science skills (perceived competence, value to the student, value to the teacher, value to self, and sufficiency of instruction). The questionnaire was content validated by an expert panel of didactics experts. Cronbach's alpha was calculated for each scale to assess reliability. The values found for all scales (0.85–0.96) can be considered acceptable (see Tavakol & Dennick, 2011). Therefore, the data were considered reliable and were descriptively evaluated.

Results and discussion
Biology teacher training curriculum
It was found that in 5 (14%) out of 36 courses in the bachelor's study program, two basic (observing, classifying) and four integrated (experimenting, designing experiments, analysing data, interpreting data) scientific skills are developed in students according to the characteristics of the courses. The analysis performed showed that observing, classifying, experimenting designing experiments and interpreting data are explicitly emphasized in 4 biology courses. And only in the thesis-writing course did the addition of the scientific skill analysing data appear, see Table 1. The results show that there is a complete lack of representation of the basic scientific skills measuring and communicating and integrated scientific skills using space/time relationships, questioning, identifying and controlling variables, hypothesizing, defining operationally and formulating models in courses objectives formulated for students in the bachelor's study program.

Tab. 1 Scientific skills in the courses characteristics of the bachelor's degree study program

The courses focus on	Number of courses with scientific skills	Scientific skills in the course characteristics
Biology	4 of 28	observing, classifying
		interpreting data
		observing, designing experiments, experimenting
		observing
Biology education	0 of 7	
Thesis-writing	1 of 1	experimenting, designing experiments, analysing data, interpreting data

Source: own processing

It was found that in 3 out of 4 bachelor courses focusing on biology, only observing is explicitly repeated in more courses curricular characteristics. No scientific skills are explicitly emphasized in the characteristics of the biology education courses. By the nature of the bachelor's thesis-writing course, the development of scientific skills is more comprehensive and explicitly focuses on experimenting, designing experiments, analysing data, and interpreting data in the course characteristics.

It was found that 7 (26%) of the 26 courses of the follow-up master's study program focusses on the development of two basic (classifying and inferring) and four integrated (experimenting, designing experiments, analysing data, interpreting and valuing data) scientific process skills in students. The analysis conducted revealed that observing, classifying, interpreting and valuing data are explicitly emphasized in 3 biology courses syllabi. In didactic biology courses and in the thesis-writing course an emphasis on integrated scientific skill was found, see Table 2.

Tab. 2 Scientific skills in the courses characteristics of the master's degree study program

The courses focus on	Number of courses with scientific skills	Scientific skills in the course characteristics
Biology	3 of 17	observing, inferring
		observing
		classifying, inferring
Biology education	3 of 8	interpreting data, valuing data
		analysing data
		analysing data, valuing data
Thesis-writing	1 of 1	experimenting, designing experiments, analysing data, interpreting data, inferring

Source: own processing

In the biology-focused master's courses, the skills of observing and inferring is repeated in 2 of the 3 courses in the course characteristics. In courses focused on biology education, 2 of the 3 courses repeat the skills of analysing data and valuing data in the course characteristics. The master's course focusing on thesis-writing, like the bachelor's course, emphasizes the comprehensive development of scientific skills in the course characteristics and explicitly focuses on experimenting, designing experiments, analysing data, interpreting data and inferring.

From the results of the analysis of the courses written characteristics, it appears that students will explicitly encounter the skills of observing, classifying, interpreting data, designing experiments, analysing data, and experimenting in their higher education preparation in both levels of tertiary study. Moreover, only six scientific skills are included in more than two courses curriculum in the entire biology teacher's higher education: observing (5 courses), analysing data (4 courses), interpreting data (4 courses), experimenting (3 courses), inferring (3 courses), and designing experiments (3 courses).

The results show that the written curriculum of the discipline-specific courses presented to students do not emphasize the systematic development of scientific skills. This is also true for most biology-oriented courses. Thus, scientific skills are neglected in comparison to field oriented factual knowledge. This emphasis can make scientific skills seem less relevant to students' studies. This orientation towards the relevance of scientific skills acquisition in the higher education may then influence teachers too in their lifelong professional learning (cf. Köksal & Cogmen, 2013). These realities may also influence how students view context of learning scientific skills and whether they consider them important to develop purposefully in their pupils.

The results show the emphasis placed on scientific skills within the written curriculum of each subject. However, based on the analysis carried out, it is not possible to directly assess the implementation of the development of scientific skills within the curriculum. This issue therefore requires further attention, and it would be useful, for example, to carry out an observational study.

Pre-service teachers' attitudes

An evaluation of students' attitudes on the scales of their perceived competence in scientific skills and their perceptions of their higher education preparation shows that in both scale evaluations, an overall median of 3 on the Likert scale was found. This means that students are more likely to not consider themselves competent in scientific skills and more likely to not consider their higher education training to be sufficient. Students of combine form of study feel

slightly more competent in scientific skills (median 4) than students in the full-time form of study (median 3). Students of combine form of study also perceive higher education less negatively in terms of sufficiency of scientific skills development (median 3) than students of the full-time form of study (median 2), see Figure 1.

Figure 1 Medians of pre-service biology teacher's attitudes towards scientific skills
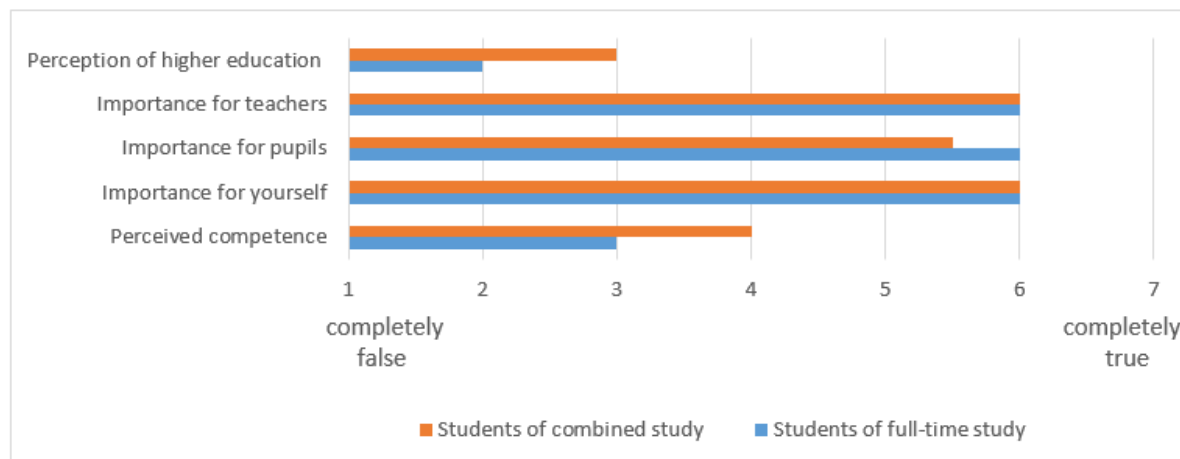
Source: own processing

Other attitudes assessed were perceptions of the importance of scientific skills for respondents personally, for teachers in general and for pupils. Respondents rate scientific skills as important on all three scales. In the case of pre-service biology teachers studying in the combined form of study, the median was 5.5, in all other cases the median was 6. Thus, students perceived scientific skills to be important to themselves, teachers, and pupils. There was no difference in ratings between combined and full-time students.

The findings indicate that pre-service teachers are aware of the importance of scientific skills. Hence they are likely to be willing to incorporate them into their teaching practice. The first essential aspect is the perception of the importance of scientific skills for themselves. It is therefore likely that this motivation can lead to the development of scientific skills in their higher education training., However, a necessary condition is that higher education training emphasises scientific skills and support their development in a comprehensive way. As e. g. Tosun (2014) points out, higher education training plays an important role, both in terms of developing specific scientific skills of teachers and in terms of positive perceptions of them in educational practice.

The second important aspect is that pre-service teachers consider it important to develop pupils' scientific skills. Thus, the prerequisite for pre-service teachers to want to implement teaching aimed at developing scientific skills in pupils is fulfilled. However, teachers determined to implement teaching in this direction need to be systematically supported in their practice from multiple perspectives. 1) There is a need of instructional materials to support the development of scientific skills including textbooks reflecting the curriculum changes as a potentially implemented curriculum, that teachers use to plan their education and lesson preparation (cf. Vojíř & Rusek, 2021; Vojíř & Rusek, 2022). 2) Sufficient teachers training needs to be modified in the discipline-specific area to support (pre-)service teachers feel and be competent in scientific skills and be able to transform it into their teaching. This relates both to undergraduate study and to taking steps to support their continuing professional development (cf. Postholm, 2012).

Conclusion

Students' perceived importance of scientific skills for themselves, teachers in general and students is an important starting point for their development. The perceived lack of competence of pre-service biology teachers in scientific skills, as found in this pilot study, may lead to the

non-application of teaching methods based on inquiry and scientific reasoning, or to the creation of misconceptions by pupils. Both basic and integrated science skills are emphasized in biology teacher education. However, their development is not systematic across the curriculum, and they are only explicitly foregrounded in a fraction of courses (14% - bachelor's degree study program, 26% master's degree study program). The need for teaching innovation is also highlighted by the pre-service biology teachers' perceived lack of support for the development of scientific skills within higher education. These aspects of biology teacher training therefore need further attention. The research instrument piloted in this study proved to be functional and can thus be used for further research in the field of attitudes towards scientific skills.

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Analysis of critical thinking strategies application from the teachers' point of view

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Abstract:

In recent times we have noticed a growing negative reaction to the quality of didactic procedures that are applied at school. The Department of Pedagogy in Nitra carried out a research investigation, the aim of which was to find out whether there are differences between groups of teachers (based on the length of pedagogical practice) in the area of application (*frequency*) of selected critical thinking strategies in their own teaching process.

Key words:

critical thinking, frequency, lifelong learning, meaning, structuring, strategies, teacher

Introduction

The 21st century constantly brings numerous changes that need to be faced, as they affect our daily lives, require making difficult decisions and solving problematic situations. We are continually overwhelmed by a lot of information, unfortunately also misinformation from unreliable or unverified sources. Therefore, we have to carefully select all information, analyse it, compare it with experience but also make our own judgments based on which we reach a decision.

Since these are activities closely related to critical thinking this is where the school comes to the fore – as a place that must provide learners with the most suitable conditions for overall cognitive, emotional and social development. In line with international efforts to support the development of learners' critical thinking within the teaching process it is also in our region desirable to identify educational strategies that have the potential to stimulate and develop learners' critical thinking. Today we know that it is not enough to teach only scientific knowledge but as part of effective teaching it is also necessary to include the development of skills associated with critical thinking, such as identifying key ideas, working with an error, recognizing important connections, correctly interpreting data, arguing, drawing logical conclusions from information, evaluating the reliability of evidence, develop flexibility of thinking.

Critical thinking

The need to bring up critically thinking individuals is not new but it has become a necessary requirement primarily due to unlimited access to information through rapidly expanding technologies. We are also of the opinion that critical thinking is a key requirement of competence for lifelong learning. In professional literature critical thinking is characterized by a system (focusing attention on logical connections, relevant arrangement of information), metacognition (improvement of one's own thinking), asking questions, higher thought operations. Summarizing scientific views on critical thinking we can state that thinking critically means thinking about information in depth, while pursuing a certain purpose (achieving a result, solving a problem, completing a task, achieving a set goal).

Learners' critical thinking addresses and subsequently develops their self-regulation, reflection of their own thought processes, independent thinking, structuring of information, identification of conventional opinions, determination of relations and contexts, comparison of concepts and ideas, analysis of facts and opinions (Ericson, 2022). Authors who operationalize critical thinking overlap in several constructs, therefore critical thinking is defined through cognitive abilities that are examined in relation to other components of personality. The following are mainly dominant: analysis of arguments (Tozduman Yaralı, 2020); argument-based deduction (Ross & Gautreaux, 2018); assessment and evaluation (Yanchar, Slife & Warne, 2008); problem

solving (Lou, 2018); self-regulation (Heydarnejad, Fatemi & Ghonsooly, 2021), concepts defining (Li, Ren, Schweizer, Brinthaupt & Wang, 2021).

Effective learning strategies belong to the main topics of psychology, pedagogy, specific didactics, but also among the educational policy within the framework of curricular changes. The source for defining strategies for the development of critical thinking is evidence that the skill to think critically can be directly influenced within the educational process (Howe, Hennessy, Mercer, Vrikki & Wheatley, 2019; Halpern, 2014; Bandvopadhyay & Szostek, 2019).

We consider educational strategies to be key determinants of active and meaningful learning, as well as the achievement of stated educational goals. We believe that the acquisition of appropriate educational strategies that develop the ability to think critically is one of the key components of lifelong learning. Based on research results (Kozárová & Gunišová, 2020) we have specified learning strategies that develop learners' critical thinking: structuring the curriculum, conceptual mapping, summarizing information, meaningful argumentation, mnemonic aids, organizing information, analogies. Furthermore there are strategies for the development of self-regulation, reading skills, evaluation, strategies for drawing conclusions and solving problems, strategies for the development of systematic and interpretive skills.

It would definitely not be effective to assess the level of learners' critical thinking and propose changes in our schools without an adequate probe into the ranks of pedagogical staff - teachers (Winch, 2019). We clearly agree with the statement according to which, in order for students to learn to think critically they first of all need an appropriate model of educational strategies and a critically thinking teacher (Snyder & Snyder, 2008). The learner does not come to school as a full-fledged critical thinker, he/she develops this ability precisely by being involved in creating suitable conditions in the educational process under the proper guidance of the teacher.

Methods

In the professional community little attention has been paid to the need for a comprehensive examination of teachers' critical thinking. The lack of space devoted to explicit measurement may be related to what Bartos & Banks (2015) called the osmotic model of critical thinking learning. It means the assumption that teachers will acquire elements of critical thinking in the course of their studies or directly during their own educational practice.

For the stated reasons the Department of Pedagogy of the University of Constantine the Philosopher in Nitra carried out research between 2020-2021, in which individual strategies that teachers use in their educational practice to develop learners' critical thinking were identified. The research sample (87 respondents) filled out a questionnaire (using scales) so that teachers could express their use of strategies for the development of critical thinking. Teachers were divided into groups according to the length of teaching experience as follows: 1st group: professional adaptation (*1 - 5 years of experience*); 2nd group: professional advancement (*6 - 15 years of experience*); 3rd group: professional stabilization (*16-30 years of experience*); 4th group: professional conservatism (*31 and more years of experience*).

The aim of the conducted research was to find out whether there are differences between groups of teachers (based on the length of teaching experience) in the area of application (*frequency*) of selected critical thinking strategies in their own teaching process. Based on the above we defined the research hypothesis: *H: We assume that individual groups of teachers (created according to the length of teaching experience) perceive the application (frequency) of selected critical thinking strategies in their own teaching process differently.*

Results

Our goal was to find out whether the differences between the groups of teachers (according to the length of teaching experience) in the area of application (*frequency*) of strategies for the development of critical thinking are *statistically significant*. The tested hypothesis was the null hypothesis H_0 which states that among 4 considered groups of teachers created according to their

length of their practice there is no statistically significant difference in the area of applying strategies in the teachers' own education process linked to Critical Thinking dimension. We tested the null hypothesis H_0 with the Kruskal-Wallis test against the alternative hypothesis H_1 that among 4 considered groups of teachers created according to the length of their experience there is a statistically significant difference in the area of applying strategies in their own education process in the dimension of Critical Thinking.

We calculated the value of the test criterion **$H = 9.005$** and the value **$p = 0.029$**. Since the calculated value of probability p is less than 0.05, we reject the null hypothesis at the significance level $\alpha = 0,05$ meaning that the difference between the four groups of teachers (created on the basis of the length of their teaching experience) in the area of applying strategies for the development of learners' critical thinking in their own teaching process is statistically significant.

Using the Kruskall-Wallis multiple comparison test we determined which groups of teachers (based on the length of teaching experience) are statistically significantly different from each other in the application of critical thinking strategies. Considering that the results of multiple comparisons will be evaluated on the calculated probability value p we will only present the table of p values (Tab.1).

Tab. 1 The Results of Kruskal - Wallis Test of Multiple Comparison

	2. group Professional advancement	**3. group** Professional stabilization	**4. group** Professional conservatism
1. group Professional adaptation	0.027*	0.059	0.316
2. group Professional advancement		1.000	1.000
3. group Professional stabilization			1.000

In Tab. 1 we can see that there is a statistically significant difference between the 1st and 2nd group of teachers – the probability values p are less than 0.05. This means that teachers with experience from 1 to 5 years apply strategies for the development of learners' critical thinking in their own education process in statistically significantly different ways than teachers with experience from 6 to 15 years.

Discussion

In connection to the trend of professionalization of the teaching profession there has recently been a discourse on the quality of teachers' work and their education not only in our country, but also abroad. In this context we also pay continuous attention to the training of teachers at the undergraduate as well as postgraduate level. Efforts to identify professional competencies characterizing the quality work of a teacher led to the creation of professional standards which became the starting point for further education, development but also the evaluation of teachers. The professional development of teachers has not only become an indispensable need from the point of view of the implementation of regional education reforms, but it should influence the quality of the teacher's pedagogical activity as well as the quality of the learners' learning results.

While teachers in professional adaptation have theoretically mastered knowledge of their subject as well as strategies, methods and techniques for realization the teaching process, they also

have knowledge about the development of critical thinking, but unlike teachers with 6-15 years of teaching experience they lack practical experience, sufficient training in diagnosis, adequate reflection on their educational activities and subsequent self-development. Despite the above we think that in addition to acquiring academic knowledge increased attention should be paid to the development of cognitive functions and processes within the pre-graduate teacher training. Universities should create an atmosphere that encourages thinking, in-depth discussions, the exchange of opinions, arguments and personal philosophies and not just the presentation and interpretation of learned facts.

We include critical thinking in a set of abilities that are among the key competencies of a student – a future teacher. Critical thinking means assessing new information, forming judgments, assessing the importance of information for one's needs and for the real needs of society. An irrational (uncritical) teacher is a threat to his/her learners from the very beginning (Li & Liu, 2021). The argument that experience will come with age and teaching experience will not stand up. Therefore, teacher education must be understood not only from the aspect of the educational programme which is filled with a number of subjects and lessons, but must be perceived from the perspective of the teacher's professional development over time and the phases of his professional career. The situation is illustrated in Fig. 1.
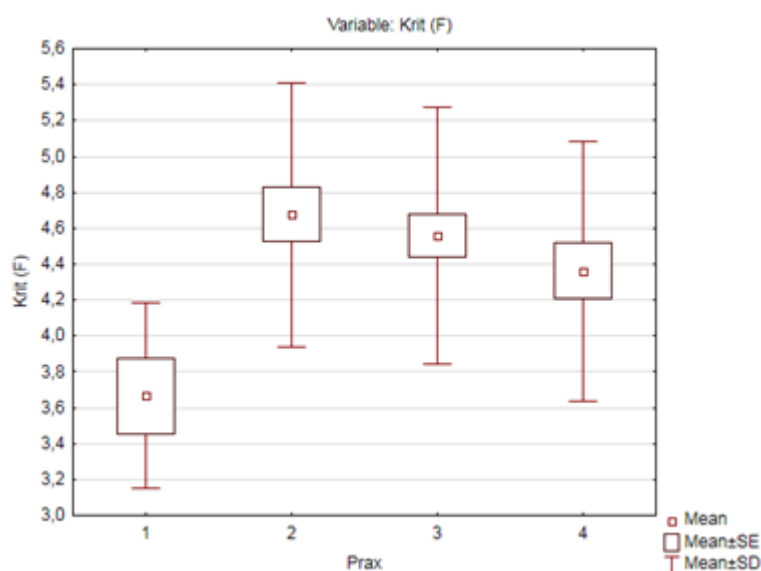
Fig. 1. Average Values of Critical Thinking (*Frequency of Strategies' Application*)

Conclusion

Educational systems in individual countries characterize critical thinking as an essential part of the equipment of a modern human being – and his/her development as one of the main missions of today's education. Topics related to the development of learners' critical thinking still raise a lot of questions among teachers, gradually lead them to a changed view of teaching, allow them to see the education process in a broader context, realize the essence of educational situations and find ways to solve them.

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Vocational subject teachers in-service training in the context of the requirements of rreen and digital transformation of economy

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Abstract:

The proposed study is an output of the KEGA grant project No. 001VŠDTI-4/2022 Teacher Training in Vocational Subjects in Accordance with the Requirements of Twin Transition Green and Digital (Bilčík, 2022a,b). One of the main research goals is to find out about the inevitable changes in the field of teachers' (lifelong) learning in accordance with the requirements of the green and digital transformation of the economy. Vocational subject teachers' training is significantly impacted by the undergoing changes in the context of both the green transformation and the digital transformation of the economy, which are associated with the need for an innovated set of practicing teachers' competences.

Key words:

digital transformation of the economy, education, green transformation of the economy lifelong learning, teacher, vocational subject teachers

Introduction

The undergoing climate change and degradation of the environment represent and existential threat for Europe, as well as the entire world. To deal with this challenge, the European Commission adopted the European Green Deal in 2019 (European Commission, 2019). Its main goal is to achieve climate neutrality by 2050. To meet this goal, changes in all branches of economy are necessary and school graduates should get prepared for them.

New technologies rapidly change the ways of interaction and working, connect communities and workers in more and more sophisticated ways, and open new opportunities. Also, new conditions and requirements related to the global economic and ecological environments (Dušek, 2019; Stehlík et al., 2020) occur. Digital literacy, as well as skills in the fields of science, technology, engineering, and mathematics should be developed in the young generation to equip them for successful working at modern workplaces and living in a modern society (Ursul & Ursul, 2018). Under the influence of the twin transition green and digital, it is expected that the European Union will gradually achieve a circular, digital and climate neutral economy, will use resources effectively and also take advantage of the potentials of artificial intelligence. For this, citizens' green skills – i.e. the skills needed by the workforce, in all sectors and at all levels, to help the adaptation of products, services and processes to the transformation due to climate change, and to the environmental requirements and regulations (OECD & Cedefop, 2014) – must be developed. It means that educational systems must ensure updating school curricula, but also the content of teachers' further education and training programmes, because – as pointed out by McConnell (2001) – the key to successful environmental education is the classroom teacher.

1. Digital transformation of the economy

The main goal of the 2030 Digital Transformation Strategy for Slovakia (Ministry of Investments, Regional Development and Informatization of the Slovak Republic, 2019) is to become a modern country with an innovative and ecological industry building on knowledge-, digital-, and data-based economy with an effective public administration ensuring an intelligent usage of territory and infrastructure, and with an information society, the citizens of which use their potentials and live a high-quality and safe life in the digital era in the context of respecting and building digital humanism by 2030. The cited document defines Slovak policy and particular priorities in the context of the undergoing digital transformation of economy and society, and under the impact of innovative technologies and global megatrends in the digital era (Hanuliak et

al., 2015). The Strategy represents a key and decisive material for Slovakia in the 21st century, when it naturally comes to a shift from an industrial society to an information one. Digital technologies should be used for increasing the quality of citizens' lives by optimizing the benefits for countries' economic, social, and environmental growth with an emphasis placed on sustainable development (see also Horváth, 2021; Horváth et al., 2021; Dušek, 2021; Veteška et al., 2022). As stated in the document Modern and Successful Slovakia (Ministry of Finance of the Slovak Republic, 2020), digital transformation of education and related administrative processes are based on the following three principles:

1. Developing teachers' digital skills;
2. Equipping teachers and schools with digital technologies (software and hardware); and
3. A curriculum reform based on strengthening horizontal digital skills, but also specific IT education.

Developing teachers' digital skills by means of further education is a basic precondition for a successful implementation of the reform. Schools' digital transformation should be managed by school digital coordinators who will be school teachers trained and prepared for coordinating the realization of a given school's plan of digital transformation. According to the above plan, teachers should be provided with digital technologies, schools should have a better Internet access, and should be provided with localized open licensed digital content available to students and teachers in the virtual educational environments. Teachers should have their own laptops with secure administration, an e-mail address administered by the school, and access to virtual educational environments. Teams of teachers should communicate and collaborate via digital technologies and information about students and personal data should be securely stored.

Digital technologies promote and simplify administrative processes in schools. Also each students should have an access to open educational resources, and schools and teachers will use digital technologies to increase the quality of on-site education. In the case of crisis situations – such as the pandemic crisis – schools would be able to transform their processes and provide online support to their students without any unnecessary delays.

New curricula should promote developing digital skills, such as programming, understanding the principles of safe use of technologies taking into account the social aspects, as well as skills in the field of working with robots and autonomous technologies. So, there is a clear space for updating the content of (lifelong) vocational subject teacher training, which provides teachers with opportunities to acquire the necessary skills and competencies for including every individual in the process of digital transformation and develop their competencies in mediating these skills to their students in schools (see also Lorenzová, Jirkovská, & Mynaříková, 2020; Mynaříková et al., 2019).

2. Green transformation of the economy

Slovakia has committed itself to achieve the goals of the Strategy of the Environmental Policy of the Slovak Republic until 2030 – Greener Slovakia, and to decrease the concentration of dust particles in the air to the level recommended by the World Health Organization by 2030. Despite the progress observed in the field of greenhouse gas emission reduction in the last 30 years, Slovakia is still far away from carbon neutrality. The transformation of the industry undergoing in the 1990s and the relatively loosely formulated goal of reducing greenhouse gas emissions allowed Slovakia not only to meet it but also to exceed it. Not even such a reduction of emissions can be considered sufficient for achieving domestic economy's neutrality. The climate change, as well as the COVID-19 pandemic, represent an unprecedented challenge requiring a change leading towards a greener, circular, and carbon neutral economy. In this context, it must be pointed out that Slovakia is highly dependent on the automotive industry. Alternative fuels and infrastructure – including electro- and hydrogen-mobility – offer opportunities for reducing emissions, but also to diversification of production. Programmes focusing on decarbonisation of

industry would significantly contribute to achieving the goal of carbon neutrality in Slovakia. Alongside with that, such programmes should be targeted on the largest producers of emissions among industrial enterprises to achieve the highest possible effect in the shortest possible time. The rate of municipal waste recycling is among the lowest in the EU and landfilling is still the dominant form of waste management in the country. This way, the economy loses a significant volume of materials, which could be re-used. Therefore, Slovakia intends to reform the system of waste separation, is going to gradually increase landfilling fees and introduce quantity collection of mixed municipal waste, within which smart solutions will be applied. To reduce waste, in each district/city, re-use centres will be founded, and with the aim to minimize food waste production, the legislation in the field will be reviewed. The Government will adopt a strategy and a map for the transition to circular economy.

The above described situation and the planned changes require an increase in the quality of vocational subject teachers' in-service training in Slovakia, as teachers need to develop skills necessary for each individual's participation in circular economy, but also competencies for developing these skills in their students (see also Tureková et al., 2020; Bilčíková et al., 2020; Lengyelfalusy, 2014). It can be achieved by participation in targeted projects.

3. In-service teacher training in the context of the requirements of the green and digital transformation of the economy

Research evidence shows that environmental education and increasing ecological literacy in the population can encourage people to adopt "greener" personal attitudes and start recycling, reducing litter, conserving energy and improving water sanitation (Wals & Benavot, 2017), which means that targeted educational activities can contribute to improving the quality of the environment. Anderson (2012) defines education for sustainable development as an approach to teaching and learning based on the ideals and principles that underlie sustainability. It promotes school improvement processes and as stated by Mogren, Gericke, and Sherp (2019), it involves addressing specific issues (climate, poverty, biodiversity), and the application of appropriate methods, approaches, and developing skills, abilities, visions and practices. Education for sustainable development is applicable to all types, levels and settings of education. Furthermore, environmental education encourages pro-environmental political behaviour, such as being involved in environmental activism, voting for green parties, supporting environment-friendly policies, etc. (Meyer, 2015; Coan & Holman, 2008). Unfortunately, in Slovakia, teacher training programmes do not sufficiently prepare pre-service teachers for the green and digital transformation, but as experience and research results indicate, the situation is similar in other parts of the world as well. Seikkula-Leino et al.'s (2021) findings show that in Nordic countries, the goals and contents in curricula related to the climate change and sustainable development are limited and environmental/sustainable education must be promoted more explicitly.

The publication by Nazarenko and Kolesník (2018) has contributed to developing a strategy for teacher training in Slovakia as they studied the level of pre-service teachers' theoretical knowledge and environmental skills in pre-service teachers. They carried out a pedagogical experiment in order to get a holistic picture of the meaning and the overall structure of the professional competences of future ecology experts. Subsequently, they proposed a model of environmental awareness providing new and effective ways of pre-service teachers' professional environmental training. They applied the methods of environmental training and focused on gaining particular experience.

From a retrospective point of view, in the context of teachers' environmental education in the Slovak Republic, a project described in more details by Fryková (2012) can be mentioned. As a part of teachers' professional growth and career advancement, The Methodology and Pedagogical Centre in Bratislava carried out a further education programme focused on increasing students' environmental awareness in the teaching process, which can be – in line with Kollmuss and Agyeman (2002) – defined as realizing the impact of human behaviour on the quality of the

environment. The described project was targeted on primary and secondary school teachers and was based on the presumption that by means of environmental education, students' environmental feelings and behaviour are influenced and developed, and these are important from the aspect of serious global and local environmental issues. The benefit of the realized programme was primarily in strengthening teachers' professional competencies (especially subject-specific and psycho-diagnostic competencies and competencies for reflection of own activities). The main goal of the programme was to deepen, develop, and widen teachers' professional and pedagogic knowledge and skills in the field of environmental education, and to strengthen their professional competencies. The specific goals of the mentioned educational programme included being equipped with sufficient information about the current environmental issues – including the issues of noise or being familiar with the legislation in relation to protected areas; having a database of environmental activities appropriate for classroom use at teachers' disposal; planning and creating environmental activities, as well as being able to implement them in the classroom; presenting these environmental activities as a part of the lesson or another organizational form of education (excursions, field trips, etc.); and evaluating their motivating and activating role in the educational process. From among teachers' professional competencies, the project was targeted on the below fields, which reflected the situation in the Slovak school system, and on opportunities for their development in the framework of the provided in-service teacher training programme:

a. The current situation in the field of participants' competencies: subject-specific competencies (teachers possess basic knowledge in the field of environmentalism in the case they teach school subjects including environmental topics), psycho-diagnostic competencies (teachers are able to implement elements of environmental education into the content of the school subject they teach, to motivate and activate students), competencies for reflection of own activities (teachers are able to evaluate and change their teaching activities),

b. Opportunities for competence development in the following fields: strengthening subject-specific competencies by means of presenting up-to-date environmental issues, mediating relevant information in the field, recommending appropriate resources, strengthening teachers' psycho-diagnostic competencies based on sharing information about environmental activities, experience exchange between teachers, implementing environmental activities in the educational process, developing the ability to predict the effect of a given activity as motivating or activating or as being an activating factor in the classroom, strengthening teachers' competencies in the field of self-reflection (being able to evaluate the realized activities and to change them if needed).

The Slovak Environment Agency (Slovenská agentúra životného prostredia, 2011) provides a description of a project entitled "Ecological Footprint – Education towards Sustainable Development. The programme consists of twelve thematic fields – lessons – divided into a theoretical and an empirical part. In the theoretical part, teachers (training participants) get familiar with basic terminology and theses. In the practical part, they strengthen and broaden the acquired knowledge by means of prepared activities and exercises. The last lesson is dedicated to the application of the gained knowledge in participants' teaching. By participating in the training programmes, kindergarten, primary and secondary school teachers increase their qualifications. The project aims to contribute to increasing the quality of in-service teacher training and increasing teachers' qualifications resulting in educating students towards sustainable development.

Another project realized in Slovakia is the in-service teacher training programme "Environmental Education in the 21st Century" (Metodicko-pedagogické centrum, 2019) focused on linking the content of a variety of school subjects, placing emphasis on practical application of knowledge, creating opportunities for increasing students' interest in their environment, educating them towards knowledge, behaviour and acting in compliance with the trends of sustainable

development and sustainable life style. Knowledge and experiences gained during the training form the basis for designing educational plans and creating projects based on the application of contextual task related to environmental issues. After completing the training programme, teachers are able to fulfil the educational plans or to meet the goals of projects, and to evaluate their contribution to developing students' literacy. The main goal is to develop teachers' professional competencies in compliance with the relevant professional standards and to promote environmental education (students' environmental literacy development). Environmental literacy means individuals' understanding, skills and motivation to make responsible decisions taking into account their existing connection with natural systems, communities and future generations (Bilčík & Bilčíková, 2020).

Ecological literacy (also called eco-literacy) is the ability to understand the natural systems creating conditions for living on the Earth. To be eco-literate means to understand the principles of ecosystems' organization and being able to apply these principles for creating sustainable human communities (Bilčík et al., 2021). Based on the above, it can be assumed that teachers need to be literate in the mentioned fields in order to develop transferable competencies in students (Bilčík, Tureková, & Bilčíková, 2019) in the classroom when teaching their (vocational) subjects. So, there is a need for increasing the quality of in-service vocational subject teachers' training, and providing teachers with opportunities to further develop their knowledge and skills in the framework of lifelong learning activities that can help them actively participate in the digital transformation and subsequently, tdevelop these skills in their students in schools (see also Lorenzová, Jirkovská, & Mynaříková, 2020; Mynaříková et al., 2019).

Conclusion

In the proposed paper, the current situation in the field of vocational subject teachers' in-service training and the existing learning opportunities for acquiring the necessary knowledge and skills, as well as developing competencies important for meeting the goals of the digital and green transformation of the economy, are dealt with. Also, the theoretical basis necessary for carrying out the planned activities within the presented grant project Teacher Training in Vocational Subjects in Accordance with the Requirements of Twin Transition Green and Digital is elaborated. As Bilčík (2022a,b) informs, the project follows up on the recommendations by the European Commission directed towards more accessible and flexible vocational training and is focused on the didactic system's functions in the work of teachers and vocational trainers. An emphasis is placed on their active participation and conscious mutual cooperation in order to increase teachers' interest in lifelong learning and developing their professional and key competencies in accordance with the twin transition green and digital.

The project is based on most up-to-date research and knowledge primarily from the fields of circular economy, sustainable green technologies and other key topics dealt with in the European Green Deal introduced by the European Commission in 2019 as a call for eliminating the existential environmental threats are considered. The project and the related activities are based on Wilke's (1985) premise according to which teachers lacking knowledge, skills and commitment to environmentalize their curriculum cannot prepare environmentally literate students. Moreover, implementing relevant knowledge in the curricula is not enough, education should also cultivate the necessary skills for environmentally responsible behaviour, such as critical thinking, problem solving, and creating links between subjects to develop and maintain sustainable schools (McKeown & Hopkins, 2010).

So, secondary school teachers should be competent to teach about the climate change and other environmental threats and to develop the above skills in their students, but the existing educational programmes do not pay sufficient attention to these issues, although they can be easily implemented in a range of vocational subjects as confirmed by the results of the School Education Gateway (2020) surveys. Their findings show that a lack of training opportunities is the main barrier to including environmental content in the classes delivered by them. So, one of the goals

of the presented project under realization it to provide vocational school teachers with relevant knowledge and information about available learning and teaching resources for individual study programmes on the level of vocational schools in Slovakia. The aim of the project is to write a handbook for implementing the themes of environmental education in the educational standards of vocational subjects and to equip teachers with didactic apparatus for providing effective and meaningful education to students in the field.

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Positive school climate and rules in the educational environment

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Abstract:

The article defines the school climate with a short theoretical digression, since the climate is a key condition of the educational process. We focus on the issue of rules in the school context, since the way they are dealt with determines and influences the effectiveness of the didactic work of the teacher and the activity of the students. We focused our research on the area of school and classroom climate and its impact on respect and compliance with school rules. We base the timeliness of the topic on the crisis in society, in which non-compliance with basic norms and rules is overlooked and often accepted without basic sanctions and consequences.

Introduction

The school and class climate is a basic condition of education that the teacher must be able to create, develop, support and improve. It affects all activities in the school and the behavior of all actors in school life. In a supportive, safe, participative and positive climate, students feel safe, they feel that they are cared for, that they are adequately supported in their learning, which fosters their sense of autonomy and belonging, develops attachment to the school, regular school attendance, behavior, educational aspirations and achievement. In the context of creating conditions for the educational process, we focus on classroom rules, which are an essential part of the school and classroom climate. Students' attitude towards the rules and their observance is reflected from the learning process to the presentation of the acquired knowledge, practical skills and behavior.

1. **Positive school climate and rules in the educational environment**

Research on school and classroom climate confirms the existence of a positive correlation between a positive school climate and better learning outcomes and student achievement (Jones et al., 2004). The factors of a positive climate that are the subject of research focus on the study of order, safety, discipline, teacher-student relationships, fairness, and clarity of rules in school (Fan & Williams & Corkin 2011; Syvertsen & Flanan & Stout 2009). A sense of belonging in school is negatively correlated with loneliness, anxiety, social isolation, and antisocial behavior, while positively correlated with happiness, social support, conflict resolution skills and social competence, academic achievement, and safety in school and the classroom.

Belonging is more strongly related to happiness, higher social skills, internal motivation, self-esteem, and adherence to democratic norms and values. In their study, Thapa & Cohen (2013) present results that confirm the importance of the psychosocial climate of the school for aggression and bullying. Reductions in aggression and violence in schools are associated with positive school climate (Brookmeyer & Fanti & Henrich, 2006; Goldstein & Young & Boyd, 2008; Gregory et al., 2010; Karcher, 2002). The lower incidence of bullying due to a positive school climate has been scientifically documented (Birkett et al., 2009; Kosciw, 2006, Meraviglia & Becker & Rosenbluth & Sanchez, Robertson, 2003; Yoneyama & Rigby, 2006).

Eliminating aggressive expressions in school and the occurrence of bullying can be achieved through rigorous enforcement and adherence to school discipline. Rules are part of the quality of the school and classroom climate, as confirmed by some of the items in the Classroom Environment Scale (CES) questionnaire. School rules are constantly present in everyday school life, in that they are either accepted or ignored (circumvented). Their observance is influenced by routine activity, habit, or attendance. Rules help teachers manage the classroom and maintain

discipline (Doyle 1990; McGinnis et al. 1995; Jones & Jones 2004). In schools, class and school rules often serve to regulate student behavior in order to create and maintain an environment conducive to learning and to prevent behaviors that might disrupt activities, cause injury, or damage school property (Thornberg, 2008).

In relation to the rules, the research focused on the study of the meaning of the school rules. The relationship rules are regulated by the school rules and are also significantly influenced by the quality of educational counseling, the work of the prevention coordinator and the activity of the student council. However, the school rules also determine the way one thinks about oneself and the world. Numerous studies have been conducted to examine teachers' perceptions and strategies regarding classroom management and student misbehavior (Clunies-Ross & Little & Kienhuis, 2008; Liljequist & Renk, 2007; Little, 2005; Shen et al., 2009; Woolfolk Hoy & Weistein, 2006). Infantino & Little (2005) examined perceptions of classroom management and behavior problems in school. Strauss & Corbin (1998) examined rules from the perspective of processing their categorization and typology in their grounded theory. Smetana & Bitz (1996) document the results of a study of rules in the area of morals and values.

The results show that they attribute greater and more positive importance to moral rules than to other rules. They conducted research that examined the teacher's personality and didactic approach to rules (Duke, 1978; Tattum, 1982). The research findings demonstrate that teachers enforce rules in inconsistent ways. A study by Jackson et al. (1993) stated that inconsistent enforcement of rules by teachers does not mean that the rules are ignored, but that they are redesigned with the goal of improving and streamlining them so that they are clear and understandable to all. Thornberg (2008) examined contradictions in the social constructions of school and classroom rules that emerge in daily interactions between teachers and students, and explored how students interpret these contradictions.

Through ethnographic research, he identified and documented problems with values and norms through observation. In addition, qualitative interviews were conducted with teachers to find out how teachers think about the practice and content of daily education on values, discipline, and school rules. This was guided by classroom communication rules. Gordon (2015, p. 267) distinguishes rules into: formal rules and procedures (often in school regulations, brochures), informal rules and procedures that are part of the school's tradition. Sometimes informal rules and procedures are kept long after they have lost their original meaning, it is obvious that they are not satisfactory in society, nobody questions them.

2. Methodology

Within the framework of the research, we focused on five selected areas evaluated by secondary school teachers, namely: students' attitudes towards rules; the most frequent instructions, rules violated by students; motivation, motives, intentions related to ignoring rules; ways of the teacher's work on how to minimize rule violations; didactic work of the teacher with rules; students' parents' relationship with school rules. Data collection was done by means of a self-constructed questionnaire "Rules and Discipline". It contained 43 items, and through factor analysis the following five factors were extracted:
1. students' general attitude toward the rules;
2. students' motivation to disobey and break the rules;
3. strategies, ways to minimize rule breaking;
4. teachers and compliance with established rules;
5. parents and their relationship to the rules from the teacher's perspective.

The aim of the research

The main aim of the research was to find out how secondary school teachers evaluate school rules, and then to conceptualize the didactic possibilities of teachers' work in creating rules in the school environment.

In connection with the focus of the work, we present one of the sub-objectives within which we wanted to find out *what secondary school teachers consider as the motives that make students break the rules, and then suggest the ways of teachers' didactic work to ensure a positive school climate in creating rules in school.* For the subgoal, we formulated the following objective hypothesis:
We assume that a positive social-emotional climate in the school influences the active participation of students in the creation of rules.

Research file

The population consisted of secondary vocational school teachers between the ages of 24and 57 in the Slovak Republic, with an average age of 37.74 years. The research group consisted of 316 respondents (males N-146/46.2% and females N-170/53.8%). The study group was intentionally formed from secondary school teachers and was available as it was assumed that the respondents were willing to participate in the study.

Methods of processing research outputs

The assumed primary data obtained through the questionnaire were coded using Microsoft Excel. During the research, the data thus obtained were processed and analyzed using the statistical program Statistics Cz, SPSS 22.00. Special methods of descriptive statistics (Pearson's correlation coefficient, Chi-square, Student's t-test). More advanced methods of inductive statistics - factor analysis, principal component analysis with Varimax rotation, Cronbach's alpha, which we used in the study of statistically significant internal factor structure of intercorrelations. Following the usual procedure, we tested the hypotheses obtained from the research sample using the questionnaire method at the significance level $\alpha=0.05$, i.e. 5%.

3. Interpretation of the results and discussion

Identification of the factor structure of the DPŽUR questionnaire

Hypothesis H1: "We hypothesize the existence of an internal factor structure of the DPŽUR methodology for the studied attributes of ways, effectiveness, and relationships in student, teacher, and parent compliance." We check the internal consistency of the items in all cases with Cronbach's alpha. We also assume that the variables included in the factor analysis are correlated. We conducted the results of internal consistency check by calculating Cronbach's alpha, the selected items are relatively strongly related to each other. To check the reliability of the research instrument, we used Cronbach's alpha. Its value is 0.731, which expresses about 62% of the correlation, which is sufficient in social sciences. In terms of extracting the internal structure of the criteria for evaluating the rules in relation to their compliance by students, teachers and parents, five factors were extracted from the 41 questions based on the analysis. In order to maximize the variance of the studied phenomenon in each factor, we applied the method of principal components with Vamax rotation in the statistical program SPSS22, extracting five factors:

1. Students and rules - SAR.
2. Non-acceptance of rules - NR.
3. Minimising rule violations - MVR.
4. Teachers and rules - TAR.
5. Parents and rules - PAR.

The extracted factors explain 65.62% of the cumulative variance, which is an acceptable value. The presence of the factor structure of the DPŽUR method is confirmed by the result shown in the screeplot in diagram number one. Considering the established experimental results, it can be stated that the extracted factors were clearly determined and identified and specified in terms of content.

Fig. 1. The presence of the factor structure of the methodology of the DPŽUR author

Scree Plot
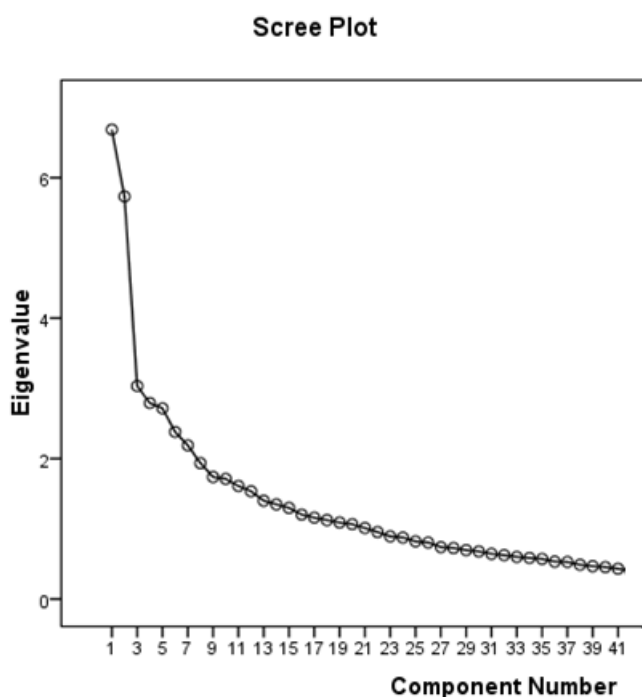
Source: own processing

In order to determine the reliability with regard to the evidence of hypothesis H1, we calculated the individual values of Cronbach's alpha for the variables that represent the degree of reliability of the items that fill in the factors of the DPŽUR questionnaire. The DPŽUR methodology variables represent five domains that mainly capture attributes related to the study of methods, effectiveness, relationships, and student, teacher, and parent compliance. From the methodological point of view, we checked the mentioned attributes using the reliability coefficient of Cronbach's alpha (see Table No. 1).

Table 1. Attribute - Minimization of rule violations-extracted reliability coefficient

	Cronbach's alpha value in case of item deletion
Active participation of students in the creation of rules	0,699
Attractive formulation of rules, instructions	0,762
The way the teacher presents the rules to the students	0,704
Rules are reasonable and necessary, clear and understandable	0,763
Constantly creating a positive social and emotional climate in the school	0,698
Cronbach alfa: 0,815	

Source: own processing

Identifying the most effective ways to minimize violations
H: We hypothesize that a positive social-emotional climate in the school will influence students' active participation in rule-making.

HA: We hypothesize that there is a relationship between a positive school climate and active participation in rule making. In testing the hypothesis, we identified the following variables: Value of positive social-emotional climate in the school and Value of influence on students' active

participation in rule making. Using a sample of 316 respondents, we calculated the rough parameters for Cronbach's alpha and obtained a value of 0.815 with a reliability of 95%. Individual items were tested using one-way ANOVA. To test the hypothesis, we used Spearman's rank correlation coefficient, which, despite its lower power compared to Pearson's parametric coefficient, captures nonlinear dependencies well.

The null hypothesis H0 assumes that there are no statistically significant correlations between the variables value of positive social-emotional climate in school and value of influence on students' active participation in rule making. We tested at the significance level =0.05.

Table 2. Correlation preferences between the value of positive social-emotional climate in school and the value of influence on active participation of students in rule making

	Correlation	Pearson	Spearman
Variables	Score of positive social-emotional climate at school		
Impact score on the active involvement of pupils in the creation of rules	**Correlation coefficients**	0,467	0,432
	Statistical significance of p	0,018	0,018
	N-number of cases	316	316

Source: own processing

Table 3. Examination of the correlations score of positive social-emotional climate in school and score of influence on active participation of students in the creation of rules

	F-test	Significance
Active participation of students in rule making	2,431	0,017
Responsive wording of instructions, rules	3,562	0,215
The way the teacher presents the rules to the students	3,627	0,138
Rules are meaningful and necessary, clear and understandable	3,558	0,029
Continuous creation of a positive social-emotional climate in the school	3,632	0,024

Source: own processing

The results of the analysis between the value of the positive social-emotional climate in the school and the value of the influence on the active participation of students in the creation of rules is a statistically significant interdependence. This is also confirmed by the values of Fisher's test. Therefore, in view of the p-values of both correlation coefficients, which are below the level of significance of the test α=0.05 established by us, *we reject the statistical null hypothesis H0.*

Between the value of positive social-emotional climate in school and the value of influence on students' active participation in rule making. If the nonlinearity were greater, Spearman's correlation coefficient would have a higher value than Pearson's correlation coefficient, because this correlation coefficient measures nonlinear dependencies less accurately. *The hypothesis was confirmed.*

Responsive wording of instructions, rules
The formal side of the rules elaborated in the school regulations has the form of a declarative sentence. It is mainly information by which the student should limit and direct his actions and behavior. The streamlining and attractiveness of the norms and rules in the school is also reflected in their wording. 67.11% of the teachers evaluated the attractive wording of the rules as an effective means of minimizing rule violations.

The way the teacher presents the rules to the students
In general, it is customary for teachers to familiarize their students with the rules at the beginning of the school year by presenting the school regulations, especially during the lessons. By signing,

the student confirms that he/she is familiar with the rules. Teachers are aware of the fact that an innovative, activating presentation of the rules helps to prevent non-compliance. Up to 66.14% of the respondents fully agree or somewhat agree with this statement. It is necessary for teachers to use activating, motivating strategies and methods, support and develop critical and evaluative thinking strategies, and create a positive relationship with the rules. The rules are reasonable and necessary, clear, understandable.

Every teacher, when formulating educational goals, must take into account the conditions of the goal he wants to achieve with the students. When we formulate the rules in their final form, we can also apply the given requirements in the formulation of the rules that ensure the classroom environment necessary for the activities of the students and the teacher. Unambiguity of rules – a principle that prevents double interpretation of the rule, controllability (easy control of compliance with the rules not only by teachers, but also by students), appropriateness (the rules required by the teacher must be appropriate to the level of education, the nature of work – theoretical and practical subjects), consistency – rules that require continuity at all levels of education. After all, 70.89% of respondents expressed a positive opinion about the clarity of the rules.

Conclusion

The teacher's didactic approach to working with rules requires knowledge of classroom and school realities that he or she will use to address violations and noncompliance. Research results document a confirmed relationship between a positive school climate and active participation in rule-making in the area of determining ways to minimize rule violations. From a didactic perspective, rules represent a key determinant of a teacher's effective work for theoretical and practical subjects. Through the analysis of social influences, we point out the necessity of the complexity of creating rules in order for them to be accepted by students as a legitimate and effective regulatory tool of the educational process in the educational environment.

In the context of the introduction, creation and perception of rules in school as something negative, it is necessary to emphasize the need to pay attention to ensuring a positive school climate and culture (positive family climate, life climate), respect for positive values, the use of strategies to support critical, evaluative thinking and self-evaluation, the creation of productive interactions, teacher-student relationships based on empathy and the acceptance of each individual, emphasizing self-reflection, self-evaluation, self-control, self-management of students using self-regulatory learning programs, self-knowledge programs, social psychological programs, character education programs, teaching students to express emotions and feelings and to control them, especially in stressful situations, to communicate openly and creatively, and to focus on rational communication, but also on communication of feelings, emotions, and experiences (Zelina, 2016). In this sense, it is necessary to pay attention to the support and development of competences of future teachers who have to cope with many roles simultaneously in pedagogical practice.

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Adhd in adulhood in the context of professional life

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Abstract:

The present paper aims to highlight the issue of adults with hyperkinetic disorders in their professional life, to specify the theoretical background from which we draw our knowledge and which will be the theoretical basis of our practical research. In the practical part of our work, we would like to highlight, through a case study, the specificities faced by the adult population with ADHD in their work environment, the obstacles and difficulties they have to face when performing the assigned work, but also the positive experiences associated with the performance of the assigned task.

Key words:

ADHD, adult population, employment, professional life, work enviroment

Introduction

In today's modern and hectic times, we face high pressure and stress everywhere. People are result-oriented, having high demands for results at work and high demands on themselves in private life. Adulthood brings autonomy and responsibility for one's actions in all spheres of life, i.e. work, family, friends, leisure, the environment, and society itself. However, bringing results and progress to the best of one's ability often brings with it a lack of time for the working adult. Therefore, to achieve the desired results, i.e. the set goals, adults need planning, strategy, self-discipline, motivation, prioritising and sequencing of tasks and many other activities. This way, they will adequately direct their actions to solve all their problems and challenges responsibly and effectively. When metaphorically translated, we can compare this approach to the creation of a library. Properly shelving books according to content, author title, and catalogue number helps us to navigate very quickly, even in a large and complex library.

We can quickly find the book we need and the answers we are looking for, thus efficiently solving the tasks we have set ourselves. However, what if that library is not classified? What if we cannot classify it capably because the necessary focus, planning, strategy, self-discipline, prioritising and sequencing of tasks, and many similar activities escape us for some reason? The adult population with attention deficit hyperactivity disorder and impulsivity often faces this question.

Based on available research, Ptáček and Ptáčková (2018) consider ADHD to be one of the most commonly diagnosed disorders in children. According to the pharmaceutical company Johnson & Johnson (2021), based on the information to date, it can be assumed that ADHD disorder persists in approximately 30–70 % of adults who were diagnosed with ADHD in childhood. Given this assumption, a percentage of adults with this disorder live in our society, and they need to be targeted and guided through appropriate means to live fulfilled and fulfilling lives.

The work environment of a person with ADHD

Several experts have investigated the work environment of a person with ADHD. We can divide the views of these authors into pessimistic and optimistic views. Experts with pessimistic views claim that work, the work climate and the work environment represent the most challenging aspects of life for a person with ADHD. The manifestations of ADHD and the associated „side effect"' have psychological consequences on self-esteem, proactivity and self-realisation. Contrary, optimistic views suggest that while the school system predetermines certain educational content, the work environment offers freedom for people with ADHD. Adults with ADHD can choose a specific occupation, the content of work activities and other areas in which they can build on their strengths rather than weaknesses. „In working life, people with ADHD see a clear link

between their actions and the outcome. They will much more readily accept effort and responsibility than if they have to learn something just because it is so in the educational process" (Grolimund & Rietzler, 2016, p. 183). The authors argue that people are motivated to improve their abilities in the work environment and to control ADHD manifestations through their self-realisation at work. The word „have to" changes into „want to". For clarification, the authors provide the following definitions of why people with ADHD do much better at work than at school:

- the choice of employment is dependent on their preferences and strengths;
- they have more confidence in their abilities at work due to their self-confidence;
- some of the symptoms do not directly affect the practice of that particular profession;
- symptoms may diminish over time as a result of adolescence and through compensatory strategies;
- motivation to work fuels their motivation to work on themselves.

According to Taylor (2012), the work environment also has a different structure of social relationships leading to improved quality of life with ADHD. On the one hand, in the manifestation of ADHD disorder, one receives more understanding from adult people than from children. Also, in most jobs, one does not rely on one's personal input to do one's work but also on the team spirit in the collective. The team's expectations, such as the reliability and responsibility of a colleague, also encourage people to work on themselves through better integration into the work team.

On the other hand, Žáčková & Jucovičová (2017), in turn, consider the work environment to be very challenging and stressful. Manifestations of ADHD can lead to job fluctuation, which can cause various defects in terms of a person's psychological well-being. Among the most common is the idea that one cannot do anything properly or is not good at anything. Thoughts like these can cause stress, which leads to mistakes, and in the last case, even to work apathy. The authors also describe a common opposite problem: even too much hyperactivity can negatively affect a person. If people are too engaged, active and hard-working at work, their team may perceive them as „the over-motivated ones", making the rest of the team appear less capable and less efficient. The rest of the team refuses to set a steady pace, so eliminating the hyperactive person from the team is a frequent consequence. Kessler (2019) discusses the frequent job turnover in people diagnosed with ADHD. Some of the major mistakes that a person with ADHD makes in employment include:

· problems with higher authorities;
· failure to complete a work task;
· overwhelmed by stimuli, one cannot fully concentrate;
· forgetfulness;
· communication problems;
· problems with self-presentation and presentation of the achieved work results;
· inability to deal with the work task comprehensively;
· not being aware of all the influences that can negatively affect the job;
· inability to fit in with the work team;
· poor spatial orientation and inability to listen actively;
· inability to meet deadlines, to create one's schedule of work activities from the most important to the less important and to respect the rules;
· jumping from task to task; not finishing to reading work instructions to the end;
· chaos, stress and disorientation across a wide range of job responsibilities and work environments.

Reimann-Höhn (2018) recommends relying on one's preferences of interest, the most important strengths and abilities that can be a potential input for the job and personality aptitudes

when choosing a job. Choosing an appropriate occupation is key to enabling other aspects of a person's life to develop in the right direction. The author recommends relying on professional help (career counsellors, psychotherapists) or professional resources (standardised questionnaires) when looking for the right job.

Methods

We can only solve the research Problem „The analysis of the manifestations of ADHD in adulthood during the performance of occupational activities in employment" by setting appropriate questions. They will lead to research data that will be content-relevant to the research problem and the achievement of the stated research objectives. According to the definition of types of research questions (Gavora et al., 2010) and taking into account our research experience, we decided to set the following descriptive research questions:

1. What manifestations of ADHD are present in people during their work performance on a typical working day?
2. What are the best techniques for mitigating the effects of ADHD manifestations in the work environment?
3. What areas of ADHD in adulthood are not yet sufficiently researched in Slovakia?

In designing the research plan, we set qualitative research of a predominantly descriptive nature as our research strategy. We will mediate the descriptive nature of the research data by analysing the collected data, which we will gather by empirical investigation using the chosen methods in the field. The choice of qualitative research consists of our motivation to look at the issue of ADHD in adulthood from the perspective of a person intrinsically affected by it. By exploring in depth a small research sample of a few individuals, we can look at the problem under study not holistically in terms of numbers but in words through authentic empirical experience.

We are always far from truly understanding the studied phenomenon when we do not experience it directly. It does not matter if we experience it only through the narration of other people. Another motivation for choosing a qualitative strategy is the typical phenomenological inquiry that can enrich science and the researchers' theory and practice. A final motivating element that prompted our choice of a qualitative method is face-to-face work with a human being, which we found to be a more exciting form of research than quantitative data processing.

For our research, we applied purposive sampling and set the following criteria:
- the person must be over 18 years of age;
- the person must have permanent employment for at least four years (but does not have to have been employed for four years in the same job or the same company);
- the person must have a professional diagnosis of Attention Deficit Hyperactivity and Impulsivity Disorder;
- the person must work in an area where the researcher can make active observations during the typical working day.

The research sample consisted of two adult females (aged 26 and 38) and one adult male (aged 24) who met all of the above criteria. We sought individuals suitable for the research from within the closer and more distant circle of people with whom the researchers normally associate. We present one case study within our paper.

We relied on the data collected to develop the case study report. We collected data using the following data collection methods:
· a structured interview with individuals;
· an active observation;
· a structured group interview.

Results

For the purposes of our paper, we present one case study of a research participant:

Age: 24 years
Gender: male
Highest education attained: secondary vocational education with a final diploma
Job position: fast food chain worker
ADHD: Professionally diagnosed

The research participant – we will call him Martin – grew up in a complete family. His immediate family circle consists of his biological parents and brother. Manifestations of ADHD were present during childhood, but a diagnosis of ADHD in childhood was not professionally assessed. His relationship with his mother and brother is very good, but his relationship with his father is severely disturbed. During childhood, our participant faced verbal and physical attacks from his father. The attacks were related to the manifestations of ADHD observed in Martin. His circle of friends is not large; the participant prefers long-term friendships and smaller groups of people. Martin finds it difficult to make new contacts. In the past, there was a frequent change of life partners, but currently, Martin is in a long-term and fulfilling relationship. He comes across as a quieter, more withdrawn, introverted personality type with low trust in his surroundings. In his free time, Martin enjoys playing computer games, reading fantasy books, and watching films of a homogeneous genre. Among his main leisure activities is fitness exercise. The research participant has suffered from tics, restlessness, hyperactivity and impaired attention since childhood. However, Martin was diagnosed with ADHD only in adulthood. He is currently attending psychological counselling and treating his condition medically. Martin has also been diagnosed with dysgraphia, which impacted his worse academic achievement during primary and secondary school. The school was a stressful environment for him regarding the demands of achieving the desired results. He also had problems because of the teaching style at school, which was not very interactive and mainly focused on theory. Martin is currently working in a field unrelated to his degree. Our research participant did not get a job in his study field because he is not interested in that discipline. After finishing secondary school and passing the final exam, Martin joined the work environment. Frequent job changes characterised the beginning of his working career. The reasons for this job rotation were dissatisfaction with the job and searching for a job suitable to his interests. He has been in his current job for almost a year and is very satisfied. He considers that the main positives of his job are the opportunity to work manually and the pleasant working environment. During work, ADHD symptoms such as looking around, a constant need to move, uncoordinated body movements, daydreaming, forgetfulness, and not completing the given work tasks are present. These manifestations impact his work performance, both in a positive and negative sense. In the negative sense, we can talk about minor errors caused by a lack of attention. In a positive sense, we can talk about hyperactivity, which encourages the research participant to work constantly. Martin shows effort and diligence in his work, which his superiors highly appreciate. The negative consequences of making mistakes at work are due to a reduced ability to pay attention, which the participant tries to eliminate by writing down important things and checking the completed tasks. A characteristic of the participant's job description is the alternation of several work activities during one working day, which the participant perceives as a great positive that improves the ability to concentrate on the task at hand. The current employer is not aware of Martin's ADHD disorder. Thus, the characteristic alternation of work tasks does not result from an individual and planned approach for work management towards an employee with ADHD but is merely coincidental. The research participant is very satisfied at work and values his job. The field of gastronomy interests the participant, and he plans to develop his career potential in this field.

Discussion

For all three participants, a desire to mitigate the consequences that ADHD symptoms bring with them in the context of effectively completing work activities was present. They assisted themselves in completing their work by writing down their work activities and checking the completed tasks several times in succession. Work disorganisation is typical for people with ADHD, which others often view as a negative feature for working efficiently. However, in this case, it can be concluded that alternating work activities positively affect interest in the performed activity and the associated concentration on the work task.

We found two contents confirmed consistently in all three people forming our research set. The first time we found the phenomenon emerged in the respondents' statements in the individual structured interview. Later, we focused on the observed phenomena in the group interview questions, where we also found the phenomenon in the statements of each of the participants. Therefore, we can conclude that the observed contents have validity and an impact on the working and non-working life of a person with ADHD. The first phenomenon we found was that each participant had a disturbed relationship with at least one of their parents. The second phenomenon, in turn, relates to the work sphere. The research participants deliberately did not inform their employer about their professionally diagnosed ADHD. We find both contents essential and interesting because describing and proposing solutions to these problems could contribute to a person's overall well-being at work and outside work.

Drawing attention to the working environment and those people standing on the margins is thus a task for all helping professions. ADHD is a complex disorder that haunts the person in and outside the work with its manifestations, as we can perceive in the case study presented here. From the point of view of the science involved in adult education, we consider it crucial to help adults with ADHD in the form of counselling, education, training and coaching. Counselling offers a broad-spectrum helping hand of awareness, an essential resource to be active and work on oneself. Education and training programmes support self-development and coping with inattentiveness, over-activity or impulsivity. Thus, in today's uncertain and hectic times, special pedagogy also has a wide application in the professional field and in helping people with ADHD through education.

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E-Support for Slovak language teaching to Slovaks living abroad

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Abstract:

The paper describes the system for educating children of Slovak parents living and residing permanently in Western European countries and overseas. It presents projects that have been focusing on this topic, as well as specific methodological-didactic games that are used during teaching. The primary goal is to describe the product titled Krajina Hláskovo (PhonemeLand), based on the gamification system as a support for teachers learning Slovak abroad.

Keywords:

gamification, gamification game design – Player centered design, multimedia platform, "PhonemeLand", Slovak education centers, gamification, gamification game design – Player centered design.

Introduction

The current need for educating children of Slovak nationals living abroad is supported by the activities of education centers associated within the International Slovak Educational Institution and Association (ISEIA) for Western Europe and Overseas. The reason for educating children in Slovak language is, on one hand, to maintain the ability to speak in one of the parents' native language and be able to communicate with family still living in Slovakia. On the other hand, the reason is also to keep the citizenship or to facilitate moving back to Slovakia in future.

The children attending schools outside of the Slovak Republic take compulsory assesments which are regulated by Slovak regulations and legislation. Children of compulsory school age attending school outside of the Slovak Republic must from the point of view of legislation attend school on a regular basis. Provisions of legislative norms are implemented to ensure the regular school attendance.

Nowadays, the modern telecommunication and multimedia technologies make it possible to easily overcome the obstacles such as great distances, to unite national communities of one culture and maintain cultural identity. Culture is closely connected with language, without language there would be no way to convey the culture. Maintaining the ability to speak Slovak language enables the exchange of experiences, opinions and information not only within the community, but also, using modern communication technologies, among the compatriots from other countries around the globe, as well as family relatives, acquaintances and friends in the country of their ancestors – Slovakia.

Since 2015, the Faculty of Education at Matej Bel University (FOE UMB) has been participating in the project MŠVVaŠ SR (Ministry of Education, Science, Research and Sport of the Slovak Republic) 2016-8774/13472-200A *The Influence Of Educational And Sociocultural Factors On Forming The National Identity Of Slovaks Living Abroad*, which primarily focuses on education of teachers in the centers of Slovak Nationals living abroad and the creation and verification of didactic-methodical tools to support and facilitate Slovak language teaching as a second (foreign) language in these centers. This project was a follow-up to other activities and projects of lecturers and professors from the FOE at UMB in Banská Bystrica. Within the project KEGA 012 UMB-4/2017 - *The Concept Of Education Of Children Of Modern Age Migrants In Western EU Countries* we mainly analyzed the topic of children's education in Slovak educational centers, the educational needs of teachers and voluntary staff working in these centers.

That is why the lecturers from FOE at UMB aimed to find teaching methods the learners would find plenty attractive, and which would use didactic means and tools allowing simple and effective language learning and understanding. The best way to reach children and learners in preschool and younger school age is by using games, that put them into direct contact with their

peers and allow them to learn from each other naturally. A game enhanced with the language handling tasks or various other means, and movement allow learners to train the basic skills necessary for learning a language, namely: understanding spoken word based on listening to language in its common and natural environment; the ability to understand developed with body movement and learners' motor skills development; spontaneous, self-sufficient and typical speech spoken at times when learners are prepared to speak after they are able to adequately perceive and understand the speech spoken by their teachers. Apart from these principles, the creative team of educators and researchers from FOE at UMB also applied the principle of combining image, sound and action that directly influence the emotions and experience, improving the efficiency of involuntary learning and, last but not least, a communication principle, in which the learners apply knowledge and skills acquired by game methods. (Doušková & Kováčová Švecová, 2022). Image and picture materials have already become a traditional part of language teaching, visual impulses in didactic tools not only enrich the teaching process, but also have a positive effect on learners' concentration, help to activate and motivate them.

A special requirement in the process of preparing, creating, and providing the materials is the topic of adequacy in terms of the children's language level, since these mainly include pupils of primary level of elementary school, as well as the topic of the availability of didactic support for all participants, regardless of the country the learners currently live in.

Based on these requirements, we developed the KEGA Project No. 019 UMB-4/2020 *Creating Interactive "PhonemeLand" Environment To Support Slovak Language Teaching For Children Of Slovaks Living Abroad*. It should create an interactive educational environment to support Slovak language teaching, to ensure continuous support and encourage digitalization of teaching, to optimize and make teaching more attractive within the educational centers abroad. The project suggests an educational platform called Krajina Hlaskovo/PhonemeLand, which serves as an original and innovative solution for supporting education in these centers. The above methodology and didactic material follow up on the already existing materials under the general title "Playing Game About Slovakia In Slovak". The material has 5 parts – Fairy Tales About Slovakia (workbook), Our Slovakia (fun card game), PhonemeLand (board game), Journey To The PhonemeLand and PhonemeLand (multimedia platform – www.krajinahlaskovo.sk) (Doušková & Kováčová Švecová, 2022).

The Method Of Gamification Of The "PhonemeLand" Multimedia Platform

The PhonemeLand multimedia teaching environment uses elements of gamification, i.e., game elements in a non-game environment, in this case in an education interface. The activity is gamified by a game mechanism representing the rules of the game. The game constitute an alternative reality from that of our daily lives, which Vesa et al. call the second quality of games because of its separation from mundane life (Vesa et al., 2017).

Games are primarily for entertainment, and hence enjoyment or fun is central to any game (Vesa et al., 2017). But we can see the potential of using games in education or in educational gaming as a new tool for research. Computer-based educational gaming can provide powerful learning experiences or be helpful in evaluating the educational efficacy of games in school education. Some authors have developed research software that can screen activity during game play in classroom (Wideman et al., 2007).

Furthermore, it includes collecting points and obtaining rewards in the form of a title, a brand, a ranking of players. Creating a high-quality design of the environment is also very important, particularly to make the learners feel like they are actually playing, not learning.

Achievement badges are a form of gamification that can be used to motivate users and to encourage desired actions, too. Some empirical studies describe and positively evaluate the use of badges achieved in the online learning environment and on interactive automatically graded exercises (Hakulinen et al., 2013)

Gamification is a comprehensive and flexible term, which in many cases can be considered as an upside, but there is also a big downside - the flexibility of this term often leads to many misinterpretations. Yildirim (in Çeker & Özdamlı, 2017, p. 222) in his work emphasizes that it is not true to say that gamification exists everywhere in which games does. He further proclaims that in the process of gamification, the game design is transferred to non-game environments, and this process itself has now become a game.

According to Zicherman and Cunningham, gamification can be defined (in Çeker & Özdamlı, 2017, p. 222) as an effort to change the way of thinking and using some gaming rules in order to increase the interest of learners and to solve problems. Increasing the interest here means to engage learners to actively participate in a gamified educational course. As long as the learners are engaged by the gamified environment, they are motivated to overcome the challenges they face without even realizing they are actually learning.

Multidisciplinary review of gamification in action, focusing on empirical findings related to purpose and context, design of systems, approaches and techniques, and user impact is presented by Seaborn & Fels as a term remains mired in diverse meanings and contradictory uses, while the concept faces division on its academic worth, underdeveloped theoretical foundations, and a dearth of standardized guidelines for application. (Seaborn & Fels, 2015)

Codish and Ravid (in Çeker & Özdamlı, 2017, p. 223) describe the differences between gamification and game-based learning (education based mainly on digital games). Their findings indicate that in game-based learning, the learners reach their educational targets by playing games. Thus, playing usually takes the major role in the learning process. In gamified education, it is not possible for the game to replace the actual learning process. Gamification makes learning a more participating activity and targets more on overcoming the difficulties in learning over time. According to Çeker and Özdamlı (2017), it can be said that by gamification, a non-game oriented environment is changed into a game environment by using game principles and game components. According to Dicheva et al. (2015, p. 78) for this, gamification uses "points, badges and rankings". Lister (in Aldermir, Celik & Kaplan, 2018, p. 237) also includes levels of experience through which learners advance to higher ranks. In game-based learning, the aim is to teach any entire subject using the game itself. (Hew, Huang, Chu & Chiu, 2015, p. 222).

Gamification has the objective to positively influence the given environment, or the player (in achieving the set education goals), and requires an understanding of several factors, thoughtful handling of all the available resources, accurate monitoring of the current state and making adjustments if necessary, improvement of the used model and further development.

Since gamification can be seen as a new method, its terms are used very flexibly in the literature, as well as procedures in game designs only have a framework, to which new elements are added constantly. These game designs include e.g. MDA/C/E (Mechanics, Dynamics, Aesthetics/Components/Emotions Framework), 6D design, instructional design, player-centered design, Four-Domain model.

From the above models, we have chosen the one that comes closest to the current learner-centered education, namely the player-centered design. This model of the design process is focused on users (in education, the learners), their needs, goals, possible problems, and the entire development of gamification is aimed towards the user (learner). One of the important elements in the design process is engagement.

The main aim of gamification, i.e. the implementation of game design elements in real-world contexts for non-gaming purposes, is to foster human motivation and performance in regard to a given activity (Sailer & Hense et al, 2017). Their research and results show that badges, leaderboards, and performance graphs positively affect competence need satisfaction, as well as perceived task meaningfulness, while avatars, meaningful stories, and teammates affect experiences of social relatedness. (Sailer & Hense et al, 2017)

The key knowledge required for a working gamification model is to understand human motivation in order to create game mechanics that the players find interesting and entertaining at

the same time. Based on information on future players and their preferences, about the effort to achieve a specific educational objective (or a vision we seek to achieve), as well as about the motivation, it is necessary to select suitable gamification elements as already mentioned above (e.g. points, rankings, badges, progress indicators, etc.). An overview of incentives and rewards used in games and their role in creating motivation is described by many authors, e. g. Richter, G. & Raban, D.R. & Rafaeli, Sh. (2015).

Since gamification is an interactive process that requires constant care and maintenance, and adjustments based on the current needs of the players or a vision, it is necessary to regularly monitor the rankings, motivation and engagement of players, analyze the results and, based on the results, consider appropriate adjustments or changes.

Conclusion

If we want to gamify education, it is necessary to treat gamification as a complex system. The process of embedding gamification elements and trying to achieve the desired user behavior requires a comprehensive game-like experience (similar to experiential learning), which is supported by the structure of the game and the game's actual appearance. Thoughtless application of game mechanics and elements can lead to low-quality game design and consequently demotivate or even deprive the users. That is why the proposed multimedia solution for the "PhonemeLand" product is very closely connected with the education of teachers and others participating in the design and operation process. (Blažíček, 2021).

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Analysis of the educational needs of seniors

Andrea Kováčová

Abstract:

In this paper, the author presents the results of the analysis of the educational needs of participants of further education (seniors), which became the basis for the analysis and adaptation of three selected concepts of educational care for seniors in Slovakia. At the same time, she presents a proposal for a methodology for the analysis of the educational needs of seniors. It is possible to use it as a basis for creating educational (training) programmes for the development of social competences and support of personal development of participants of further education with an emphasis on the target group of seniors.

Keywords:

educational needs, health disadvantages, self-development, seniors, support

Introduction

„We are not thinking beings who have emotions, but we are emotional beings who think." A. R. Damasia, American neurologist, In: Procházková, 2019, p. 9)

It is possible to perceive seniors (not only) with health disadvantages as persons whose cognitive response capacity is largely impaired, but on the contrary, their emotional level of experiencing the current life phase is very intense (Procházková, 2019). This fact, from our point of view, opens up a new space for improving the professional approach to the elderly also through the lens of geragogy. The analysis of educational needs represents one of the primary pillars of a systemic approach to education. It precisely defines the required education and specifies what knowledge and skills are necessary to develop in seniors (Prusáková, 2007). Under this conceptual definition, in the following section, we describe the results of the analysis of the educational needs of seniors with health disadvantages dependent on social services. Their needs constitute the basis for creating educational (training) programmes to develop social competences and support participants' personal development in further education.

Insight into the issue

Concerning the education of the elderly, there is talk primarily about improving their quality of life and preserving their intellect. Šerák (2009) sees the importance of education for the elderly in preventing impending risks or measures and compensations corresponding to them. He attaches meaning to maintaining physical and predominantly intellectual strength to ensure a quality and dignified life. According to the author, the advanced society in which we live should support the elderly through an acceptable offer of education for the elderly, thus fulfilling its members' need not only for security and a dignified old age but also for their participation in social life.

Within European countries, an integrated framework "WISE" has been designed to support the transition from passive to active aging by activating the potential of seniors and promoting healthy aging. It deals with the development and implementation of educational interventions aimed at cognitive stimulation of seniors over 65 years of age, thus helping in the fight against the onset of dementia. At the same time, his effort is to train these seniors and integrate them within the educational process. Being able to continue working brings wider benefits in the social or economic field (Panitsides, 2014). The integration of seniors into the educational process is also practiced in North America in the form of „peer learning", which is the latest trend in seniors programs. It consists of a small group of seniors who are united by the same study interest (Clark et al., 2006).

According to Balogová (2005), the learnability of seniors is determined not only by the accessibility to education and the clinical picture of the elderly but also by their individual ability

to preserve cognitive functions, their intrinsic motivation and ability to learn. Another factor acting on seniors' learnability is their previous knowledge level. The author presents that for the actual organisation of educational programmes, it is crucial to know the participants' age and psychological individuality, which the educational process must respect. Furthermore, the author states that for the successful education of seniors, not only the results of various research are helpful, bringing the possibilities of education of people of younger and older age. It is also essential to use their own life experiences and associations; to support their vocabulary and other areas. We fully agree with the above and share the view that a person in any period of his or her life can be the subject of education, training and socialisation, albeit in a specific form.

For determining an appropriate and successful educational programme reflecting and fulfilling the educational needs of seniors, it is essential and helpful to know the biography of the senior. Průcha (2014) mentions the intertwining of three psychological traits, which, according to the author, are very difficult to recognise in seniors regarding their educational needs. We agree with his opinion. He draws attention to concepts such as motivation, interest and need. Prusáková (2010) states that education is a process of satisfying needs and a need in its true sense. Therefore it is crucial to distinguish and know the personal motivation oriented to the need to address the given reality and the need to learn. According to several authors, identifying the current (educational) needs of seniors, their motivation and their interests is the way to successful education (Határ, 2014, Palán & Langer, 2008).

When we refer to the essence of knowing a senior's biography, it is about understanding the essence of his or her life story. A biography can be an account of a life, that is, a biography of a senior citizen written by someone else (Böhm, 2009). If a senior writes his/her life story, it is an autobiography. In the context of the analysis of the educational needs of seniors, we can understand biography as a set of information about the senior who actively participates in its creation (active biography). Alternatively, it can be a passive biography, where information is provided on behalf of the senior by family, acquaintances, staff or other documentation. In the case of seniors with health disadvantages dependent on social services, the biography forms the cornerstone of creating individual planning for the senior's care. Procházková (2019) lists the methods of working with a biography that can be used in educational (activation/training) programmes. She divides these methods according to their focus into communication-oriented, activity-oriented, and document-oriented methods. Education and activation are processes that overlap very strongly when working with seniors. In the context of activation, we offer an incentive-rich environment. Its priority is to prevent passivity in seniors. Activation can be carried out in a group or individually. The advantage of individual activation is to saturate the clients' needs with exercises that match their needs (Kováčová, 2022).

A narrative approach is important when creating educational programs. Narrative care focuses either on reflecting on life stories or on capturing stories in everyday conversations, which is especially suitable for seniors with medical disabilities, e.g. dementia. Awareness of narratives as something key in a person-centred context comes hand in hand with the creation of (educational) care modules (Kitwood, 1998). According to Edvardsson, Varrailhon and Edvardsson (2014), maintaining biological continuity and following opinions and experiences from everyday life should be respected.

Kenyon and Randall (2015) consider narrative care, also perceived as narrative gerontology, as an intervention oriented to a person and his unique story. In people with dementia, such autobiographical memories can dissolve and become blocked due to the disease, which poses a risk to the preservation of a person's personal identity. Narrative interventions aim to maintain or restore the life stories of people with dementia, preserving their identity for as long as possible (Dempsey et al., 2014). Working with the life story involves collecting and recording information from the senior himself or his relatives (Elfrink et al., 2018), which can be used not only to improve the overall senior care but also to create educational programs.

Procházková (2019) emphasises the importance and meaning of using biography to support the cognitive, emotional, sensory, and social domains of a senior's needs. We extend this knowledge to the educational domain.

Design of the methodology and interpretation of the survey results

The research aimed to identify and methodically implement a draft analysis of the educational needs of seniors. The study population consisted of 10 seniors with health disadvantages dependent on a social service (available sample). The group of seniors was heterogeneous in different aspects (cognitive, social, health, psychological aspects, ...) The age range was 83-95 years, and the group consisted of eight women and two men.

The first step in the implementation of the research activity aimed at analysing the educational needs of seniors was the collection of biographical data or passive and active biography provided by the seniors and their families.

The biography itself consisted of creating a biographical form that included mapping the senior's crucial life periods. These periods were:

- childhood (focusing on relationships with siblings, place of living, parental upbringing, childhood traumas, experiences, interests, and significant persons in childhood),
- adolescence (focusing on the senior's youth, social life and education),
- adulthood (focusing on employment, marital period, marital relationship, living during the marriage, parents of seniors),
- middle age (focusing on employment, coping with life changes, grandchildren),
- present time (focusing on coping with change, level of independence in activities of daily living (ADL), housing, maintaining contacts, communication, interests, self-perception and incentives).

Another area of mapping consisted of information contained in the process of adaptation of the seniors in institutional care and their individual plans. It was a health and social assessment form that recorded the seniors' needs based on daily living activities and their relationship with their immediate social environment. The social environment included seniors' social interaction, participation in social events, and sources of natural social support from their family or community. Based on mapping seniors' interests, needs and personal goals, written on a separate form, we draw up individual plans for providing social care for the elderly. They showed the specific methods chosen to achieve seniors' personal or collaborative goals and their risks and measures. We obtained comprehensive information through the semi-structured interviews and the above forms, which were beneficial to our proposed extension to map the educational needs of the seniors. The form we designed consisted of 7 questions oriented to educational needs, representing a starting point for designing an educational (training) programme promoting seniors' retained skills and knowledge. We set the following questions as part of the educational needs mapping:

1. *„What activity do you enjoy? What activity do you like to do?"*
2. *„What skill would you like to strengthen?"*
3. *„What is interesting for you? What would you like to know more about?"*
4. *„Are you interested in what is going on in the world?"*
5. *„Do you like attending leisure programmes?"*
6. *„What activations do you like to attend the most?"*
7. *„What are your goals? What else would you like to achieve?"*

Considering the objectives of the survey and trying to design an educational (training) programme most successfully, we present an interpretation of the two most relevant questions for us. To the question *„What skill would you like to strengthen?"* the survey revealed needs such as supporting communication by increasing vocabulary, as seniors, due to health disadvantages, drop out of words and cannot express themselves sufficiently when having a dialogue. This dysfunction

is very frustrating for them and often leads to mental closure and social withdrawal with the risk of social isolation. Another area based on cognitive function relates to the need for the overall strengthening of memory functioning. In addition to supporting cognitive skills, the survey has identified motor skills and mobility needs. They significantly affect or even limit the self-development of seniors.

Figure 1: Self-development needs of seniors
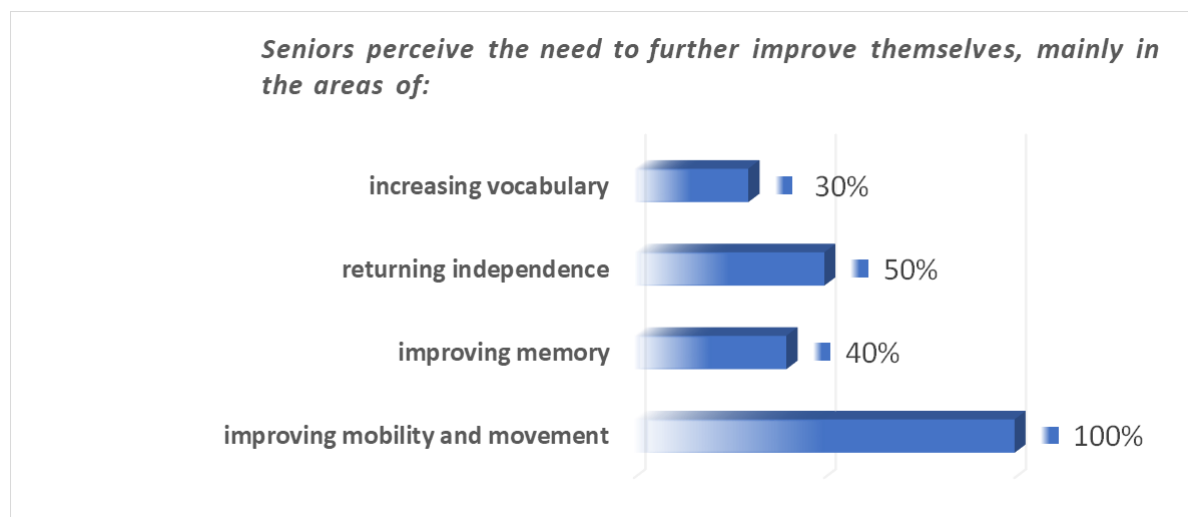
Source: own creation

The second essential area for our survey was the question *„What activations do you like to attend the most?"* The survey yielded a wide range of areas in which seniors are interested and whose implementation in the educational (training) programme responds to the expressed needs of seniors to strengthen and support them. Each area supports the senior cognitively and psycho-motorically, acting stimulatingly or educationally.

Figure 2: Need for educational (socialisation) activities
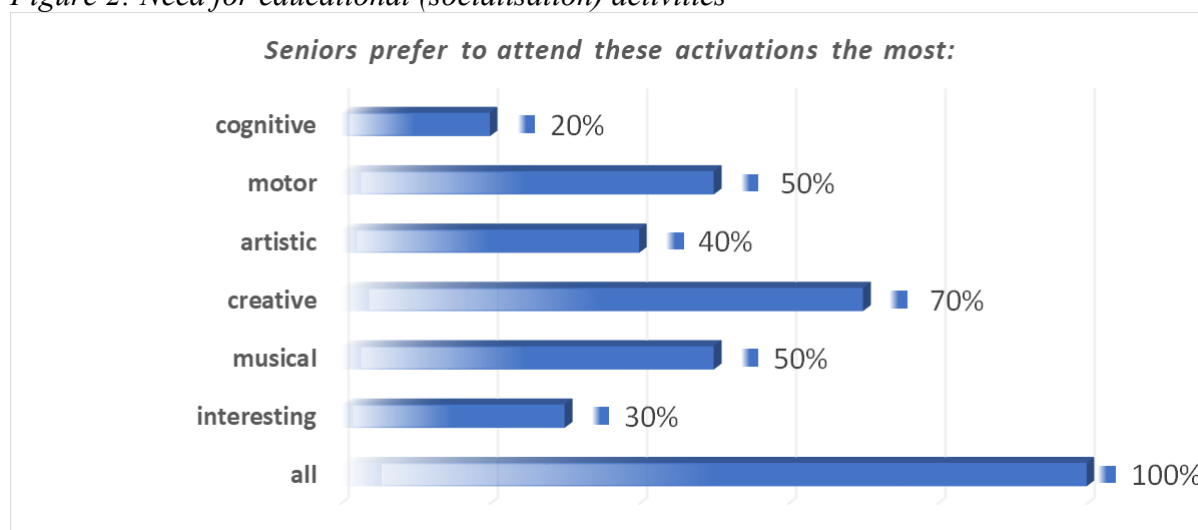
Source: own creation

The results of the analysis of the educational needs of seniors served as a basis for adapting three selected concepts of educational care for the elderly in Slovakia. Among these concepts with an international scope, we include Montessori geragogy, Motogeragogy and cognitivisation (cognitive training, cognitive rehabilitation).

Montessori geragogy places great emphasis not only on the seniors themselves but also on the preparation of the environment. Tokovská and Šolcová (2014) perceive the Montessori-geragogical essence precisely in the change of perceiving a person in the life cycle through promoting his/her independence and autonomy (changing the approach to the care of seniors in general). The Montessori guide for the elderly must have a pre-prepared concept of the course of the entire educational session with the relevant geragogical material. For seniors with dementia, structure, activities or order in their environment is perceived as necessary to ensure comfort and psychological well-being, leading to maintenance or partial improvement in the senior's cognitive, physical or psychosocial domains (Kelly, 2017).

According to T. Zak, *motogeragogy* is a comprehensive and experience-oriented educational concept that shapes personality at an advanced age through exercise and movement. It is the promotion of psychomotor development that is supposed to help the elderly and the very elderly to cope better with themselves and their life situation. Cognitive *training (cognitive activation)* aims to increase, restore or maintain seniors' cognitive functions and abilities. The cognitive training facilitator chooses which cognitive functions to address during the training session and addresses/stimulates the senior's chosen cognitive functions with appropriately chosen exercises. These may be memory exercises, attention exercises, thinking support exercises, speech support exercises, exercises focused on visuospatial orientation, planning or emotions. For seniors with low cognitive function or dementia, the facilitators use cognitive rehabilitation as an intervention, during which they adapt the difficulty of the exercises to the preserved abilities of people with dementia (Centrum Memory, 2019).

Our selected concepts of educational care for the elderly also support socialisation, help seniors to cope with stressful situations or manage everyday activities necessary for their lives.

Conclusion

The proposed and described methodology for the analysis of the educational needs of seniors, oriented more towards seniors with health disadvantages and dependence on social services, brings complex use also for seniors who are not in institutional care. The Biography method will provide us with the necessary information. In synergy with the current assessment of seniors' abilities, skills, health condition and educational needs, it is possible to design a successful educational (training) programme consisting of activities (adapting selected concepts) reflecting on the educational needs, retained skills, knowledge and personal goals of seniors.

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Quality of the education process et Slovak education centers in Great Britain and the possibilities for its improvement

Zuzana Kováčová Švecová, Dagmara Smalley

Abstract:

Slovak people live abroad in Great Britain with their families and their children takes place in education at English schools. They also learn Slovak as a second language attending educational centers, because they are still students of the Slovak school system. The study of the Slovak language is specific in its form and frequency of education, which takes part only in weekend. This study investigates whether the special language program collaborate with quality of this education. It presents partial research results from the application of an intervention program in educational centres in Great Britain, which took place in 2021-2022.

Introduction

Quality in education can be perceived in different ways. On one hand, it expresses an ideal, positive, optimal state, which assumes that teaching has a high quality; on the other hand, it implies the exact opposite – a negative way of describing the state of things. Quality means different things to different people and quality is also relative to 'processes' or 'outcomes' (Harvey & Green, 2006). Similarly, Helmke (2003) also describes quality with two different meanings. Quality as a grade, the term is used to evaluate quality, value, level; and quality as an object's features, where it is used in the sense of qualitative characteristics, as a descriptive, not an evaluative phenomenon.

Janík (2016) reflects on the use of the term quality of education or the quality of teaching and, with regard to the terminological distinction between the terms education and teaching, suggests that in terms of education, where teachers create the conditions for the learners' to learn, we talk about the quality of education, and in the teaching process during which both the teachers and learners interact, we talk about the quality of teaching. The quality of teaching is defined by a complex, structured criterion derived from the requirements set within the teaching objectives, the status of which determines the position of teaching on the value scale and indicates those components and determinants of teaching that need to be improved. The quality state of teaching at a specified place and at a specified time is determined by teaching evaluation.

Teachers play an important role in young children´s language and literacy development via mechanism related to teacher characteristics, classroom quality and children´s academic gains (Guarino et al, 2006) In addition to teachers' self-efficacy, classroom quality is associated with children's language and literacy skills (e.g. Mashburn et al., 2008). In this paper, we are going to focus specifically on school tasks and cognitive activation, to which we want to apply the created intervention program. *Cognitive activation* comes from the dynamics of the context between content, teaching goals and student activities.

The Quality Of Education Centers In Great Britain

In terms of children's education and in order to ensure the proper education quality, education centers have struggled and are still struggling with many problems. According to Kariková et. al., (2018) these problems exist, because the centers are created on a voluntary basis, their activity is not consistently coordinated and methodically managed; children are often taught by volunteers, not all of which have a proper teacher education; the Slovak Republic does not provide uniform

methodological materials for their training. This situation proves that there is a big flaw in the system of Slovak education concerning the care for children living abroad. That's why it is difficult to talk about the quality of this education. There is practically no institution or model of education that could be used to ensure and manage the quality of education. In order to solve the issue of teaching quality and for the needs of the research, we therefore asked ourselves the following question: *What are the needs and solutions of teachers, parents and children to improve the quality of the teaching process (goals, means and conditions) in the education centers?* We also wanted to determine if it is possible to influence the quality of education (in the selected area of language teaching) by including a prepared intervention program, or to assess its effectiveness in the educational process; therefore the second question was: *What is the effectiveness of the intervention program aimed at developing children's Slovak language skills*?

We created 6 research questions, which we used to formulate hypotheses and apply the selected research methods. This paper presents partial results of this research for the question RQ6 – *Which language abilities of children have improved in quality by learning through the intervention program?* We are monitoring the fulfillment of the premise for hypothesis H6 – *We assume that the intervention program increased the level of children's language skills.*

Methods

The basic research methods included the method of content analysis of literary and electronic sources, the method of sorting information, and the comparison method; as part of the mixed and evaluation research we also used questionnaires, language tests and focus interviews. The questionnaires and language tests were self-sourced, not having a standardized origin. For the purposes of this study, the most important part of the research was the section that verified the intervention program.

During the verification of the intervention program, the respondents were 1st grade elementary school pupils who were tested using language tests before and after the completion of the intervention program. The test battery included a set of 8 tests, each of which contained 10 test items adapted into a test with closed questions. To create the test, we used various combinations of voice recordings of words (vocabulary), pictures, real words and nonsense words (pseudowords) formed by a random cluster of sounds from the Slovak alphabet. Initial testing took place in December 2021 and January 2022. Final testing took place in March and April 2022.

The research set consisted of children attending education centers in Great Britain. However, children from other countries also took part in the testing, which due to the specifics of the language and country of residence and other factors were not analyzed in detail and were not included in the final comparison and analysis of the findings at this stage.

"Hláskovo" (PhonemeLand) Intervention Program

The PhonemeLand set is focused on practicing and improving the learning content related to the sounds of the Slovak language and its segmental phenomena (vowels, diphthongs, consonants, and syllables) and suprasegmental phenomena (quantity - length, sonority, emphasis, etc.). It follows the line of dividing speech sounds based on acoustic and articulatory criteria and according to their function within a syllable into vowels, diphthongs, and consonants. From an orthographic point of view, for vowels and diphthongs, it focuses on dividing them based on their length (short / long); for consonants, based on their classification into hard, soft, and unmarked consonants. The set of games aims to develop learners' phonetic-phonological, orthoepic, orthographic as well as morphological competence in Slovak language. These are the areas that differ from the English language, in which the Slovak learners take their education at English schools. Speech perception can be viewed in terms of the listener's integration of two sources of information: the acoustic features transduced by the auditory receptor system and the context of the linguistic message (Massaro &Cohen, 1983) The PhonemeLand is a virtual environment where pupils perform various tasks in a funny, interactive way, using *gamification elements –*

rewards, evaluations, rankings, etc. (Dicheva et al., 2015) The use of gamification in learning contexts is accepted, but a distinction must be made between serious games, educational games, game-based learning, and gamification. (Becker, 2021) There are matching tasks using text, images, and the spoken word to help improve learners' vocabulary in Slovak. Learning language vocabulary with pictures, gestures and sound is the best way to enhancing vocabulary (Andrä et al., 2020) Vocabulary is a fundamental component of language learning that predicts second language competence in general, particularly because it determines the transmission of meaning (Barcroft, 2004).

Effectiveness Of The Intervention Program In The Process Of Children's Education – Results

The intervention program is evaluated by comparing the results from the initial and final testing of learners' language abilities. The sample for hypothesis testing was cleaned so that a paired t-test could be used. Within the sample, the initial testing included 90 tests. The initial test was fully completed by 72 learners. During the final testing, 83 test were initiated, but only 78 tests were fully completed. When pairing the initial and final test pieces, we ended up with 66 participants from both testing rounds that provided complete testing results. These test participants were included in the statistical assessment of the hypotheses.

The test participants filled out 80 test items altogether, each subtest contained 10 test items. The test batteries were used to monitor the usage of words, images and sounds – subtest no. 2 (What word can you hear?), subtest no. 4 (Mark the correct word), subtest no. 5 (Mark the correct picture), subtest no. 7 (Which of the words can you hear?). Subtest no. 6 (Which word starts with the same sound?) and subtest no. 8 (Which vowel do you hear at the end of the word?) were differed from other tests, because the respondents did not choose specific well-known words with a clear, familiarized or understood meaning, but the so-called pseudowords (hardly comprehensible random clusters of sounds without a clear and specific meaning, often deliberately created for the purpose of observing a specific phenomenon (in test no. 6) or they chose a separate sound according to the instructions (test no. 8).

The tests monitored visual perception (perception of written characters), auditory perception (perception of the spoken words), phonological competence (the ability to analyze and synthesize sounds), as well as the orthographic competence (ability to deduce the sound form or meaning of a text from letters, seeing the differences between letters, attribution of meaning to written words).

Test No. 2, in which the results confirmed that the item 9 indicated the largest increase between the input and output testing rounds; this test was also focused on auditory perception. Based on what they heard, the respondents marked the correct answer from 3 options. The options for selecting the answer always had at least two elements identical. These could include words with the same number of syllables, with the same final vowel, the same category of words according to a topic, words with the same grammatical category (in the same gender, e.g., only feminine, only masculine; in the same number – for example only plural words), words with the same combination of long and short syllables, etc. The recording within the monitored item no. 9 contained the word "bábka", for which the respondents were supposed to select the answer for the options "babka, banán, bábka". The words were deliberately chosen so that they start with the same sound and at the same time, these should include the combination of the words "babka – bábka", because this pair is mostly used when teaching short and long vowels, when explaining the change in the meaning of a word based on the incorrectly used sound "a/á" (distinctive marks and their ability to change the meaning of a word). Of all the respondents, only two chose the word "banán" as an option, the other incorrect answers were found in the pair "babka - bábka". The difference between the tests was 31.8%, which can be considered the highest change and positive benefit of the intervention by applying the PhonemeLand intervention program into teaching and home preparation of children.

We verified the hypothesis *We assume that the intervention program increased the level of children's language skills* by comparing the total sum of correct answers in both initial and final testing. As we also had data on the participants, it was possible to match the test results to individual participants, which allowed us to use the paired t-test as a statistical method. Based on the results from the statistical processing of the collected data, we were able to confirm the hypothesis 6, when the participants achieved an average of 54.32 points in the initial testing and 59.23 points in the final testing (with a maximum of 60 points). The results of the statistical verification confirmed at the level of significance $p = 0$, the achievement of $t = -4.858$ against t crit = 1.997. Based on the statistical verification, it is possible to confirm the hypothesis. The intervention program indeed increased the level of children's language skills.

Discussion

The evaluation research results indicate that the test returned an improvement at all levels of children's language skills thanks to the intervention program applied at the centers. The most significant difference between the initial and final testing was recorded in Test item 2/9 (bábka). The lowest improvement in children's abilities was diagnosed by the test 5/4 (d, stôl). As many as five test items showed that the children improved at a comparable level of competence. Using the time of the intervention program implementation, we consider it realistic, even though several factors could have intervened in this process, especially other elements from school teaching and family that encouraged the development of children and, last but not least, the impact of children's natural maturing and learning.

The results of the testing indicate an improvement at the level of phonemic awareness, but also at the lexical level of the language, where children's progress in being familiar with much higher number of words in their vocabulary was confirmed. Using the combination of voice recording – image – written text, the test battery made it possible to verify familiarity with words from the selected range of children's vocabulary. The relationship between phonological memory and word acquisition to the experimental learning of second-language vocabulary was also described in study with Hongkong students. It was concluded that phonological memory plays a part in second-language word learning, and its effects interacts with the learner´s long-term knowledge in that language (Cheung, 1996). Likewise, different options were used for children to answer the questions. Since it was not possible to ensure the presence of a teacher during the testing of all children, so that the teacher could monitor the number of times the recording was actually used during children's answers, we are not able to fully confirm that every child improved the same way at each individual level using the same number of listening sessions.

In our research, one of the limitations was the situation caused by the COVID19 pandemic; it had an impact on individual groups of respondents, especially pupils, the testing involved home testing, in which we were not fully able to identify possible auxiliary factors that could have affected the actual results (e.g. listening to the recordings multiple times, different font displays on different IT devices, or possible help from parents or older siblings).

Conclusion

Some research findings show that an early start to second language learning does not automatically ensure significantly positive results. A high-quality language intervention program in which learning takes place appears to be more important (Najvar, 2010).

By using the intervention program, we tried to influence cognitive activation by connecting thematic, conceptual and competence layers. Specifically created tasks for pupils, set into the context of the didactic activity in the program, enabled the development of those areas of pupils' language competence, which are part of the Slovak language curriculum, and are at the same time considered as key elements for language learning for children of Slovaks living abroad. These include partial language competences at the level of phonemic awareness, but also at the lexical level of the language, orthoepic, orthographic and morpho-syntactic competences.

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The structure of leisure and educational activities in the selected retirements homes as an important part of supporting the improvement or maintenance of the quality of life of the clients of these facilities

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Abstract:

The aim of the survey was the analysis of a particular seniors´ facility offer of the activities that support independence, mental balance and wellbeing of the clients. A variety of activities contributes to an increased quality of life. The evaluation also includes monitoring seniors' interest in activities and their satisfaction with the offer they receive. The analysis also includes an evaluation during the Covid-19 pandemic.

Key words:

educational activity, quality of life, leisure activity, outdoor activities, retirements homes

Introduction

Leisure and educational activities in elderly care can be considered as a key component of supporting and developing the longest possible self-sufficiency of the client, which significantly affects the psychological balance and well-being of the client. The variety of activities, that clients can engage in contribute significantly to improving quality of life (comp. Anderson, Shivakumar, 2013).

Rehabilitation, health physical education, relaxation exercises, outdoor activities (trips, walks), other sports activities, ergotherapy, mental training courses are considered as basic methods of activating clients in residential facilities (e.g. Sala et al., 2019; Gamberini et al., 2006; Paggi, Jopp & Hertzog, 2016; Karp et al., 2006; Tilinger & Švamberk Šauerová, 2019).

Aim

The aim of the survey was the analysis of the offers of the activities in seniors´ homes. On the basis of the data obtained, a proposal was then prepared to adjust the observed situation. The investigation was carried out on the basis of a request from the management of the residential facility – deterioration of service provision during the pandemic period due to a failure of staffing policy.

The results of the analysis are published with the consent of the management the residential facility.

Methodology

Sample and method

The research investigation took place in a specific residential facility, at the request of the management of this facility.

Prior to the analysis of the offers, the readers must get the essential demographic data in order to specify the key criteria that may influence the evaluation of offer and offer utilization.

There was a questionnaire serving the essential clients´ data collection (for clients). The questionnaire contains a range of standard activities usually offered in senior citizens' homes. The management indicated which activities and at what frequency are implemented in the residential facility. Seniors indicated which activities they are interested in.

The questionnaire of demographic data was filled in by the particular home management – the male/female ratio, age diversification, mobility, family contact frequency. The following table delivers the basic demographic data of respondents.

Table 1: Demographic Basis

Institution/Category	Number of seniors	Average age	Male/Female	Average age Male/Female
RH Central Bohemia	49	82,2	4 / 45	83,1 / 81.2

The above data show, that the residential facilities is a smaller facility with a low male number. The average age is 82 years.

An important criterion for evaluating the range of activities on offer is the degree of mobility of clients. The following table refers to it.

Table 2: Mobility and Dementia of clients

Institution/Category	Absolute Mobility	Mobility Disorders but Self-sufficient	Mobility Disorders, Assistance Needed	Immobile	Early Dementia
RH Central Bohemia	5	20	24	0	3

The next table delivers the family contact frequency. I consider this one to be the important factor in client´s decision to lead a healthy and active life.

Table 3: Family Contacts (before quarantine is established)

Institution/Category	Intensive Family Contact Number of Clients	Intensive Family Contact (%)
RH Central Bohemia	29	59%

As we can see, slightly over a half of the clients maintains an intensive contact. Other clients mention "meeting with family" at a frequency of 2x a year, the level of this frequency seems very alarming and insufficient (Šauerová, 2012).

Tab. No. 4 observes the length of stay in the institution. Most of the clients stay over a year there and so we shall agree that the variable offer of activities is a must. The activities must be suitable, carefully selected and well combined with a large amount of outdoor activities as the isolation preventive measure keeping the people in touch with the life outside the homes (Švamberk Šauerová, 2019).

The secondary evaluation of negative mood cannot be related to the length of stay in the homes. The frame of mind more closely corresponds with the health state.

Table 4: Length of Stay in the RH

Institution/Category	Within One Year	Over a Year
RH Central Bohemia	6	43

Results

Activity Offer in the RH Central Bohemia

Table 5 gives an overview of the activities that are/are not implemented in this particular retirement home.

As for the activity participation frequency, a questionnaire was asking the seniors for their choice of activity and frequency of attendance. There was a space in the questionnaire for the clients to express their wishes and suggestions of improvements (Tab 6).

Table 5: Offer of the Leisure Time Activities in RH

Activity/Institution	Offer Available	Frequency - offer	Interest (persons) – In opinion of management	Interest (%)
Library	Yes	Mon - Fri	11	28%
Pedicure	Yes	Mon - Fri	4	10%
Manicure	Yes	Mon - Fri	2	5%
Hairdresser*	Yes	Mon - Fri	29	73%
Culture club	Yes	1x a week	18	45%
Seminars*	Yes	Seldom	15	38%
Health Seminars	Yes	Seldom	0	-
Language courses	No		0	-
PC course	No		0	-
Hand crafts	Yes	2x a month	6	15%
Arts	Yes	2x a month	6	15%
Ergotherapy	Yes	1x a week	8	20%
Reminiscence therapy	Yes	regulary	29	59%
Cooking club	No		0	-
Rehabilitation	Yes	Doc´s order	30	75%
Basal stimulation	No			
Massage	Yes	Doc´s order	9	23%
Fitness hall – exercising	Yes	1x a week	32	80%
Physiotherapy	Yes	1x a week	7	18%
Evening sessions	Yes	2x a month	11	28%
Theatre performance*	Yes	1x a quarter	15	38%
Assisted walks*	Yes	1x a day	24	49%
Meeting professionals	No		0	-
Reading sessions	Yes		12	30%
Yoga	No		0	-
Tai chi	No		0	-
Musical Evenings/sessions	Yes	2x a year	12	30%
Films Evenings/sessins	Yes	4x a year	18	46%
Memory Training	Yes	1x a day	9	23%
Bowling	No		0	-
Sports Games**	Yes	1x a day	5	10%
Newspapers	Yes	Mon - Sat	34	85%
Exercising in room	No		0	-
Canistherapy*	Yes	Upon request	0	-
Triathlon for elderly*	No		0	-
Dance therapy	No		0	-
Logotherapy	No		0	
Travelling*	No		0	-
Meeting a parson, services	Yes	Upon request 2x a month	7	18%
Social games	Yes	1x a day	11	22%
Choir	No			
Meeting relatives*	Yes	Not specified	-	-
All-day trips*	Yes	2x a year	14	35%

*These activities were not implemented at all during the pandemic - quarantine in the senior home (14 months) - see text below
**These activities were implemented only in the interior of the senior home

Analysing this, it is obvious that the institution management does not pay enough attention to logotherapy and physical activities (e.g. walking, trips, etc.) The activity offer is either insufficient or even absent (information from seniors). Many activities are not promoted at all so there is no awareness among clients which results in 0 attendance to such an activity and cancellation.

Insufficient supply of support for seniors, especially in the area of physical activity, is contrary to the results of a number of research studies. As many findings suggest (McAuley, Elavsky, Motl, Konopack, Hu & Marquez, 2005; Štilec, 2004; Cvecka, Tirpakova, Sedliak, Kern, Mayr, & Hamar, 2015; Callow, Arnold-Nedimala, Jordan, Pena, Won, Woodard, & Smith, 2020; Vostrý, Veteška et al., 2021) exercising helps to preserve brain functions, probably by stimulating the blood flow. It is assumed, that the program of regular exercises may slow down the degradation of cardiovascular and muscular systems and joint flexibility (Hátlová, Kirchner & Suchá, 2010).

It may be interesting to compare the activities on offer with those abroad – here we find among the common activities: craft work, gardening, further education, creative writing, volunteering. Hairdresser/manicurist care etc. is classified by foreign retirement homes under the

title of pampering (Cf. e.g. https://www.umh.org/assisted-independent-living-blog/stimulating-activiti-es-for-the-elderly).

A specific activity, which is hardly found in Czech homes for the elderly (activities of this nature are one of the few facilities, e.g. the House of Master Kristan in Prachatice), are volunteer activities, charity activities. These activities can be found in the Czech environment outside residential facilities, in the offer of various activity centres for the elderly - for example, "reading grannies" or making dolls for Unicef (e.g. activity of Jana Skarlantová, –presentation her activity with elderly during international conference of experiential pedagogy 2022, paper in the press). However, we do not find them in specific residential facilities.

Interest of seniors in the activities offered

In order to present the view of essential activities as a whole the following table is added, where the previous data are shown in logic units. There is also a graph serving this purpose.

Table 6: Overview of Preferences in the Basic Kinds of Activities

Activity/Institution	Number of People	Percentage
Reading Active/Passive	36	90%
Outdoor Activities (trips, walks)	21	53%
Indoor Physical Activities	40	100%
Arts and Crafts	11	28%
Educational and Mental Activities	15	38%
Cultural Activities	28	70%
No Activity	0	0

It is also important to monitor which activities are preferred. The collected data show, that the indoor physical activities are the most popular (all the clients participate to certain ectent in the indoor exercises). We may consider this to be a positive aspect, especially when it comes to the mobility of seniors (Šauerová, 2013). From the table no. 5 we can find that the indoor exercise is available just once a week. We must assess the offer of physical activities as absolutely insufficient although the gym overheads right in the facility are minimal. The otdoor activities are exercised by just a half of the clients. Through interviews ve found out, that they are afraid of stay outside the homes facility and that there are not anough assistants to accompany them at walks. The frequency of trips is insufficient in their opinion.

The seniors themselves state that the offer is sufficient. There are only 9% of them stating that the outdoor physical activities should be more frequent – assisted walks and trips. The home for the elderly has a very convenient location, allowing short and longer walks.

The people who had experienced more active lifestyle require more frequent and more demanding physical activities. The key factor affecting these preferences is the health state and self-sufficient mobility level.

At this point we have to consider how demanding it would be for the institution management to provide the activities required by the clients and for smaller groups utilize besides the ergo therapy methods also the methods of adventurous therapy to work with them. Through the development of this kind of therapy, new programs have been created. They do not involve any strenuous physical effort regardless the environment. Recently, other components such as spiritualistic or social and psychological adventure have been discussed (Kirchner, Hátlová & Hošek, 2010).

Realization of activities during a pandemic – quarantine status

However, the results obtained from the survey need to be further specified in view of the period of prolonged quarantine as a result of the Covid-19 pandemic, during which the survey was carried out.

Despite the fact that the elderly care facility was found to offer outdoor activities and to encourage active social links with relatives, all activities that contained a risk of transmission of Covid-19 were completely suppressed during the Covid-19 pandemic.

This situation of affairs at the facility (compared to other facilities in other regions) lasted for 14 months. During this time, the following activities marked with an asterisk were not implemented: hairdressing, language classes, lectures with an expert, theatre performances, health lectures, assisted walks, yoga, tai-chi, triathlon, travel, day trips.

At the same time, it should be stressed that during the 9 months, visits from family members were allowed under very strict conditions, which made social interactions very difficult. Visits were allowed at most twice a week, with only 1 family member per visit, with confirmation of vaccination, passing a test on the day of the visit, filling in a health questionnaire, taking a temperature. The length of the visit was set at 1 hour. The facility was only able to allow 3 clients to visit in a given hour, with visits taking place in three locations in the lobby, in the afternoon, on weekdays (2-5pm). Thus, 9 clients could have a family visit per day. It was not possible to be in the client's room or in the lounge. In good weather it was possible to use the indoor garden, which has a total area of 500 m^2, with several basic paths.

At the same time, during the whole period of the covid 19 pandemic, it was not possible for the elderly to stay with the family at the weekend, due to the possible risk of disease transmission. These measures must therefore be put in the context of the data, as they have had a very significant impact on the well-being of not only the local clients but also their family members.

It was also found in the course of the analysis that „regular" indoor activities did not take place on a regular basis, due to high staff absenteeism, high staff turnover, training of new staff, and limitations on the input of specialists – outsiders implementing specific activities (e.g. yoga trainer, tai-chi, zootherapist etc.).

Proposal for practice

The importance of regular and varied activities for the wellbeing of residential clients is very valuable, as can be demonstrated by a number of theoretical studies (e.g. Winstead, Yost, Cotten, Berkowsky & Anderson, 2014; Salmannezhad, Momtaz, Sahhaf, Rassafiani & Foladi, 2022).

It contributes not only to promoting physical fitness and therefore health, but also to promoting longer-term mental well-being, specifically for people with cognitive decline.

From this perspective, the findings can be seen as alarming. The management of the facility was aware of the unfavourable conditions due to the pandemic, the facility was not prepared to deal with such a situation, especially in terms of staffing the facility, which translated into reduced social contact between clients and their families and a reduction in a number of activities beyond the very basic care.

Management has taken the following corrective actions:
- Regular case management seminars, supervision
- Stress prevention education – on-site at the residential facility with existing staff.
- Refinement of criteria for hiring new staff (recruitment and participation of psychologist).
- Staff audit – selection of staff who are able to cover most of the activities offered internally or willing to complete the relevant course (for transitional leadership activism)
- Negotiations with the founder for salary increases and subsidies for more staff
- Creating a career plan for staff, including self-evaluation

Limits of the study

The main limitation of the study may be the ethical aspect - the publication of negative results of the analysis of activities in a specific home for the elderly, despite the fact that the research and the design of the solution were related to the requirement of the management of the home.

Another limitation of the study is the level of reliability of the respondents – especially of the staff (comparison of the results of the information and the actual implementation shows that the reported results did not correspond to reality).

Another limitation of the study is the high turnover of staff, which made it difficult to obtain data and compare the reality (the departure of the main rehabilitation nurse – impact on the frequency of exercises, the new one came on board after 2 months, however, in the long run the activity was evaluated as implemented). The benefit of the study is the preparation of a specific facility for a similar situation by suggesting corrective procedures. These suggestions quickly led to an improvement in the identified situation in the area of the implemented activities, and a targeted wellbeing promotion intervention was quickly initiated.

Conclusion

Leisure and educational activities can be considered a key component in elderly care to support and develop the longest possible client self-sufficiency, which significantly affects the client's psychological balance and well-being. During the pandemic, the psychological state of the population, including the elderly, has deteriorated significantly (WHO survey results, NHS, etc.), especially due to quarantine and restrictions. In view of possible further threats of a similar nature, it is necessary to look for effective sources to prevent a similar collapse of care for clients in residential facilities, to have a care plan to promote quality of life and well-being even in situations that are globally unfavourable.

The elderly are among the most vulnerable segment of the population, both from a health and psychosocial point of view. These findings, as well as the proposal of corrective procedures in a specific facility, can contribute to a real reflection on the functionality of the education and activation system in another facility, without the data on functionality/non-functionality being publicly presented. Inspiration can also be drawn from the practice of foreign homes for the elderly, which expand the range of activities for clients of residential facilities.

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Electronic education and digitalisation in further professional mandatory education in selected types of organisation

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Abstract:

The paper deals with two basic areas of mandatory education, namely the mandatory education ensuing from the legislation and other obligatory education described in internal organisational regulations. Its aim is, based on empirical research, to identify the possibilities of innovating mandatory corporate education through applying digitalisation and detecting the employees' interest in virtual or hybrid educational environment. The paper is worked out in accordance with the content of the Scientific Grant Agency research project No. 1/0623/22 "Virtualization in people management – life cycle of employees in digital transformation."

Key words:

corporate education, digitalisation, electronic education, hybrid learning, learning environment

Introduction

Similarly, as all the industrial revolutions, also the current digital transformation is going to have a crucial impact on enterprises, while it will bring a high degree of automation, robotisation, and digitalisation of elemental operations. Education 4.0 as part of Industry 4.0 will become part of desirable access to learning, which is connected to the incoming Fourth Industrial Revolution. According to the World Economic Forum, there are five principal areas of education – the omnipresent access, collaboration and communication, extended reality, artificial intelligence, and Blockchain (UNICEF, 2022; WEF, 2022), which are especially suitable for the application of new technologies in education.

They can be applied also in further corporate education. We can observe their priority in mandatory education, which is obligatory and ensues from the legislation or from internal rules and regulations of enterprises. While the virtual and augmented reality environment (VR/AR) – potentially including in-depth learning environment, offers unique conditions and opportunities for experiential education, artificial intelligence offers the option of adaptive learning. Simulated environment of virtual and augmented reality enables the participants to learn in the environment that could be dangerous in real-life conditions. Artificial intelligence creates opportunities to adapt the content and pace of education to participants′ individual needs of (France, 2019) of further corporate education. Blockchain technologies are secure accounting systems that are capable of "smart contracts" and other forms of online record keeping. Smart contracts could grant post-training certifications and assessments and provide these credentials in a secure format not only to graduates but also to employers, who need to have documents of mandatory training activities (WEF, 2022).

Traditionally, the physical teaching environment was traditionally used in mandatory education. The aim of the paper is to identify, on the basis of empirical research, the interest in using the virtual and hybrid educational environments in mandatory corporate education. Our intention was to search for the means and ways of making the mandatory education more attractive for employees, via using an environment that is more suitable for them.

1. Further mandatory corporate education and learning environment

Mandatory (normative) education was studied by Palán (2002), who perceives it as a periodic verification and renewal of competence to perform working activities. Mandatory training of employees affects mainly those educational activities that commit the employer to conduct education and the employees to the obligation to participate in the required educational activities.

In the present paper, we describe only selected compulsory educational activities. This primarily concerns mandatory training resulting from legislative amendments. Most of the mandatory trainings, which are intended for all employees of a given employer entity, concern safety and health protection at work, first aid, fire protection, generally referred to as OSH and OHS training, which every employee performs after taking up employment, and at certain intervals also retraining of the employee. Safety and health protection at work is regulated by the state through a set of laws, regulations of the government of the Slovak Republic and decrees of the relevant ministries. (Slov-Lex – Legislative and Information Portal of the Ministry of Justice of the Slovak Republic)

The fire protection training (FPT) can also be included in mandatory education. Pursuant to §20 of the Decree of the Ministry of the Interior of the Slovak Republic No. 121/2002 On fire prevention, employee training shall be carried out before starting employment and then repeated within 24 months. Employees who remain at the workplace after the end of working hours, for example police officers must undergo training once every twelve months. All employees, including contract workers and part-timers, shall participate in the training. Similarly to OSH training, the fire protection training (FPT) is carried out either directly at the workplace or as electronic learning. (Slov-Lex – Legislative and Information Portal of the Ministry of Justice of the Slovak Republic)

As part of mandatory education, it is possible to characterize other educational activities aimed at regular professional testing and renewal of skills. These include various specific job positions and workplace activities, for example, professional drivers, drivers of motorized (high-lift and low-lift) trucks. In our organizations, it concerns the hygienic minimum for workers in the food industry and other educational activities, such as for example electrical engineers, welders, etc., i.e., occupations with which we do not deal in our research sample of respondents.

Professional driver training: Act no. 280/2006 Coll. On the mandatory basic qualification and regular training of certain drivers defines regular training as "updating the level of knowledge and practical skills necessary for the performance of the driver's profession with an emphasis on road traffic safety and the rationalization of fuel consumption." The regular training is carried out through training courses that focus on repeating and also deepening the completed level of knowledge and skills acquired in the basic qualification courses. Part of the regular training course is theory as well as the practice of regular rides, the content and scope of which is precisely determined. According to the law, a regular training course shall be completed by drivers who have been residing or working in the territory of the Slovak Republic for five years from the date of issuance of the basic qualification certificate, if they are holders of the basic qualification certificate. A driver's qualification card is issued by the Regional Office of Transport to a driver who holds a certificate of basic qualification and a certificate of regular training. (Slov-Lex – Legislative and Information Portal of the Ministry of Justice of the Slovak Republic)

Other normative educational activities include forklift operator training. Act no. 124/2006 Coll. imposes on the employer the obligation to entrust only the employees who are holders of a valid motor trolley operator's licence for the given class and type of motor trolley to work with a motor trolley. Furthermore, it also sets the minimum requirements for the course or the issuance of a licence, which include reaching the age of 18, medical fitness, completion of education and training, i.e., the course itself and verification of the knowledge of operating motor trolleys, logistics, and that of warehouses before the examination committee.

To operate a forklift, the employee is obliged to participate in repeated trainings in accordance with the Slovak Technical Norm (STN) 26 8805 once every twelve months and a refresher training once every five years. The aim of the training is to refresh the knowledge of operating a motor trolley, to supplement it with new legal regulations, become familiar with the occupational accident rate and conditions in the organization, eliminate any inappropriate habits, and to deepen the knowledge of the safe and economical motor trolley operation. By completing a repeated training, an integral part of which is an examination, the validity of the motor trolley driver's

licence is extended. The licence is then valid for twelve months from the successful completion of the repeated training, and this will be indicated in the motor trolley driver's licence. According to Act no. 124/2006 Coll., the training takes place every five years from the issuance of the licence of professional competence to operate trolleys, and it is carried out by every holder of this licence. If this training is not completed, the licence loses its full validity.

For employees of the Food and beverage service activities division of Section I, Statistical classification of economic activities, the hygienic minimum of a worker in the food industry is also mandatory. The hygienic minimum, i.e., the certificate of professional competence for carrying out epidemiologically significant activities is a proof of the worker's expertise in the food industry. Graduates from the course shall be familiar with the temperatures and times of prepared food, the basics of the HACCP system (System of risk analysis and determination of critical control points), monitoring of food sources, operating procedures, and other information depending on the activity performed. Every employee who comes into contact with food in the manufacturing stage, or when handling and putting food and dishes into circulation, needs professional food-handling skills. In addition to cooks and waiters, this obligation in catering facilities also applies to workers who process raw materials, pack prepared meals, and operate gastro-technical equipment. (Slov-Lex – Legislative and Information Portal of the Ministry of Justice of the Slovak Republic)

Corporate mandatory educational activities create the basis of the entire in-house corporate training; they entitle employees to perform particular work activities. The core of educational activities in organisations was the physical environment, although some educational activities were carried out also as Computer Based Training (CBT) or as Web Based Training (WBT). The physical environment, where the traditional direct teaching and a personal contact between the lecturer and participants prevail regardless whether the training is held in an educational facility, namely in a specialised classroom or in workshop, office and the like. To support those who pursue self-study, the asset of technological tools is applied – hardware and software ones – in offline electronic education. The training does not require connection of the participant's computer to another computer via the network in real time. Study materials are distributed on memory carriers, for instance CD-ROM and DVD-ROM, hard disk drive (HDD) or a local area network (LAN); alternatively, teaching curricula may be delivered via the Internet. In numerous companies, the COVID-19 pandemic acted as a stimulus of an intensive breakthrough of information and communication technologies into education. The need for social distance required to search for more diverse means of electronic education. (Sumandiyar, et al., 2021)

Electronic education has become the base of virtual (digital) learning environment. Nowadays, digital environment provides numerous information and communication tools. The digital multimedia world offers those interested also the freedom to decide on the way of acquiring new knowledge. It is a diverse technological system, which provides a scale ranging from the full-fledged independent educational platforms up to specialised online tools and digital sources (Elkins & Pinder, 2015). Today, teaching face-to-face at a distance is referred to as virtual education. This model of education would not be possible without modern information and communication technologies. Virtual learning spaces are interconnected via satellites or other technologies. Lectors and participants are not in the same room at the same moment. The lector can see and hear participants, and they can also see and hear the lector in different locations, distant in space.

The physical learning environment together with the face-to-face training at a distance, that is, virtual learning, offers advantages of both educational environments and is described as hybrid learning space. It enables participants of training to either take part in traditional (in-class face-to-face) education or use digital technologies. Hybrid education is an efficient combination of conventional traditional teaching with some elements of virtual learning, or distant education, in order to achieve a favourable learning environment. Its essence lies in the fact that part of participants can be physically present in class and part of them are educated virtually, while a

synchronous version of the electronic education is based on the methodology verified through in-class face-to-face teaching practice (Kříž, 2020; Sumandiyar et al., 2021).

The role of education provider is to adjust to the needs of participants and the content of further professional education and provide the training in the kind of environment that enables to apply results of scientific research in the learning process, while learning and cognition styles may be respected. In order to achieve a favourable educational environment, there are efforts for creating various combinations of learning environments as well as the providing unlimited time for learning.

2. **Methods**

Mandatory education does not belong to popular educational activities with employees. It is connected with the obligation of cyclic renewal of knowledge and skills for the performance of activities that the employees have performed for a long time. The overall motivation for compulsory educational activities is based on the necessity of completing them. In the case of numerous employees, we recorded the employee motivation to participate in mandatory education increases with the application of information and communication technologies in education.

The research was conducted using the interview method and the questionnaire method. The interview was used in order to better understand the opinions and experiences of the respondents as participants of corporate trainings conducted by their companies. The interview was applied in the pre-research stage and in the preparation of the questionnaire. The questionnaire method was suitable for practical reasons: the research required a representative sample of respondents. The questionnaire consisted of two basic parts: an information section containing the basic data about the respondent and a professional section focused on the respondents' opinions of the possibilities of using electronic education and digitalisation in further mandatory corporate education.

In the empirical research, we considered opinions employees of 146 micro and small companies of Section I – Accommodation and food service activities, namely from Division 56 Food and beverage service activities of the Statistical Classification of Economic Activities SK, NACE Rev. 2. The research was conducted from June to July 2022. The total number of respondents was 146, i.e. one from each company. The research sample consisted of employees working mainly as kitchen crew and employees who are in direct contact with customers (waiters, bartenders, and security guards). In the analysis, we applied descriptive statistics methods. To process the data accumulated, we used manual processing (the bar code method was used for some types of questions) and automatic processing: collected data were analysed in MS Excel (Hanák, 2016). Results of statistical processing are presented in statistical surveys in tables and acquired findings are interpreted verbally.

3. **Results**

A characteristic feature of mandatory education in the enterprise is that its outcome is not only an increase in knowledge, but the focus is shifted to the development of skills. Nowadays, many employees are expected to be able to practically perform and manage activities that are a long-term routine. Not only customers but also employees encounter digital technologies in restaurants. Digital technologies are used in the service system, when ordering food, and in addition to traditional cash registers, self-service kiosks with the possibility of scanning QR codes are already being used. Many facilities already use a drive-through (drive-thru) system, which is a type of delivery service provided by the company that allows customers to purchase products without leaving their vehicles. The goal is to provide services at a high professional level, without unnecessary waiting and providing maximum customer comfort.

Digitalisation enables to achieve these goals. The use of electronic education and digitalisation is the least evident in mandatory education, where the lecture is still a dominating traditional method of education, and the lecturer acts as a mediator of new information and a trainer or instructor for acquiring the necessary skills. In mandatory education, employees would

prefer using more recent information and communication technologies. According to the respondents' opinions, in the current practice of the analysed companies, both offline and online education are currently used in their asynchronous and synchronous versions; the results are presented in tables no. 1 and 2.

Table 1: Implementation of education through the application of offline variants of training

Variant of education	Supported items	Tools applied	Section I NACE, Rev .2	
			Division 56	%
Off-line training	Computer Based Training (CBT))	Training materials on CD and DVD disks	32	21.9%
	Web Based Training (WBT)	Training materials on the Web pages and accessible by Web browsers.	97	66.4%
Off-line training not done			17	11.7%

Source: own processing (Employees indicated only one option, one that is applied most frequently.)

Educational content of mandatory training for all employees, such as OSH − health and safety at work, FPT − fire protection training and first aid courses, has been prepared and the trainings are available offline. However, there are also employer entities that do not provide these trainings yet.

It needs to be mentioned that 11.7% respondents admitted that electronic education was not implemented in their organisations, and if it was, then for example email communication was applied for work-related purposes rather than for the purpose of education. Since there are two versions of online education, namely synchronous and asynchronous, and several tools are used; respondents recorded the applicability of several tools in their training.

Table 2: Implementation of education through the application of online variants of training

Variant of education	Version	Tools applied	Section I NACE, Rev. 2	
			Division 56 (126 resp.)	%
On-line training	Synchronous version	Internet telephony (Skype, WhatsApp, etc.)	8	6.20%
		Live transmissions of lectures with the option of immediate feedback	31	24.0%
		Chat	11	8.53%
	Asynchronous version	Electronic mail *	129	100%
		Discussion forums	-	-
		Training sources sent electronically	121	93.8%
		Working out assignments	-	-
		Visiting of educational portals	17	13.2%
		Visitong of e-libraries	14	10.9%

Source: own processing (Employees gave their opinions of several tools applied). * In the electronic mail section only those respondents are considered who indicated that the mail was used for educational purposes (17 respondents of the total 146 respondents).

Synchronous communication is conducted in real time, i.e., participants have to be present at the same time. In terms of technology, this communication can be based on voice, text, audio, or video transmissions. The development of ICTs has enabled the rise of other means of communication, for example chat or videoconferences. Chat stands for a synchronous communication based on the exchange of short texts inserted in the application window, while they are displayed to other communication participants. Live lecture broadcasts stand for the synchronous communication, which became widespread during the COVID-19 pandemic; image and sound are simultaneously transmitted, while there are rich possibilities of interaction in natural form (Bisták, 2012). Since it was mainly restaurant and catering facilities that found themselves in a difficult situation during the pandemic and frequently were looking for the ways of their very survival, they could pay only marginal attention to education and training. This is reflected in the character of the trainings that were closest to face-to-face teaching, while, on the other hand, various online platforms (Microsoft Teams, Zoom, Hangouts Meet, Webex Meetings, Cisco Webex Meetings, Workplace from Facebook and others) were used only to a limited extent (as reported by 24% respondents).

In mandatory corporate education, asynchronous communication is probably more popular (Pomffyová, 2009), which was also reflected in respondents' replies (see Tab. 2); there are more options available. Discussion forum enables employees and instructors to share ideas, ask questions, and demonstrate individual findings whenever they wish to and from anywhere they can log to the Internet. It is organised in topic groups, i.e., articles related to some topic are posted together. In contrast to the passive reading of Web pages, the discussion forum is based on an active participation of its users. When inserting an email address, individual communication between users is also made possible. After the discussion forum is set up by the instructor, the forum can be fully administered. The forum can be either free or restricted. Authors may identify themselves or remain anonymous. (Abas, 2009; deLima, et al., 2019). However, respondents did

not mention this tool among those used in their companies. Visiting educational portals and electronic libraries belong to seldom used tools; the reason is the absence of educational sources for the mandatory education required by its users.

4. **Discussion and recommendations for practice**

Digitalisation in education has been applied for several years; its rapid development was triggered off by the pandemic in 2020 and 2021. Information and communication technologies enable continuity in education, application of self-paced learning and adaptation to learners' needs. It emerged from the respondents' opinions that they prefer distance learning when using online lectures. As Table 1 shows, 11.7% of them would like to replace the physical environment with virtual learning, with the option of hybrid learning for those who prefer personal participation in training activities. Most motivation options can be achieved via a suitable combination of teaching environments, after taking into account learners' educational preferences.

In first aid courses and first aid skills training, respondents would prefer physical participation and simulations to test and practise the skills required. In order to be able to repeatedly listen to and see instructions on how to give first aid, they need demonstration.

Respondents preferred electronic libraries and would appreciate using interactive training activities. They specifically mentioned the FRED online platform, a library of interactive training materials used in adaptive education. According to respondents, there should be available lessons from compulsory education, similar to those described in the FRED platform, where the lessons contain for example the information necessary to do all restaurant jobs. This platform can be accessed via a mobile phone, PC or tablet connected to the Internet. Employees are able to communicate through an internal social network, which serves for sharing photos, posts and communicating through digital chats.

Mobile learning is recommended for mandatory education; it is learning through the Internet or network using personal mobile devices such as tablets and smartphones to access learning materials through mobile applications, social interactions, and online learning centres. Mobile education is flexible and allows a high variability in education, with respect to time and place. (Demir, & Akpinar, 2018). Mergany, Dafalla, and Awooda (2021) list some of its disadvantages, namely considerable distraction on the part of learners. The use of Internet in education is becoming a new educational trend. Education can take place round the clock, and the employee can complete it in any place and at any time. Its disadvantage is the costs of software and technical equipment, which was not considered by the employees.

Respondents suggested to use social networks in their mandatory educational activities. Respondents would like to use social networks (Lindedln, Facebook, YouTube, and Skype.) Learners' motivation for education is often supported with videos with motion graphics. It is very convenient to supplement the lectures with short, simple and entertaining animations that complement the presented curriculum. We need to think about Xlearning as a successor to E-learning or a paradigm of online learning (Nagi, 2011; Složil, 2020). Its main principle is interactivity of not only instructors, but also that of course designers. E-learning, a popular form of education, changed with the advent of generation Z. Learners often dislike when offered an image with a lot of text, which they do not want to read, and if video is used, the learners still do not learn much and would prefer to experience the process. That is how Xlearning was born. A precisely processed presentation ending with a test is no longer enough for training participants; instead, interactivity is the source of interest in education. Xlearning requires activity and gives feedback on the activity. This kind of activity is rather difficult for training course designers, because their preparation takes several months and is the result of the work of a group of experts. For simpler educational activities of a mandatory nature, the preparation may be easier. (Složil, 2020)

The power-point presentation for face-to-face education should be supplemented with gamification. With gamification, the aim is to support the course completion and interest in the

course with game elements (Kursch, &Veteška, 2021; Sailer, & Homner, 2020). It does not have to mean turning the course into a game, but it will help to keep learners focused and motivated. X-learning, using gamification and game-based learning, is an effective way of simulating certain situations and improving the skills of the participants. Learners have the opportunity to test their decision-making skills by playing games before applying some scenarios in real work life. Similar goals in education can be achieved today with technologies such as artificial intelligence (AI), virtual reality (VR) and augmented reality (AR), where participants learn new skills from virtual characters while using games (Jámborová, Dzuro, & Lumnitzer, 2019).

It is also advisable to use microlearning, the aim of which is to achieve the goal of education by providing brief information to the participants. Education with little information content has been on the rise recently, thanks to a large number of mobile phone users (Giurgiu, 2017; Krishnamoorthy, & Padmanaban, 2018).

Digital technologies used in education make it possible to ensure continuous education while respecting the uniqueness of each learner and support motivation for education through the diversity of the educational environment. Today, employees often do not have time to attend face-to-face courses, which can also be logistically difficult for them. It is the electronic education that remains the trend in education, which responds to the increasingly newer and more sophisticated achievements of new information and communication systems.

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Health and education to health

Július Matulčík

Abstract:

The study presents a research project of *Education to Health of Adult Population* targeted at finding attitudes to health and education to health in various age groups of adults. The methodology of the research is based on the HLS19-Q12 questionnaire, a tool for measuring general health literacy that was approved by the HLS19 consortium (the 2019-2021survey of health literacy of population) of 17 countries within the Action Network on Measuring Population and Organizations' Health Literacy. The study comprises elementary theoretical research resources concerning health perception, health education, health training and health learning.

Key words:

health, health education, health training, health learning, formal education, non-formal learning, informal learning

Introduction

The issue of health and sickness represents a permanent topic resonating with both professionals and lay people. It often looks as if everybody was familiar with health issues. As if everyone were involved and knew what its content is. We witness the rise of new culture of health that penetrates into our mentality through the image of our body. From the social point of view, the task of citizens, their active participation in maintaining their health within the ever more complex health-care systems, surrounded by ever-present "health market", keeps growing. Demographic changes, population development, aging population and the growth in number of senior citizens associated with it, present a challenge which has both social and political dimensions while at the same time it represents a challenge for sciences directly or indirectly involved in health issues. The *Education to Health of Adult Population* VEGA project number 1/0293/21 is a fulfilment of such a challenge.

1. Research goals and methodology

The scientific goal of the *Education to Health of Adult Population* research is to find out, based on theoretical and empirical research, the attitudes of individual adult age groups towards health and health education. The research corresponds with the document Health 2020: A European Policy Framework and Strategy (for the 21st Century) approved by the World Health Organization European region member states.

Based on the scientific goal, the following scientific hypotheses have been formulated:

1. Adult citizens of Slovakia of all age categories will be placed at the lowest of the three levels of health competence – functional health literacy (Don Nutbeam 2000)
2. The interest of adults in health issues grows with their advancing age.
3. Adults of all age categories gain knowledge and skills concerning health competences through informal learning.

The quantitative research methodology is based on the Slovak version of the HLS19-Q12 questionnaire, the tool for measuring general health literacy developed by the work group and approved by the HLS19 consortium (the 2019 – 2021 population health literacy survey) of 17 countries within the Action Network on Measuring Population and Organizational Health Literacy (M-POHL; https://m-pohl.net) under the auspices of the European Initiative of the WHO in healthcare (EHII) coordinated by the International Coordination Centre (ICC).

The empirical research required a necessary prerequisite of theoretical definition of health perception and education to health.

2. Attitudes to health perception

Health and its perception are most often linked to sickness or other associations, e.g. doctors, sports, food, medicines, hospitals on the one hand, and with contentment, physical and mental performance on the other.

In everyday life, health and sickness do not have to be always understood as counterparts. A person can be sick and yet they may feel healthy, or they can be healthy and feel sick. Most people cannot be clearly marked as sick or healthy. Depending on earlier experience with sickness, social standing, cultural background or life history, the lay way of viewing health varies considerably in individuals.

As Herzlich (1973) and Faltermeier (1991) claim, lay people see health as absence of sickness, as resistance to external influences, physical and mental contentment, functional fitness or as control of one's self, one's body.

It follows from the above mentioned that health perception is not limited to medicinal aspect only but that the concept of health is much more often perceived as a social phenomenon. To renew one's health means to bring the sick person to such kind of health that is recognized by the relevant society, that was first formed in the society itself. (Franke 2012, p.37)

The phenomenon of health had long been sickness concept oriented. According to Faltermaier however, health is more than absence of sickness but what this 'more' means requires differentiated analysis. (Faltermaier, 2009, p. 46) Negative perception of health becomes more often replaced by positive perception of health which emphasises such aspects as welfare, vitality, flexibility and self-realization. These aspects are also comprised in the WHO's definition of health: "Health is a complete physical, mental and social wellbeing, and not merely the absence of disease or infirmity." (WHO, 2014, p. 1) Over the years, the centre of gravity of this definition has been moved from the purely individual level to the social level. It claims that health can only be achieved when it is made possible by social conditions: "The elementary conditions of the constitutive moments of health are peace, adequate housing, education, diet, income, stable ecosystem, careful use of existing natural resources, social justice and equal opportunities." (WHO, 1986 acc. Franke 2012, p. 190). In the healthy society of the new millennium (see Kickbush 2006) individuals use hitherto unknown decision-making options in relation to their health. The responsibility thus acquired presents lots of challenges.

The term health is closely related to other notions whose content or practical fulfilment lead to health, achieving it, maintaining and caring for it. Such are: *health support, prevention and public health, health literacy, health competence, health education and health training.*

Apart from the subjective feeling and perceiving of what health is, health issues are dealt with by several scientific disciplines which approach it from their own methodological and theoretical points. Apart from medicine, they comprise e.g. sociology, philosophy, theology, or even educational sciences – pedagogy, andragogy and geragogy.

Health may thus be understood as an educational goal, i.e. not just on the level of biology and natural sciences but also from pedagogical point of view, in complex anthropological way. (Gangl, 2015, p. 25)

3. Education to health

From many definitions of health and efforts to most accurately render its essence it can be concluded that health is not a state but a multifaceted process that must be consciously cultivated throughout life. Emphasis is put on procedural understanding of health that forms a relationship to learning and development. Healthy are those people who open up new areas of their lives and activities on the backdrop of long-term goals through learning (Höher, 2014 p. 4) Thus, education and learning in the field of health are of special significance in this context during a person's entire life.

In regard to education to health, several terms are used, most frequent being **health education** and **health training**. Many authors see these terms as being synonymous (Hoh, Barz, 2011, p.

731), especially when it comes to early years of education to health (1950s). Health education used to be initially perceived as factual information on suitable body hygiene and on the source and development of diseases. (Hurrelmann 2013, p. 199)

The predominantly biological and medicinal knowledge was delivered by educationists within *health awareness*. Hurrelmann distinguishes between "classic" or "authoritative health education" and "participative health education". The *classic health education* has instructive character and unhealthy behaviour is often approached in an authoritative way with no attempt at resolving hard life situations. The *participative health education* focuses on reasons of health-risk behaviour. The main goal of education is to mediate the attitudes, behaviour dispositions and knowledge, and to enable their inclusion in addressees' life. It is also aimed at strengthening individual competence of mastering acute developmental tasks. Health behaviour is not inborn, thus it requires measures and proposals for creating a living space during the childhood, as well as direct forms of healthy behaviour education. (Hurrelmann 2013, p. 201)

Health education is understood in a similar way by Cassens (2014, p.8). According addressees he distinguishes between health training of children and health training of adults. It matches the perception of the term education (*Erziehung*) which is used in the German speaking environment in connection with children, while with adults, only the term training (*Bildung*) is used.

When thus perceived, health education represents organized influencing of health behaviour through handing over the knowledge of health and creating health competences. This is usually carried out within the socially mandatory framework, e.g. at schools. In upbringing, it is about influencing behaviour by pedagogues – educators (parents, tutors, teachers) whose knowledge, authority or competence put them in a superior position. By its nature, upbringing represents a targeted intervention in development of other people and reaches deep into personality structures.

On the other hand, however, the term health training is used mostly at such intervention strategies, in which addressees are given various offers of health behaviour checks and of improvement and health-related self-understanding. Whether these offers will be accepted depends on the addressee's decision. Compared to health education, the degree of organization and engagement is considerably lower. However, the goal of enhancing the health potential and optimizing health behaviour is identical.

Health training is targeted at an effort to influence health behaviour of individuals with the aim of enhancing one's own well-being, comfort, i.e. to improve the quality of life. Hurrelmann (2013, p. 209) points to the increased social inequality in connection with health training. The training is voluntary, it requires certain measure of health self-reflection and is usually costly and that is why it is used mainly by people who are better off. Paradoxically, the population groups that should be approached primarily do not take part in health training. Contrary to education, health training is less age related. According to Cassens (2014, p.111), health training is carried out in informal environment as part of free-time activities. Attention is focused on purposefully organized communicational offers whose goal it is to enhance health competence.

In terms of types of training, it is important to consider in what form, in what environment and in what way health training is being carried out, what are the options, offers, and what is the attendance in training.

Health trainings can be carried out as part of *formal education*, in institutions intended for education and professional training, i.e. usually at schools. It is completed with awarding officially recognized documents and acquiring relevant qualifications.

Within the *informal education* that is not usually completed by issuing official generally valid documents, health training can be carried out at a workplace as part of activities of civic associations and organizations, through organizations that were established to supplement formal systems of education.

Institutional, as well as autodidactic, self-managing trainings in the field of health comprise *intentional health learning* related to partaking in such learning processes which enable people to

acquire health related experience and may initiate changes in behaviour, or alter the individual's subjective state of mind, experience and behaviour. (Koch, 1991, p. 53)

The concept of health learning is strongly oriented to changes in behaviour. The program areas of education to health – health education and training are comprised in offers of educational institutions focused on nutrition, exercise, relaxation, self-awareness, health supporting behaviour, society and environment, life with ailments or addictions, etc. However, Koch criticizes the absence of approach to target groups in educational offers which are mostly open, i.e. accessible to all interested parties. (ibid, p. 101) According to her, instead of creating programmes focused on a specific topic, problem-solving offers that would be significantly target-group oriented should be drawn up. The continuous participation in training in the field of health should be supported as well. (p. 205, etc.)

Informal learning represents an important form of non-institutional education. *Informal learning* is a natural part of everyday life. Non-intentional adult learning of permanent character has been becoming increasingly important as it helps adults to acquire more knowledge than through intentional learning. This fact requires more attention to be paid to the issues of non-intentional learning in the field of health as well.

When defining the informal, non-intentional adult learning, the term "*en passant learning*" (Reischmann, 2008) is often used. The French term "en passant" means 'by the way', alongside something else, i.e. learning in addition to other activities going on in a person's life. It is not deliberate learning as in school instruction or institutional education. Adult persons can – and do – master knowledge from the field of health and increase their health literacy through non-intentional, informal learning by combining different learning methods. The differences between the methods are being blurred because in real life, adult people learn in interaction between their job, leisure time and family, entertainment, pressure and necessity. They learn in different life situations based on various impulses, and by combining different educational resources.

Conclusion

Understanding education to health, health education, health training and health learning is, similarly to defining the term of health, differentiated both from the point of theoretical points and from the point of view of its being realized in particular conditions, through a specific institutional base and target groups, as well as by participants in educational process themselves.

Based on the results acquired from the ongoing theoretical and empirical research of the *Education to Health of Adult Population* project, a structural model of competences related to health will be made and attitudes of the adult population to health and health education will be identified. The acquired knowledge will be used in further development of andragogical activities in the field of health.

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Students' reasons for not completing their combined studies

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Abstract:
Study failure associated with not completing studies is an indicator not only of the efforts, abilities and performance of students, but also a part of the school's concept, a criterion of the effectiveness of the teaching method of the educational institution. Among the most common reasons for not completing a combined study are personality psychological factors in the form of low motivation or insufficient study skills, as well as pedagogical factors, e.g. high demands on students, and social factors, e.g. low support of the student from their social environment.

Introduction

According to the pedagogical dictionary, academic failure can be understood both as a failure to cope with the school's requirements towards an individual, confirmed by a negative assessment, and also as a product of mutual non-cooperation between the teacher and the student. Cooperation between teacher and student should be aimed at achieving educational goals. Historically, authors differ in the importance of individual items, e.g. Hrabal (1979) sees the importance of the student's social evaluation, while Helus (2002) emphasizes the student's internalization of values for studying. Beneš and Závada (2009) describe failure/success in university studies as a complex of three variables: the number of students entering, the content and requirements of the study program and the number of graduates. The first two can be set, while the third is dependent. Thus, when the requirements in the content of the study program are increased, the percentage of failure/success in studies and the proportion of graduates is predetermined. On the contrary, success in studies can be influenced by adapting the content and requirements of the study program to the students' capacities. (Průcha, Walterová, & Mareš, 2013)

It is not possible to evaluate the difficulty and quality of teaching individual subjects based on overall school failure, e.g. a student's failure to progress to a higher year, as well as the attitudes of teachers or students or their readiness to practise a profession or their competitiveness on the labor market, as overall school success is influenced by a number of more or less influential factors. (Lee, Lee, & Gong, 2016; Juklová, 2011)

Adequate student preparation is essential for success. However, the terms school success, school fitness, school performance and school achievement cannot be confused. School performance is the result of some specific study activity that can be evaluated "objectively" (it depends on the method of evaluation and the ability of standards among educators). Academic aptitude is a set of student abilities and personal prerequisites for performing and becoming successful. A student's personal disposition is physical, psychological and social, and their intermingling is necessary. Among the most important are input knowledge, cognitive, motivational and self-regulatory structures. The teacher should identify these so that he can guide effectively the student to the goal through his teaching process. A positive thing for the entire teaching process is that personal dispositions can be changed during the course of study, which can be done with, among other things, the right teaching system. School performance is the intersection of school aptitude and success. For adult students of combined studies, school performance is in an ambivalent position, some do not deal with it too much, while others are afraid of failure and feel that the numerical evaluation of school performance proves their abilities and is an indicator of readiness for a profession, which, especially with studies while working, may not be be a valid data. They unnecessarily put a lot of intimidating emotions into the study, which can unknowingly spoil success. Emotional maturity and stability are important for a student

who, in addition to his study obligations, also deals with work and family obligations. (Bhagat, Vyas, & Singh, 2015; Sithole, 2018)

1. Factors affecting school failure

Not only can many factors be distinguished, but also many ways of sorting them. Study failure primarily affects the student and his activities, however, in the case of combined studies and obligations towards other entities, even seemingly peripheral entities play an important role. Kosíková (2011) divides three levels of influential factors (personality psychological, pedagogical and social) according to subjects and relationships that influence academic failure/success. (Grant, 2014; Kosíková, 2011)

I. The personality-psychological level – in addition to the student's personality traits (performance, self-regulation, dynamic, relational attitude), the quality and quantity of motivation is a very strong factor contributing to success. Motivation includes several components – through the component of natural curiosity to life's aspiration. Student motivation activates, dynamizes and directs. According to the type of motivation, a distinction can be made between students: the type oriented to the field of science (studying for science), the type oriented to the profession (attracted by the performance of the profession), the fleeting type (studying for presence), the type of non-genuine student (studying for social affiliation), the type seeking status (studying for future high social status), type requiring competence (studying for expert knowledge). Each student has a different type of motivation, or the types alternate or combine. (Furnham, 2012; Schunk, 2012; Werner, 2016)

In his work, Diseth (2003) investigated the relationship between personality, approaches to learning and academic achievement. The research sample consisted of 315 students, whose neuroticism, extroversion, openness, friendliness and conscientiousness were monitored by questionnaire. He observed the expected correlations between personality and approaches to learning, with significant positive relationships between depth approach and openness, surface approach and neuroticism, and strategic approach and conscientiousness. Surface approach was negatively related to achievement and deep approach was positively related to academic achievement. (Beard, &Wilson, 2013)

II. Pedagogical level – the consolidation between school and student, demands and possibilities. The teacher also contributes to the climate of the school through his pedagogy, whether the student, for example, accepts assessment as a natural part and reflection of the learning strategy or as an intimidating activity. It is advantageous to understand evaluation as a superior matter to classification. (Fleming, 2011; Haan, 2013)

The teacher affects the student's success not only by his personality, but especially by the way of teaching, which should be adapted both to the abilities of the students and, in particular, to the expected results of the pedagogical process and self-study in relation to the nature of the work activities of the graduates. The teacher can direct the student to a certain learning style with a deliberately chosen teaching method. Diseth and Martinsen (2003) distinguish an assimilating style, preferring rational and analytical processing of information and following rules. On the contrary, the exploding style uses the search for information through trial and error, and the accommodating style combines both previous styles according to the requirements of the environment. The last two are more risky and lead more often to academic failure. (Diseth, 2003; Ganesh, & Ratnakar, 2014; Zyl, Roll, & Richter, 2020)

Chlumská (2011) observed the relationship between personality factors of high school students and their learning styles and between learning style and success. She has shown that academically successful students are more persistent and responsible in learning, prefer to learn alone, prefer visual learning over auditory learning, and do not seek out experiential learning too much. Higher achieving students are also more intrinsically motivated, with less need for authority when learning. (Chlumská, 2011)

III. The social level – the social environment around the student, from close family and work to the whole society's attitude towards education, the student's family and work obligations, which are often prioritized over learning for existential reasons. However, on the other hand, many students only explicitly transfer their study passivity to these obligations. Even for an adult student, the support of the family, its social relations, aspirations, expectations, demands, and at the same time the effort to accept a new role and adapt to new responsibilities are important. Even the micro-social environment of the school classroom for adult students is not negligible, even if rivalry is not so frequent. However, the comparison of abilities and possibilities also takes place and has a motivational and demotivating role. Social skills are important for success – being able to establish contact with classmates and teachers for cooperation, to communicate effectively (discuss, present, argue). Rittig (2009) used a version of the Study Style Questionnaire based on the Approaches to Studying Inventory (ASI) by N. Entwistle and P. Ramsden and found that a higher score on the learning styles variable "striving to achieve" predicted a better academic average and a higher score in variable "need for social contact". Among other things, he concluded that students who are satisfied with their learning style have better academic results than students who are not satisfied with their learning style. A good pedagogue must lead students to see the possible change in school success with the appropriate activity. One cannot, for example, throw the episodically unsuccessful into the syndrome of an unsuccessful personality with a feeling of learned helplessness with social stigmatization. (Halili, Naimie, Sira, Ahmed, & Leng, 2015; Rittig, 2009)

In 2009, a survey was conducted at the technical university in Brno to monitor obstacles to study with the aim of eliminating the number of students leaving their studies early. According to the results from 157 students – 41 % of students rated the study as "relatively demanding". Up to 66 % of students put off studying for an exam until the last minute, and 63 % of students prepare for the exam just 3.5 days in advance. At least 48 % of them struggle with a lower ability to concentrate on learning and 34 % have difficulty memorizing the material. About 27 % of students reported unrealistic planning of their learning, 26 % excessive attention to detail, and only 7 % excessive preparation. (Čihounková, & Šustrová, 2009)

Juklová (2011) observed study difficulties in 585 students from 6 universities of the Czech Republic (University of Economics in Prague, Charles University in Prague, Technical University in Brno, Masaryk University, Mendel University in Brno, Palacký University in Olomouc and University of Hradec Králové). Using factor analysis, she extracted two lines of problems: misunderstanding (failure to understand the subject matter, failure to distinguish what is important, stress during exams and communication with teachers or expressing opinions in front of classmates) and problematic self-management (poor time schedule, little will to learn). (Juklová, 2011)

2. Research objectives and methodology

The goal of our longitudinal research (2014-2021) was to find the most common reasons for not completing a combined study at a higher vocational school. The partial goal was to prove the reduction of study failure associated with the completion of studies after the introduction of specific teaching methods in individual fields of non-medical health professions.

The research group of respondents included all students (n=551) of the Mills Čelákovice Higher Vocational School of Health from the fields of Diploma Pharmaceutical Assistant (GPhA), Diploma Medical Laboratory Technician (GHLT) and Diploma Medical Paramedic (CP) studying at this school between 2014 and 2021 The GHLT field was only introduced at the school in the 2015/2016 school year. Students could be admitted to the field of physical education at vocational schools (according to Act 96/2004 Coll. in the current version) for the last time in the 2018/2019 school year.

In the 2016/2017 school year, specific teaching methods were included at the Mills Higher Vocational School in all studied fields, which correspond to the use of selected cognitive functions

according to the students' future competencies according to the studied field and potential profession. E.g. among pharmacists, the teaching methods were focused on improving (mechanical and logical) memory to increase the ability to keep information in the exact wording, i.e. to follow exact compositions and procedures when preparing drugs in pharmacies. Methods were used (classical and alternative, discussions and methods, e.g. snowball, outer and inner circle etc.) supporting cognitive learning with a focus on the accuracy of knowledge. While paramedics, who must find a unique procedure for each patient in order to individually solve each emergency case due to the comorbidities of individual patients, and therefore use and connect the knowledge learned and find the optimal solution, they must especially train their thinking when learning. Rescuers practice logical thinking, e.g. by means of role-playing, brainstorming, demonstrations, and above all solving problem tasks immediately when acquiring new information, so that the process of proposing a solution to the exit situation becomes natural for them and does not increase the already heightened stressful situation. For laboratory technicians, it is primary to learn to be as attentive as possible to detailed differences, so that they are able to capture even small pathological variants, since many differences are not even enough to learn during studies, and therefore they use and strengthen specific attention during their work. The teaching of laboratory assistants took place in the real environment of clinical laboratories, for example in the form of a flying team with the possibility to monitor and evaluate an abundance of preparations and look for differences not only in the appearance of specific biological material.

The results were determined on the one hand by comparing data from the school register, where the number of students by field of study and school year who did not complete the relevant year or the entire course with a final discharge was monitored. The data before and after the introduction of specific methods was intentionally compared, the aim of which was, among other things, to increase the success rate of students. Furthermore, individual interviews were conducted with all students who did not complete their combined studies. The interviews were semi-structured with a focus on the reasons for early termination or interruption of studies.

Table 1: Number and age of respondents

Graduated pharmaceutical assistant				Graduated health laboratory technician				Certified paramedic			
n	r age	ø age	σ age	n	r age	ø age	σ age	n	r age	ø age	σ age
211	21-52	34,46	8,46	165	21-46	34,44	7,14	175	22-53	36,48	7,18

(Source: own processing)

3. Research results

After the application of specific teaching methods, the proportion of unsuccessful students who did not complete their studies decreased significantly. The reason for completing studies has also changed, or the reason for early completion of studies is gradually disappearing due to the great difficulty of studies. Students see studies as more manageable, probably due to a greater connection between learning and practical application in the relationship of teaching methods and competence with the involvement and strengthening of the corresponding cognitive functions.

After 2017, students did not complete their studies most often due to time pressure or lack of time for regular attendance at school or for professional practice or for self-study and preparation for exams. Another, though less common, reason was the wrong choice of field.
Until the introduction of specific teaching methods (2016/2017), a frequent reason for interrupting studies (with a return to studies within two years) was a failure to master the subject matter. The last time this reason occurred was in the following year, as not all students or teachers were satisfied with the change in methods, so they did not immediately manage it successfully. The same was the case when justifying the repetition of the year.

The average age of students who did not finish the year is similar to the average age of all students of the given year according to individual fields. At GPhA, the average of non-completers is 34.40 years and the average age of all students is 34.46 years. At GHLT, the age of students

with an unfinished year was around 34.25 years, while the average of all students was 34.44 years. At CP, the average age of students with an unfinished year was 36.30 years, and the average age of all CP students was around 36.48 years. Therefore, it was not proven that younger or, conversely, older age was a factor leading to not completing studies.

Chart 1: Non-completion of studies by fields and years
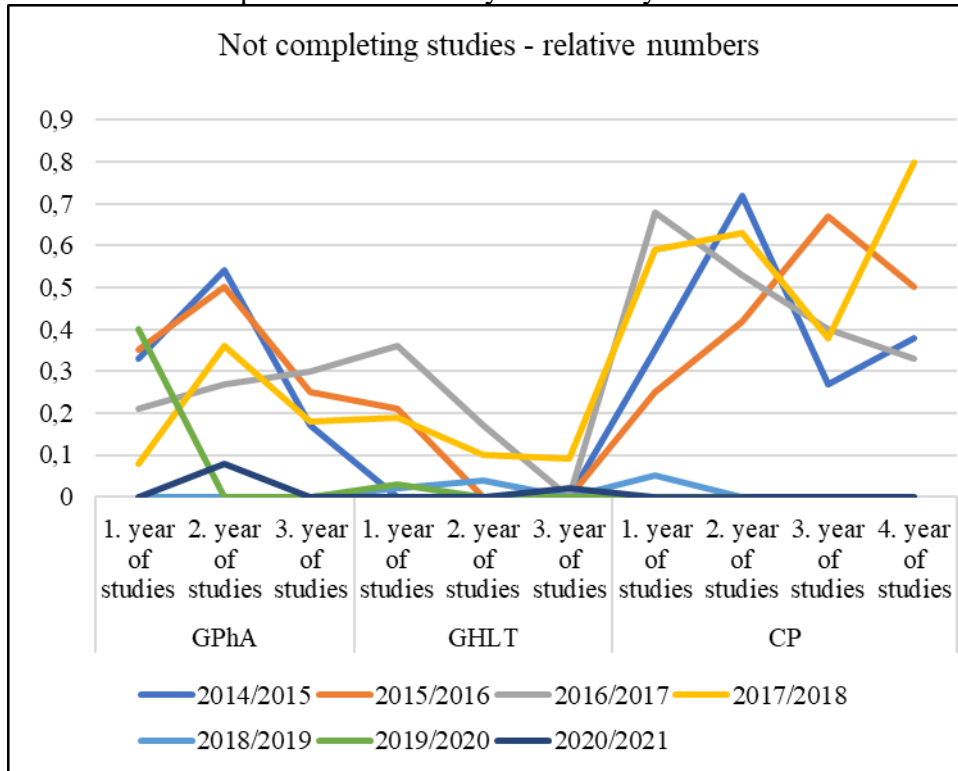
(Source: own processing)

Table 2: Reasons for dropping out early

Field	Year of studies	Reasons for termination	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
GPhA	1.year of studies	time pressure	0,11	0,1	0	0,02	0	0,04	0
		wrong choice of field	0,06	0,05	0	0	0	0	0
		difficulty of study	0,17	0,2	0,21	0,06	0	0	0
	2. year of studies	time pressure	0,23	0,14	0,07	0,21	0	0	0,04
		wrong choice of field	0	0	0,07	0,07	0	0	0,04
		difficulty of study	0,3	0,36	0,13	0,07	0	0	0
	3.year of studies	time pressure	0,06	0	0,1	0,18	0	0	0
		wrong choice of field	0	0	0	0	0	0	0
		difficulty of study	0,11	0,25	0,2	0	0	0	0
GHLT	1.year of studies	time pressure	x	0,07	0,09	0,2	0	0,03	0
		wrong choice of field	x	0,07	0	0,2	0,02	0	0
		difficulty of study	x	0,07	0,27	0,1	0	0	0
	2. year of studies	time pressure	x	x	0	0,1	0,04	0	0
		wrong choice of field	x	x	0	0	0	0	0
		difficulty of study	x	x	0,17	0	0	0	0
	3.year of studies	time pressure	x	x	x	0	0	0	0,02
		wrong choice of field	x	x	x	0	0	0	0
		difficulty of study	x	x	x	0.09	0	0	0
CP	1.year of studies	time pressure	0,06	0,07	0,14	0,14	0,05	x	x
		wrong choice of field	0,06	0,04	0,09	0,09	0	x	x
		difficulty of study	0,24	0,14	0,45	0,36	0	x	x
	2. year of studies	time pressure	0,17	0,17	0,26	0,38	0	0	x
		wrong choice of field	0,1	0	0	0	0	0	x
		difficulty of study	0,45	0,25	0,26	0,25	0	0	x
	3.year of studies	time pressure	0	0,17	0,2	0	0	0	0
		wrong choice of field	0	0	0	0,13	0	0	0
		difficulty of study	0,27	0,5	0,2	0,25	0	0	0
	4. year of studies	time pressure	0	0	0,11	0,2	0	0	0
		wrong choice of field	0	0	0	0,2	0	0	0
		difficulty of study	0,38	0,5	0,22	0,4	0	0	0

(Source: own processing)

Table 3: Reasons for study interruption

Field	Year of studies	reason	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
GPhA	1.year of studies	time pressure	0,06	0	0,05	0,02	0,04	0	0
		change in legislation	xx	xx	xx	0,38	xx	xx	xx
		family reasons	0	0	0	0,02	0,04	0	0
		difficult subject	0,11	0,05	0	0	0	0	0
	2. year of studies	time pressure	0	0	0	0	0,05	0	0,04
		family reasons	0	0	0,07	0,14	0,05	0,03	0
		difficult subject	0,15	0,07	0	0	0	0	0
	3.year of studies	time pressure	0	0,13	0	0	0	0,05	0
		family reasons	0	0	0	0	0	0	0
		difficult subject	0	0,13	0	0	0	0	0
GHLT	1.year of studies	time pressure	x	0	0	0,08	0,04	0,03	0,03
		family reasons	x	0	0	0,04	0,04	0,03	0
		difficult subject	x	0	0,09	0,04	0	0	0
	2. year of studies	time pressure	x	x	0	0	0,05	0,02	0,03
		family reasons	x	x	0	0	0,05	0,02	0,03
		difficult subject	x	x	0	0	0	0	0
	3.year of studies	time pressure	x	x	x	0	0	0	0
		family reasons	x	x	x	0	0	0	0,02
		difficult subject	x	x	x	0	0	0	0
CP	1.year of studies	time pressure	0	0,04	0,05	0,09	0,05	x	x
		family reasons	0	0,04	0	0,09	0,05	x	x
		difficult subject	0,06	0,07	0,09	0,09	0	x	x
	2. year of studies	time pressure	0	0,08	0,11	0,13	0	0	x
		family reasons	0	0,08	0,05	0	0,25	0	x
		difficult subject	0,03	0,08	0	0	0	0	x
	3.year of studies	time pressure	0	0	0	0,13	0,2	0,2	0,05
		family reasons	0,09	0	0	0,25	0	0,2	0
		difficult subject	0,09	0	0	0	0	0	0
	4.year of studies	time pressure	0	0	0	0	0	0	0
		family reasons	0	0	0	0	0,17	0,17	0,2
		difficult subject	0,13	0,13	0	0	0	0	0

(Source: own processing)

After the introduction of more specific teaching methods, not only did the number of students requesting to interrupt their studies decrease, but the most common reason for interrupting also changed. The most complicated thing for students to study was fulfilling multiple social roles at the same time. They could not combine family, work and study responsibilities and were under time pressure. Family reasons included – pregnancy, childbirth and caring for infants, caring for parents, serious illness, divorce and caring for children especially on the weekend when there are classes. Time pressure was the most common reason given for the interruption – they don't have time to go to school on Friday from work, they don't have time to combine school with normal family or work obligations, they feel frustrated by unexpectedly more study obligations, many hours of practice completed on vacation.

In 2017/2018, the most frequent reason for an interruption in the field of GPhA was a change in legislation, as many students started studying GPhA as a condition for obtaining the qualification of a newly emerging non-medical profession – therapist of traditional Chinese medicine. However, after a few months, this qualification was canceled and many students lost the motivation to continue studying. But they were hoping for a re-introduction, that's why not everyone quit right away, but only interrupted. Transferring to another school of the same focus was most often justified by the students during the interviews by the shorter commuting distance to the workplace of professional practice. In individual semesters, students must complete approx. 140 hours of professional practice at the chosen workplace, which is difficult for most students due to the workload, and they therefore prefer to choose a school that allows them to practice not only at the workplace designated by the school. Another reason was the way of teaching at the

school. Some students are more comfortable with face-to-face teaching, others with alternative methods. Some students are more active in their studies, including self-study and collecting study material, while others are more passive. Younger students are more comfortable with electronic study material, while most students over 28 prefer printed textbooks. A significant reason for transferring to another school is the financial burden of studying. The main item is school fees and then travel or accommodation during school hours, often further away from home. The next is the price of study materials.

Table 4: Reasons for transferring to another school of the same focus

Field	Year of studies	Reason	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
GPfA	1.year of studies	practice at the place of residence	0,06	0,05	0	0	0	0	0
		other teaching methods	0	0	0	0	0,04	0	0
		lower tuition fees	0	0,05	0,05	0	0,04	0	0
	2. year of studies	practice at the place of residence	0,08	0,07	0	0	0	0	0
		other teaching methods	0	0	0	0,07	0	0	0
		lower tuition fees	0,08	0,07	0	0	0	0	0
	3. year of studies	practice at the place of residence	0	0	0	0	0	0	0
		other teaching methods	0	0	0	0	0	0	0
		lower tuition fees	0	0	0	0	0	0	0
GHLT	1.year of studies	practice at the place of residence	x	0,07	0,09	0,04	0	0	0
		other teaching methods	x	0	0,09	0,12	0	0	0
		lower tuition fees	x	0	0,09	0,04	0	0	0
	2. year of studies	practice at the place of residence	x	x	0,08	0	0	0	0
		other teaching methods	x	x	0	0,1	0	0,02	0,03
		lower tuition fees	x	x	0	0	0	0	0
	3. year of studies	practice at the place of residence	x	x	x	0	0	0	0
		other teaching methods	x	x	x	0,18	0	0	0,02
		lower tuition fees	x	x	x	0	0	0	0
CP	1. year of studies	practice at the place of residence	0	0	0,05	0	0	x	x
		other teaching methods	0	0	0	0	0	x	x
		lower tuition fees	0	0	0	0	0	x	x
	2. year of studies	practice at the place of residence	0	0	0,05	0,13	0	0	x
		other teaching methods	0	0	0	0,13	0,25	0,06	x
		lower tuition fees	0	0	0	0	0	0	x
	3. year of studies	practice at the place of residence	0,09	0,17	0,2	0,25	0	0	0
		other teaching methods	0	0	0	0,13	0,2	0	0
		lower tuition fees	0	0,33	0	0,13	0	0	0
	4. year of studies	practice at the place of residence	0	0,13	0,11	0	0	0	0
		other teaching methods	0	0	0	0,2	0,17	0	0
		lower tuition fees	0	0	0	0	0	0	0,2

(Source: own processing)

The share of women and men who did not finish the year in a given school year is also similar to the share of women and men among all students of the given year and field of study. Occasionally (e.g. in the 3rd year of GPhA) there was a greater proportion of women among the unsuccessful students, namely all men in the given class successfully completed their studies. However, these were classes with a minimal proportion of men compared to other classes, so a zero proportion of unsuccessful men is more likely.

4. Discussion

Adult students usually estimate the quality of their mental readiness for learning, or their personal cognitive capacity, but they do not always realize in advance what studying "on the job" entails and what the performance of a given profession actually entails. The task of the school and every teacher is to work on student motivation and study conditions without reducing the quality of studies. It is necessary to always think about work applicability in individual fields and especially the work competence of the graduate. It is beneficial to use specific teaching methods and not only improve the student's strong cognitive aspects, but also use them to increase the weaker ones, because cognitive processes do not work separately but as a complex, it is only necessary to let knowledge be guided by more developed functions.

In middle and older adulthood, an environment that increases the chance of success in studies is an influential motivating factor, the so-called Flynn effect, in which intelligence also increases thanks to a motivating environment. Or, on the contrary, cognitive development can contribute to motivation from the student towards the social environment. It is very effective when the teaching method becomes non-violent in relation to the expected way of work of the student and is preferred for the student and completely suitable for greater success in learning new knowledge. If a practical positive consequence of the effort to learn knowledge and skills is demonstrated for the student, learning is more effective, more interesting and popular for the student. Through their studies, students should not only increase their expertise but also their general creative aspiration, both of which can be trained even during combined studies by guiding them in a specific way of teaching and learning, supporting the required cognitive functions. Students should not only acquire new knowledge, but be able to use it productively and be creative, thereby moving away from the average. It is necessary to teach them to use specific cognitive processing of work activities.

Conclusion

Reasons for student failure are tracking factors for both school management and students. For them, it is a motivation and a mirror of the self-concept of the learning subject. Every student needs to experience success in relation to their demonstrated activity. Today's society is very much based on success, performance and awards, which gives a person a sense of self-worth and further purpose. However, the demands of society and individuals often do not overlap and there is a mismatch on both sides. It is then necessary to identify the cause and look for a remedy. When rooting out school failure, it is necessary to distinguish between absolute and relative school failure. At a higher vocational school, when a student can already distinguish his abilities even before starting his studies, it is usually a relative or episodic failure caused by the student's passivity towards study obligations or a temporary indisposition due to other obligations, which can again be successfully solved by teaching.

Not only because of their learning experiences, students in the combined study are able to appreciate and adjust the structure of the learning process, they know that it is beneficial or even necessary to spend enough time to gain initial knowledge of the given task in order to be successful in finding the right solution, and it is not always beneficial to solve study obligations mechanically learning not only because of its limitations with increasing age. Although the speed of cognitive processing of information slows down at an older age, it is possible to balance the cognitive decline with specific training using cognitively focused teaching methods not only with a greater amount of knowledge and experience accumulated throughout life and thus increase success in studies regardless of age or other family or work responsibilities of students of combined studies. Repeated success using effective teaching methods increases success in studies and an individual's self-confidence to learn, which has a reciprocal effect.

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Innovations in the educational process in the context of contemporary society

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Abstract:

We perceive teachers as important agents of society, which, based on prescribed education and laws, entrusts them with the power to influence the ideas, attitudes and behavior patterns of young people. Teachers are also responsible for the upbringing and education of students, thereby also introducing them to social life. In the article, we deal with innovations that teachers encounter in the performance of their profession. We also offer the results of research related to the performance of the teaching profession, which we have carried out.

Key words:

educational process, school, social conditions, society, innovations, teacher

Introduction

The best prerequisite for a future teacher to be well prepared for his profession is his personality. This assumption is related to the fact that the teacher educates and educates not only the students, but also himself, points out Janík (2009). Among other things, however, every teacher should have mastered the curriculum, didactics and issues in the field of his field. Of course, the teacher cannot bear 100% responsibility for the student's behavior, just as a cook in a restaurant is not always fully responsible for the taste of the food that was brought to him and which he later processes. According to Šafránková (2019), the method of performing the teaching profession not only affects the student's behavior, but also the individual life path.

1. The teacher and the educational process

At the beginning of the modern age, the idea of education began to include respect for the uniqueness of the child and his individual possibilities. Basically, J. A. wanted to promote this idea much earlier. Comenius, which made him a forward-thinking philosopher for his time. Then later in modern times, another philosopher J. J. Rousseau began to forge a new approach to the specific world of the child (the work Emil or about education). With this work, he also tried to point out morality (Anitha, 2014). As a teacher, I would, for example, he did not allow yelling at a 6-year-old child, because it is certain that his reaction will not be identical to the reaction of an adult individual, who might even pretend not to hear anything and prefer not to notice it. The child should therefore be the center of the educational process (Miškolciová, 2008).

In the course of the 20th century, due to the emergence of various pedagogical movements, the school began to be demonized and the family overly idealized. There was even a period of social pressure on teachers and failure to exercise their authority. However, not only are the influences of family and school on the child not mutually exclusive, they even complement and support each other. According to another philosopher, Dewey (In Suchožová, 2014), the process of raising a child should not only focus on intellectual activities, but also on practical knowledge and skills, and at the same time attention should be paid to creating social relationships with other people. I also generally consider practice in life to be significantly more essential than theory, which is used in life on a significantly smaller scale than practice. Properly, school should adapt to life as much as possible. And as for social relationships, they are extremely important, because without them there would be no marriages and the continuation of the human race would not be ensured. Professionalism is an idealized model that serves as a "guide" for comparing the development of other professions. The question of professionalization of the teaching profession is both a theoretical and a practical matter (Balogová, 2016).

Due to conflict situations in society, teachers in developed countries went through self-awareness processes and developed political, professional and organizational activities through which they managed to achieve real improvement and ensure the performance of their profession. The definition and concept of professionalism create a theoretical model framework that was developed on the basis of a whole series of concrete processes. The abstract nature of professionalization models places teaching in the group of professions that require demanding preparation and complicated operation. It is clear that when an unprepared teacher comes to my class, the class will look chaotic, as the lesson plan will not be set and the teacher is forced to improvise and act quickly (Turek, 2014).

In order to understand the slow pace of change in professional practices and education, we need to realize that this results from the very nature of professionalism. Professions represent patterns of selected types of jobs that have highly developed systems of norms derived from their particular role in society. Norms and special roles of professionals require a clear understanding (Porubčanová, 2016).

Since the time of the Enlightenment, the state has assumed responsibility for the spread of education and, by implementing educational programs, delegates individual schools. institutions. The state retains the organization of control of educational programs and their accreditation (Chráska, 2014; Vašutová, 2007).

The teaching profession itself went through three main directions of development:
1. The trend towards professionalization and independence of the profession means that teaching gradually became a separate profession, teachers do not carry out the activities to which they lead their pupils – e.g. a teacher who teaches history is not a historian himself.
2. The trend towards general influencing of student development means that the teacher does not only teach subjects, but prepares the youth for social life.
3. The trend towards specialization and particular action means that the teacher meets the students temporarily and for a relatively short time during the lessons, this phenomenon is noticeable in Slovakia from the 2nd grade of primary school (Šafránková, 2019).

Two other secondary trends can be added to these three main ones:
1. The trend towards intensification of action means that with lower numbers of pupils, the individual approach is strengthened and the educational activity becomes more effective.
2. The trend towards the democratization of the profession means the gradual equalization of differences in the requirements for the training of different types of teachers, the same availability of professional status for men and women is promoted (Lengyelfalusy, 2009).

It is said that choosing a teaching profession is a "certainty". Every future teacher has the opportunity to become familiar with his future profession and form basic ideas about what his job will be, what his working conditions will be like, colleagues... The internal reasons for this choice tend to be diverse (Grob et al., 1991). It can be some excellent teacher whom the adept of the profession met during his schooling and identifies with his work model. It is a similar case as when a descendant brings up his descendant according to the pattern of his own parent. The case of identification with the work of a teacher also concerns us personally. The idea of a future teaching career always contains something of authority or the possibility of influencing other human beings.

Teaching is always about working with ideas, but at the same time it is based on influencing others (Klein, Cornell & Konold, 2012). Influencing is institutionalized, so the teacher can rely on official regulations and regulations. Many teachers find self-fulfillment in the possibility of self-expression through professional knowledge. For teachers, a certain form of self-denial is also expected during the performance of their profession. At the same time, some characteristics cannot be expressed very much: private worries, fatigue, worries.... The public demands a serious performance from teachers as it does from artists, but with the difference that public recognition

is not much expected. So teachers operate in quiet glory. They are also required to be humane or respect for the human being, as the teacher introduces his students to a shared world and is socially responsible for himself and other people (Barnová et al., 2018).

2. Innovations in the school environment

In the course of the 90s of the 20th century, the idea of free competition of various pedagogical concepts, the idea of equal chances in the field of upbringing and education, and the idea of freedom and responsibility is increasingly being promoted in education. These ideas support and evoke respect in various innovative manifestations such as the recognition of the change in the role and function of the school, the internal organization of the school, the transformation of mutual relations between individual actors, transformations in the field of education, the use of effective methods and forms of work. Innovative expressions gradually led to the promotion of long-term school development planning. The idea of a new educational policy enabled the development of pedagogical creativity, which resulted in the creation of own school educational programs (Barnová, Čepelová & Gabrhelová, 2019).

From the point of view of the school system, we can define three basic types of innovation processes: a) innovations caused by economic and social needs, the aim of which is to adapt school education to the needs of the labor market (Tangney, Baumeister & Boone, 2004). However, this trend may not respect the interests and needs of individuals who must adapt to the policy of using human resources; b) changes in internal processes (school climate, material equipment, changes in relationships) – many schools are adapting to new socioeconomic and political conditions. The management of schools enables conceptual changes on the outside, which enable in practice to promote innovative elements in the personnel, pedagogical, economic and legal fields. Innovation processes initiated from below by individual actors, especially teachers, cause that unless the teacher feels supported, he usually abandons the innovative element after a certain time or only uses something from it (Lukáč, 2021).

Change means a certain uncertainty as it causes both rational and irrational emotional reactions. One of the reasons why some people do not want organizational changes is the fear that they will lose something they value, such as loss of power, means, freedom of decision, friendship and prestige. When they reject changes, they think primarily of their own interests (Suharni, Taruno, & Khairudin, 2017).

As for the changes in education, they are changes that the school can carry out, e.g. already during the creation of the school educational program, in a more effective organizational structure, where some schools join together and create the so-called united schools (Caldarella et al., 2015). Some reactions to changes also mean the solution of classes, teaching and study fields or even the cancellation of the school. We can respond to changes with a development concept, but unfortunately also with a concept that brings about the disruption of ineffective educational programs (Králová & Lengyelfalusy, 2010). The changes also concern the internal life of the school (school climate), change in management style (e.g. authoritarian to democratic, which requires greater employee participation), delegation of powers (e.g. middle management), creating a support system for pupils (school psychologist, career counselor and etc.), to make the offer in the field of informal education more attractive, i.e. respond to the interests and needs of pupils (Forsberg et al., 2014).

Deepen the school's cooperation with the external environment (municipality, other organizations and abroad), create the school's image, etc. First of all, however, each school must engage in self-evaluation (map its strengths and weaknesses, external and internal possibilities) and only on their basis approach the creation of development goals and concepts. The importance of innovations in education is great and it is a promise of higher quality education. It is a permanent change and it leads and brings the changing school closer to the already formulated goals of social development, organizational and structural change (Gailliot, Baumeister, 2007). Innovation represents new pedagogical concepts, the practical introduction of new elements into the

educational system and thus its improvement. Innovations are closely related to greater autonomy and are the benefit of new, high-quality approaches and concepts in the educational process. These are new positive changes that are complex and mostly planned. Innovation efforts aim to achieve changes that are usually proposed by educational institutions, schools or teachers (Wilhelm, Dewhurst-Savellis & Parker, 2000). They can affect changes in the structure of the school, its content, methods, forms, values. Innovations in the field of education have recently been a well-known term in educational policy and pedagogical research, not only in our country. The European Union supports innovation in all member states. The essence is to adapt to world trends and thereby move towards a positive improvement in the quality of educational and educational work. The idea of something new and unusual, the idea of addressing unfulfilled social needs and values, the idea of the problem of power, the idea of change is essential (Veteška, Kříž & Koubek, 2020).

In connection with the issue in question, we conducted research in which 287 students of teacher study programs of the University of Prešov in Prešov took part. Through our questionnaire, we asked our respondents what motivated them to study the teaching profession. According to the answers, parents and family members influenced them the most. This was the answer of a third of respondents (34.49%). They were also largely influenced by their friends (27.18%). A fifth of the respondents (21.25%) had long desired to become a teacher. 14.29% were influenced by their teacher in this regard. 2.79% of the respondents answered that they decided to study the teaching profession on the basis of their previous studies at primary or secondary school. The order of answer selection was different for male and female respondents. According to their answers, respondents were most influenced by parents and family members (41.77%). They also marked the answers "old desire to become a teacher" (23.93%), "teacher's influence" (19.02%), "friends' influence" (12.27%) and "experience from previous studies in primary or secondary school". (3.07%). Respondents of male students were most motivated by the following factors when choosing a teaching profession: primarily it was the influence of friends (46.77%), the influence of parents and family members (25%), the old desire to become a teacher (17.74%), the influence of a teacher (8 .06%) and experience from their previous studies (2.42%).

Figure 1 **Motivation for studying the teaching profession**
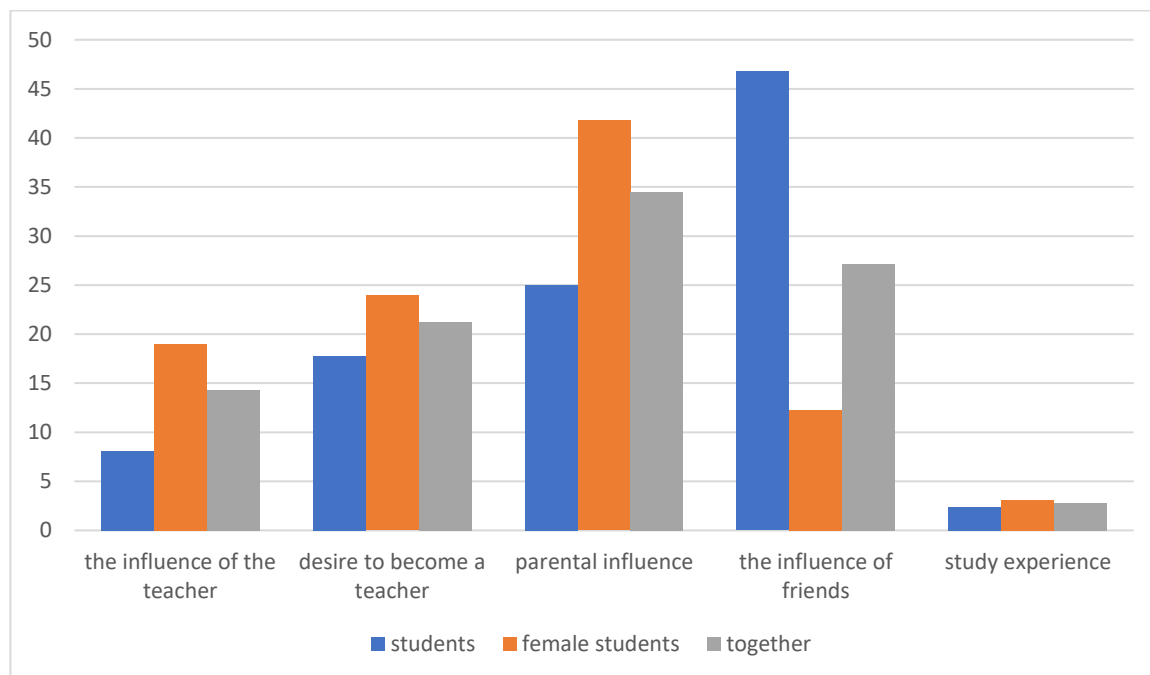
Source: Own processing

We also asked our respondents what, in their opinion, a teacher should be. A third of the respondents (33.45%) stated that the teacher should first of all be a partner for his students. More

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than a fifth of the respondents said that the teacher should mainly be an advisor to his students (22.65%). 20.91% of the respondents pointed out that the teacher should be an expert in his field and 18.82% of the respondents reminded that the teacher is also a role model for his students. For 4.18%, the personality of the teacher is a confidant. According to the survey results, the perception of the teacher's personality according to the opinion of male and female students, i.e. male and female respondents, is different.

A third of the female respondents consider the teacher mainly as an advisor (28.83%), the majority of the male respondents stated that the teacher should be a partner for his students (47.58%). Respondents further appealed to the fact that the teacher is a role model for his students (23.31%), they also prefer a partnership approach (22.70%), in their opinion it is important that he is an expert in his field (17.79%) and confidants (7.36%). The male student respondents, in addition to the partner approach, which in their opinion is the most important in relation to the performance of the teaching profession (47.58%), also prefer his expertise (25%). 14.52% appreciate the fact that the teacher is also an advisor and a role model for students (12.90%).

Figure 2 **The teacher according to the opinion of the respondents**
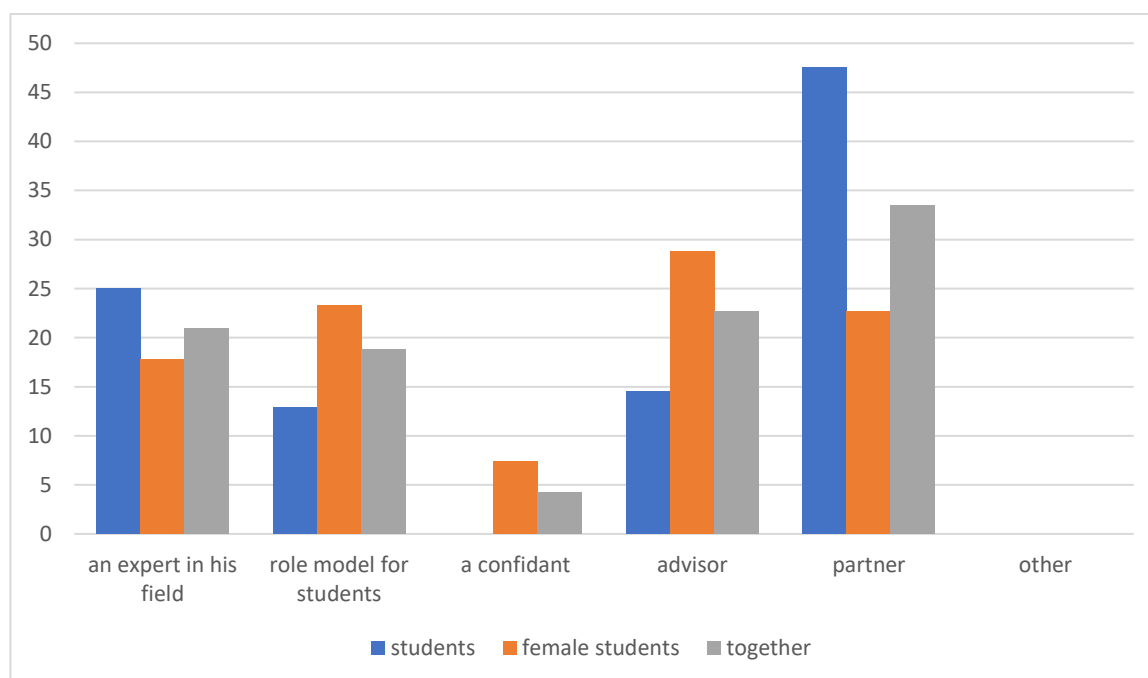
Source: Own processing

In connection with the previous question, we also conducted a survey to find out how the respondents perceive the teaching profession. More than half of the respondents are aware of the demanding position of a teacher. As many as 51.92% of respondents chose this answer, of which 54.84% were male and 49.69% were female. A third of respondents perceive the teaching profession as a mission (30.31%), this is what 33.06% of male students and 28.22% of female students who took part in the survey that we conducted said.

17.77% of respondents drew attention to the reduced status of the teaching profession, which is very often discussed nowadays. 12.10% of respondents and up to 22.09% of female respondents drew attention to the reduced status of the teaching profession in their answers to this question. Figure 3 highlights the comprehensive survey findings.

Figure 3 **Perception of the teaching profession according to respondents**
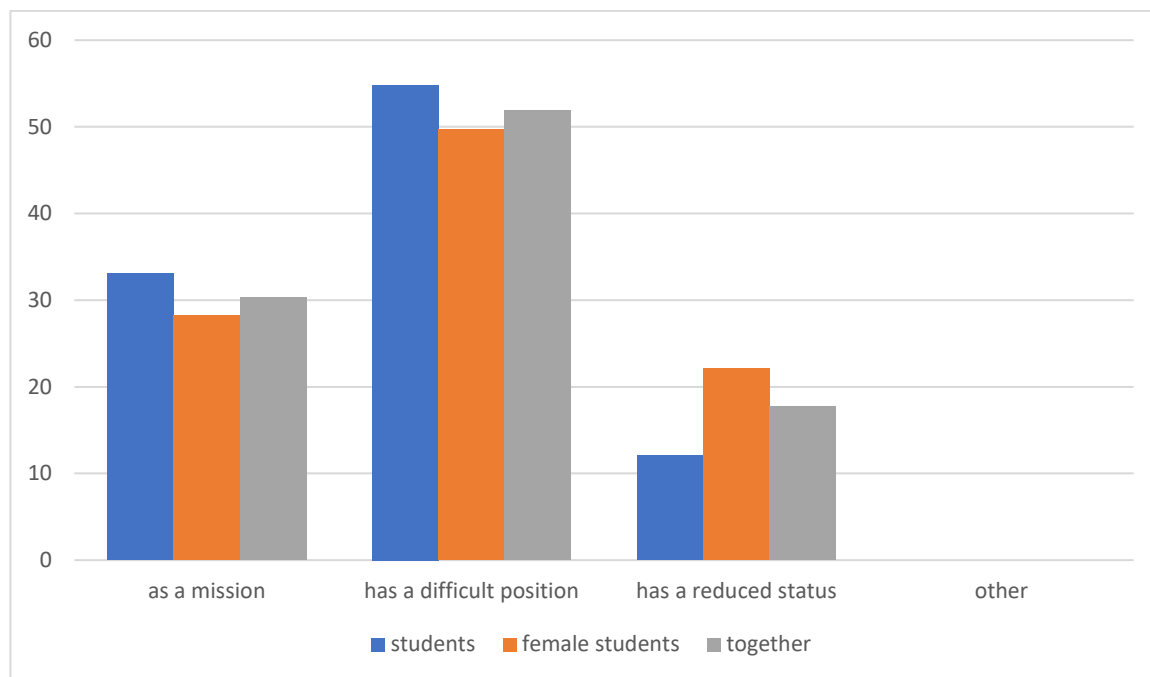
Source: Own processing

We also asked the respondents students of teacher study programs, which educational methods they prefer within their studies. We can look at the problems in contemporary education and the application of educational methods in education from different perspectives. We present interesting findings that we obtained based on the students' answers to the mentioned open question in the questionnaire. Respondents most often stated that the problem is the amount of theoretical information that is characteristic of their lectures.

"Only once in all my years of study have I met a teacher who tried to lead her classes through discussion and really led us to critical thinking. These classes were challenging but stimulating." "I appreciate it when the teacher gives us space to express ourselves. It's challenging, not that I don't have my own opinion, but because I've never been asked to express myself in this way in education, and even though I knew about this teaching method from my friends' stories, I was surprised that someone wanted me to she expressed." "I prefer classes that were conducted in the form of dialogues and the final assessment was mostly essays or reflections. This kind of education was rewarding for me." "Given that we have a global pandemic here, the teaching was transferred to the online environment even before it started. Since I can't compare the differences between face-to-face and distance learning from a student's point of view, I will focus on what I found problematic. Presently, face-to-face lectures and seminars suit me. Personal contact with teachers in classes cannot be replaced." "For example, the teaching of exercises in a foreign language itself is difficult. In this case, the most important thing is the conversation."

Conclusion

The goal of innovations is to introduce new elements into the educational system and thereby improve its quality (Foldi, 2021). Innovative efforts, according to Kolář (2009), which follow certain changes, usually come from individual schools, from teachers, but also from the sphere of science, professional workplaces, school institutions. Innovative efforts are linked to a certain social context, which conditions interests in changes and gives incentives for these changes. If the teacher is to successfully use these new stimuli, it is necessary for him to have a deeper knowledge of their substance and meaning (Lengyelfalusy, 2009).

An example can be open teaching or alternative schools. If people do not fully understand why the changes are happening and what their connections are, then they will start to resist them.

A misunderstanding of the intention and the result of an organizational change occurs when there is insufficient trust between the individual and the person who initiates the change (Emeghara, 2020). Those who introduce changes tend to see their positive consequences, while those affected by them tend to see their costs and problems. At the same time, the change is related to the expansion of the powers of employees, which can be carried out by delegation and empowerment.

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Model of further education of teachers in the field of personality-social development

Adriana Pavlikovská

Abstract:

The article is about the importance of further education of teachers in the field of personal and social development. It represents an educational model divided horizontally and vertically. The horizontal plane depicts the issue from the point of view of building up six areas of human life. The vertical plane expresses emotional areas. The presented model of continuous education of teachers in the field of personal development is presented as a pilot and is a part of dissertation research.

Introduction

In a contemporary civilization, adult learning is given the high importance in the context of a lifelong or continuing adult education. The term education can also be used in a professional sense to refer to the term education, i.e. the process of guided learning and teaching that takes place in a school or other educational setting within adult education. It is a process that involves educational activities carried out by adults in a formal and a non-formal education. This issue is considered to be a topical and significant item in the development of the human being and the teacher in particular. The Labour market provides many opportunities for their professional and personal development, and it is only a question of how individual institutions will stand in competition with motivating components. Thus, the process of education in the education system, which includes not only the development of teaching and non-teaching staff, but also of the institutions themselves (kindergartens, primary, secondary, and higher education institutions), is an essential means of the development process. (Veteška, 2014)

The topic of this article is the issue of further education of teachers in the Czech Republic in the field of a personal and a social development. Why the field of personal and social development? We all live in a time that is constantly on the move, and the centre of this changing time in the world of education is above all the teacher, who is the first of all a human being. And a man is not only the creator of a change, but he can also influence it and is himself influenced by it. Every man, in whatever centre of his/her life, is constantly exposed to the various influences of the outside world, and obstacles and tasks of various kinds are thrown at him which he has to overcome. Someone overcomes them with ease, someone with difficulty but copes with them, and someone becomes a victim of them. A life brings a man into various situations and exposes him more often than not to negative factors affecting his own being. Then he looks for new and new solutions, tries to navigate as best he can in unexpected situations, creates suitable conditions for his own life and thus becomes a part of the changes. There is thus a progressive change in his personality. We call this process a personal and a social development, which is also becoming established in the pedagogical world - in the lives of teachers - and which is closely linked to psychology, pedagogy and sociology.

For a better orientation in this broad area, for the support and systematic application of this process, we have created a "Model of teacher training in the field of personal and social development". With the help of this model, the article gives an explanation and orientation in the interconnectedness of the mutual areas of the external and internal world in the system of existence of a person-teacher and the different environments in which he moves.

1. The concept of "Personal and Social Development of Human"

What is a personal and a social development? Before we start talking about it, it is important to explain the concept of 'personality. This term comes from the Latin word 'persona', which means the mask that actors in ancient Rome put on during theatrical plays to give them a certain appearance. Persona was thus something that expressed both what a person looked like and what the role they were playing. Later on, the term came to be included in describing a person's form - what a person is like and what their character is like, and in the contemporary context, the term persona is associated with the appearance and glorification of someone who is being shown appreciation or admiration. (Petruželová, 2009)

A person's personality does not have a permanent character, it is something that is constantly being formed, changing and shaped under the influence of various events and situations. Thus, as Kohoutek (2000) states, personality is actually a product and at the same time a co-creator of the social cultural and historical humanity, the basis of which lies in the genetic endowment of the organism of each individual.

Průcha and Veteška (2014, s. 201) pay a lot of attention to the definition of this concept in their source, who perceive a personality as one of the basic concepts of psychology with relevance for andragogy, pedagogy, and personal science. They present this term as: *"a complex and relatively stable system of psychological and physical characteristics of an individual, which functions as a whole and manifests itself in reactions to various stimuli and situations, in interaction with other subjects",* with the basic consideration of the fact that personality is formed from an early childhood under the influence of the family environment in the course of the overall socialization and acculturation of the individual. They attribute to personality its basic features, expressing in particular (1) the individual's relationship to other people, to society, to work, to education and to the concept of self, (2) intellectual and manual abilities, (3) temperament, (4) ways of thinking and behaving and (5) communicative abilities.

Smékal (2002), believes that a healthy personality is at each moment the result of a previous process and a preparation for the following co-creation. A person who ceases to consciously seek and pursue his or her life path may survive as an organism, but his or her personality dies. It follows that development is progressive in nature and, according to Čáp (1996), it is about improving and refining the present state of a person's personality, developing it from a simpler form to a more complex, more perfect one.

Every person is original and unique, and it is his difference from all other people that makes his personality his own. And when we talk about a personal development, we are also talking about an individual and a specific approach to each person. Explaining the process of personal development is very difficult because everyone perceives it in his or her own unique and an unrepeatable way. This is because it is an individual experience that each person experiences differently and therefore it is virtually impossible to describe the changes in this process (Glauser and Bozarth, 2001).

However, if we want to achieve any development, it is important to learn to adapt to change and to our surroundings. Also the author Toman (1996) says that the whole humanity has been developing for hundreds of thousands of years, which has always been characterized by dissatisfaction with the achieved state and if someone succumbs to the feeling of permanent satisfaction with himself and does nothing more for his development, he will start to fall behind. Already in the ancient past, Greek philosophy combined in man the three stages of being -physical, mental and spiritual-in a higher value, designating man first as a rational being, later as a social and then as a political being. A life was regarded as a task in which a man was to acquire education and develop himself, for general education was to cause the soul to become refined and not merely the intellect. Plato regarded the refinement of man's soul as a great virtue which existed before the body and was banished to the material world and was to be developed to higher degrees through the body. Aristotle regarded the soul as substance and the body as a form. He categorized three types of souls from the lowest level to the highest: 1. vegetative, which was the lowest for all

organisms, 2. sensible-which was capable of movement, perception, and feeling, and 3. rational-capable of thought and knowledge. The development of a man combined into three components of education-physical, moral and intellectual, and just as nature linked all three souls within man, so society enabled man to educate and develop.

The authors Kolář, Nehyba and Lazarová (2011) have very aptly specified a personal and a social development, divided it into six levels and the last one was the inspiration forthe creation of the educational model of teachers in personal and social development. They are the following planes: the path to the fulfillment of the ideal, the Mover of social transformations, the Process of mental development of a man, the Form of an active life, Preparation for a quality life, Promotion of professional cultivation.

The level of personal and social development as a support for professional cultivation is seen through the lens of preparation for future or existing professions. The appropriate personal and a social profile of the worker plays a very important role in perhaps every human profession. In some of them, this role is so fundamental that the subject of a personal and a social development is permanently embedded in the curriculum of their professional training. A worker with an appropriate personal and a social profile plays a significant role in every human occupation and is therefore not only a preparation for the professions, but is also becoming a common specialized personal preparation for e.g. managers and supervisors (Smékal, 2008). Therefore, a personal and a social development becomes the task of educators in institutions (universities, higher vocational schools, further education institutions....). Non-institutional support, such as a supervision, mentoring, coaching, etc., is also becoming very important (Kinkor and Baštecká, 2009). The main goal is to focus primarily on quality of being, prevention of a possible life difficulties or acquisition of professional skills that will enable the most effective work performance (Lazarová and Knotová, 2008).

Personal and Social Development and Teacher

The issue of a personal development is currently a hotly debated topic, especially in the field of education. Let us ask ourselves the question, why should teachers be educated in the field of a personal and a social development? We answer the question by asking. How does the society view teachers? They are looked upon as people who are expected to be individuals with a mature personality with a broad political and cultural outlook, expected to be highly professional erudite and expected to be of the utmost psychological equilibrium. It is true that a teacher should possess a broad professional outlook, a set of pedagogical competences that are the necessary basis for good work and communication with pupils, a good cooperation with pupils' parents, superiors and colleagues. A very nice characterization of a teacher was made by Nelešovská (2005), who stated in her source that a teacher should be a person who is a driving force for social change and progress and at the same time should transmit traditional cultural values.

However, how to access these values in today's hectic world? Let us look at the life of a teacher through an objective lens. The Donath-Burson-Marsteller surveys in cooperation with the Association of Institutions of Adult Education of the Czech Republic and Factum Invenio (2009), Adult Education Survey (2016), Labour Force Survey (2019) aimed at investigating adult education in the Czech Republic have shown that not enough attention is paid to adult education, that the quality of courses is quite uncertain, the offer is opaque and especially teachers are faced with financial barriers, time constraints and a lack of motivation. It is the teacher who needs to develop throughout his or her working career, who needs support to develop not only his or her professional skills, but also, as mentioned above, his or her personality.

Research has also been carried out on the conditions of teachers in other countries, such as Romania, where basic questions have been investigated: to what extent have different training factors contributed to the development of teachers' competences and what are the roles of teacher education to produce well-prepared teachers for the future. Two conclusions were drawn. One was that initial teacher education provides a small part of the necessary competencies and teachers

need to be prepared for the role of lifelong learners in order to be able to face all the challenges and professional demands in their careers. The second conclusion was that in order to have well-prepared teachers for their professional future, it is necessary to apply lifelong learning principles in teacher education, many of these principles are accessible and practical to implement but introducing a compulsory lifelong learning course seems to be difficult but not impossible. (Marcut and Kifor, 2017)

In the context of their country, authors Khan and Afridi (2017) state that the process of professional development of a teacher begins after admission to the profession if someone has the required qualifications and meets the eligibility criteria. Thus, the initial professional qualification provides the basis for the future professional growth and development, therefore, proper professional qualification becomes a prerequisite for the future professional development. Considering this, the whole process of teacher professional development could be divided into three parts: 1.the professional qualification of teachers, 2.the introduction to the teaching profession, and 3.the process of the professional development, which the author of the article adds that professional development includes both professional and personal areas in equal proportion.

Personal and Social Development and Psychology

The term personality can be associated with the meaning of a person's extraordinary and highly distinctive qualities. Or, as psychology indicates, personality may not only be considered a person who is exceptional and memorable in some way, but as Smékal (2005) states, every person is a personality, it depends only on whether his personality is primitive, simple, or richly developed and refined.

Many developmental psychologists agree that an individual becomes a personality at the point of separation from the mother, awareness of self as a separate entity, and identification of self as "I" (Kohoutek, 2000 and Vágnerová, 2005).

A person's "self" is formed throughout his/her life based on his/her own human resources and, of course, the influence of the external world. At the same time, a person develops a certain capacity of resilience to the external world and this is very individual for each person. Among the own human resources are mainly traits, attitudes and abilities. Traits are hereditary and are naturally inherent in human beings and either do not change throughout a life or a change spontaneously without direct influence. In a way, a person can dispose of them to a large extent. They represent deeply ingrained components of the human personality that are inherited. Whereas attitudes are not directly inherited. They are acquired in the course of one's life, and this acquisition is mostly an unconscious process. Attitudes also include two distinct subsets: beliefs and motives. Opinions are subjective reflections of what people think and believe. Motives are also a subjective reflection, but of what people want. And although most opinions and motives are formed by unconscious learning, some are fully conscious. Some attitudes are hidden in the unconscious, or are only partially realized, or in variously named forms. This so-called "distorted" perception is more acceptable to him or his environment than reality. This can often permeate life as a distorted image of reality and therefore it pays to listen well to what people say, to think about it and to be guided by one's inner voice. (Plamínek, 2010)

We used Nutbeam's (2000) three levels of psychological competence to describe basic psychological competence according to Nutbeam's (2000) conception of health: 1. basic/functional, 2. communicative/interactional, and 3. critical.

At the basic/functional level, the teacher should know basic psychological terminology and use it correctly, understand the recommendations of professionals in the psychological assessment of the pupil, work correctly with psychological data on pupils and their diagnoses, interpret the results about them, and, if he/she is authorized to do so, should be thoroughly familiar with the psychological service system.

At the communication/interaction level, he/she should be able to apply psychological knowledge in everyday practice and transform it into his/her pedagogical and life competences.

This means that he/she should apply the knowledge of social psychology in the management of his/her classroom and in the performance of his/her tasks as a classroom teacher. He should be able to apply an individual approach to pupils with learning needs and, above all, to develop his self-knowledge and his personal and professional competences.

At a critical level, the teacher is expected to be able to evaluate and apply the contribution of psychological knowledge to educational practice as well as to his/her personal life. This means that he/she can critically evaluate irrelevant information presented, for example, in the media and select from it only that information which is beneficial in the field of educational psychology. A critical level of psychological education expresses personal and social responsibility. It is the highest level of cognitive competence, which helps a person to critically analyze information and, consequently, is able to use this information to gain greater control over his/her own life, his/her work, and the situations and events that occur in it. The teacher gains information and opportunities to critically evaluate the external world and, in the context of mental health prevention, this then leads to responsible choices of strategies in his or her personal and professional life. He gains greater resilience in social contacts, work competencies and family life. He is able to remove barriers, prejudices, myths and achieves the ability to critically evaluate the publicly presented image of this world, and this enables him to be more ready to act and actively participate in community development and responsibility building.

Personal and social development and sociology

The social skills of a teacher depend on the environment in which the educational process takes place and in which he/she realizes his/her personal life. It is the teacher's interaction with the outside world: with pupils, parents, supervisors, colleagues and all participants in his/her life. Although the outcome of the interaction depends on all the actors involved, it is the teacher who, by virtue of his or her professional role, wants to consciously influence the course of interactions at school. The teaching profession is extremely demanding in terms of the variability of social skills and the demands placed on teachers in this respect are extreme compared to other professions.

Social skills can be understood as prerequisites for appropriate social interaction and communication, which are acquired through learning. Social intelligence, interpersonal intelligence, emotional intelligence, social skills, pedagogical tact - are terms that express part of the teacher's abilities and skills for psychologically adequate cognition and control of oneself and dealing with other people (Čáp and Mareš, 2001; Goleman, 1997). For example, based on Gardner's approach, Goleman distinguishes elements of emotional intelligence related to the self: self-awareness, recognition, expression and control of feelings, needs and thoughts, etc. and elements of interpersonal relationships such as empathizing with another person's situation, listening, understanding another person's point of view. Thus, the social skills of a teacher are those related to communication, social perception and social cognition, self-knowledge, self-reflection or creative conflict management.

Attention will be paid to those skills that apply and contribute to the creation and development of good interpersonal relationships at school at different levels, but above all to relationships with oneself and with people who are important and necessary actors in the teacher's professional and personal life.

None of these skills claims to be more important. After all, it is not even possible to make a general determination, because the use of a particular skill always depends not only on the teacher, but also on other conditions, both on the part of the child (colleagues, parents) and with regard to the overall situation. All skills also intersect and combine in different ways. More generally, the basic elements of social skills such as getting to know each other, trust, creating a favourable emotional atmosphere, giving support and help, showing tolerance and responsibility play an important role in all longer-term interpersonal relationships.

Personal and social development and pedagogy

In the social sciences, the question of what is crucial for a human development is emerging. Whether it is biological factors or, on the contrary, social factors, i.e. the processes of socialization and upbringing. An interesting view was held by Wroczynski (1968), who distinguished two different approaches, namely pedagogical psychologism (naturalism), which is understood as a process of individual growth and development that has a biological basis and relies on the findings of psychology. Another approach is pedagogical sociologism (sociologism) explained as a social process developing based on the influences of the social environment. Modern pedagogy today respects both biological and social influences.

In the issue of teacher education in the area of a personal and a social development, it is a process that acts on the adult in social situations in an authentic setting and a positive outcome is expected in changing his/her personality. Thus, we are talking about an andragogical process which, unlike the pedagogical educational process, is less prescriptive, regulative and directed towards the conscious self-development of the adult. An educated teacher in the field of OSR receives help and support in situations that he/she has to face in life and work, which he/she is able to cope with thanks to the new quality of personality and character qualities (Pavlov, 2015).

Part of pedagogy is didactics, which deals with the phenomena, forms, procedures and goals of education. In the issue of teacher education in the field of personal and social development, which is implemented through the educational agency, didactics deals with three basic issues:
1. Why educate teachers, with what aim and what do we want to achieve?
2. What is the content of the training?
3. How do we educate; how does the education take place and what do we choose means, methods and forms?

We focus on affective goals, which are primarily concerned with human attitudes related to emotional orientation, and cognitive goals, which focus on the acquisition and mastery of knowledge, skills, and habits and on holistic growth. In pursuing didactic objectives, we follow certain principles and meet requirements such as appropriateness, that is, the objective must be consistent with the environment in which the teachers find themselves, taking into account the family status, the climate of the teaching staff, and the age of the teacher. Then there is verifiability – ongoing verification that the training is understandable and satisfactory to the participants, and the use of questionnaires to verify the extent to which the training has impacted on their lives. An equally important principle is consistency, which is characterised by the consistency of the training content with the requirements of the participants and with the trainer's belief in the usefulness of the training.

Consistency is a principle based on clarity and adherence to the basic rules of training (acceptability, understanding, empathy, creation of a pleasant environment, control of the internal climate...). Another principle is to respect the taxonomy in the affective domain, which according to Kratwohl (in Turek, 2004) means focusing on the incorporation of attitudinal value into the character structure of the personality, integrating this value, appreciating it and accepting it.

2. A model of teacher education in personal and social development

Fig.1: A model for teacher training in personal and social development
Source: own elaboration

Structure of the model

The model (Figure 1) represents teacher education in the area of personal and social development. For the horizontal plane, we have chosen a division according to the areas of life - environment, which was inspired by the Czech psychologist, educator, theologian Maximilián Kašparů (Švamberk-Šauerová, 2018). For the vertical plane, we chose the classical division of emotional intelligence, while the vertical plane is further divided into external and internal planes: internal – self-awareness, self-regulation and self-motivation, which influence the degree of satisfaction of the inner world of a person, and external – empathy and social competence expressing his relationship focused on the external world.

These are the domains that influence the degree to which he experiences himself and the external world. With the help of the questionnaire we are able to capture and clarify the different areas of the horizontal and vertical planes and to direct the client to orient himself to himself in these areas and to find out which of these areas have reserves in his life. Based on personal interviews and a valid questionnaire prepared, we are able to specify the client's individual problems. At the same time, it is very important to clearly specify and anticipate the possible way of the proposed way forward and to select appropriate topics for lectures and seminars.

The horizontal plane is built on the priority areas of a person's life that make up the complexity of his existence. For the basic orientation we used the six areas of life from the so-called six walls of Maximilian Kašparů as a means to find out the level of quality of life of a teacher in his individual areas (future, family, friends, work, background, spirituality). The future is the totality of all the events that have not yet taken place in a life. They are events that have not yet taken place, that are present only on the timeline of the sequence of phenomena, that is, they are only potentially present, they have yet to be realized. Each individual teacher, whether consciously or unconsciously, shapes his future, and this depends on what his goals are, what his will is, what his relationship is to himself and to the outside world, how he works with self-knowledge, self-confidence and, above all, on the perspective he has created, i.e., on the perspectives of his future. In order for this area to work in his favour, it is important that he learns to work with his visions, the goals he has set himself and that he understands the importance of persevering in achieving them.

When building the family area, it is important to think about the family climate in which the teacher lives, in what relationships he or she lives his or her life. Relationships with the closest people are considered the most important for any individual. As long as he is happy and secure in them, it should be a natural duty for him to maintain this state, to protect it, not to neglect it and not to take this state for granted. Relationships are very fragile and malleable. However, if one does not live in good family relations, it is important to reflect on this, to look for the causes of this unfavourable state, to look for a way to straighten it out and to bring it closer together. Every teacher is a part of his family system, he has a certain representation there, he has a role to play, and he should be able to work with his role in the family model. He or she should not only see but also understand the connections that create the real relational situation, perceive his or her past, his or her ancestors, be aware of his or her present and not forget about the future in creating relationships, especially with the children and future members in the family.

In building the friendship field, it is very important to be able to work with one's own "self", specifically the "unknown self" that is formed in self-knowledge and self-concept. The question arises as to how to live with friends in such a way that they are his helpers, do not become a threat to him, are a part of his joyful life, and share life with him in good times and challenging times. As part of education according to the set model, the individual-teachers learn to work with themselves, with every part of their self, so that they are then able to seek into their lives those friendships that are based on honesty, respect and trust, and also to be able to continue to build and develop such relationships.

The working atmosphere itself is created by the staff-teachers in the team, they sign with their personality, their qualities, their temperament, their character, their attitudes. Each one is a certain imprint of the whole complex and it is up to each of them how they work with the situations occurring in a given community. A training in personal development helps the teacher to know his rights and duties, teaches him to respect the agreement between himself and the organization-school, to assert his demands naturally and considerately, and teaches him to take the appropriate standpoint at certain moments, because it is not important what situations happen, but what attitude he takes towards them.

In order to create a solid foundation, a person needs to have auxiliary pillars, which we call the four pillars of life: the program -he has a certain idea of how he wants to live his life, where he wants to live it, what he tends to do and what he wants to develop. He creates his own life program. Improvisation -looks for ways to fulfill his/her life program. He finds that dreams and reality are drifting apart and exercises his creative expression without preparation. Life itself is the individual's own school of life. This means that he must first live life and in the course of living his life and living his own experiences, he seeks appropriate solutions in overcoming certain life obstacles. Regeneration - it is about re-creating his path from which he has strayed in search of a solution to his life, applying the various choices of his decision that were not the happiest and trying to bring his life into the state desired by him. Adaptation - follows improvisation and regeneration. In this pillar, the individual begins to orient himself in the reality of his life, considers the acceptability or unacceptability of the state of his life, selects favorable conditions from unfavorable ones, and when he finds the right direction for his own path, he begins to adapt in it.

For the field, spirituality is perhaps most easily defined in academic terms as something that transcends us. It is, for example, love, beauty and other inner feelings and ideas of an individual that affect them and that they try to realise in the external world and are often unique and different for everyone. The greatest contradictions stem from conforming to societal norms and a lack of love for oneself. Many people fall into false ideas of how perfect they should be in order to accept themselves, but no one will ever be perfect. It is necessary to open your eyes and look around, throw off the emotional wounds and accept yourself as you are.

The vertical plane speaks of emotions that make life full of interesting experiences, surprise, overwhelm, open life in all directions and show what is hidden in man. The Vertical Plane is an

interesting guide to discovering one's own emotional world and will also give insight into hidden corners and increase self-awareness in particular. The development of emotional and social competences has been a trend in recent years and much attention has been paid to communication, decision-making, intrinsic motivation, the importance of self-knowledge, self-awareness and the development of empathy. Many professional publications and articles have been produced on this subject-emotional intelligence, its division and research. We, for our purpose, draw on an old idea of Sigmund Freud in Radka Loja's source (2019), which states that, in the course of human evolution, the culture we live in has moved away from our instinctive powers and instincts. If we want to be psychologically healthy, we must cultivate our instinctual nature and bring our culture closer to our instinctual nature. Arguably, this path leads through the emotions.

Life happens mainly in relationships reflected in emotional intelligence, and emotionally intelligent people are exceptional in that they know how to deal with relationships and feelings, and tend to be more successful and happier in relationships. Emotions are an essential element of humanity; every living and thinking individual has an emotional quality and can work with it. Self-awareness, self-control, self-motivation, empathy, and emotional dexterity are the core areas of emotional intelligence, the first three being a manifestation of the individual's inner world and the others being a reflection for the outer world. As such, emotional intelligence affects all aspects of an individual throughout his or her life. This intelligence determines the extent to which an individual will experience joy, sadness, stress, falling in love, jealousy, and other emotions in life. The individual is born with emotions, but as J.J. Rousseau says, the autonomy of emotion must be emphasized. In this idea, Rousseau interprets that the individual should be independent by nature and should not be taught to live according to set norms of emotions. Immanuel Kant, in his philosophy, in turn, says that emotions are natural, free and cognitive, that is, those with which the individual becomes familiar during life. Thus, emotions are a part of life from the beginning of life, and whether the individual wants to or not, he or she must learn to live with them and apply emotional processes to his or her life and the lives of others as part of life's journey.

As we have already stated, the presented model is in the process of a dissertation research that seeks and explores the determinants from the given domains that motivate the teacher for his own personal and social development or, on the contrary, that hinder his further development and we are looking for the causes that cause this. A further and related step in the application of this model is the educational courses and lectures professionally and qualitatively prepared on the basis of inspiration from foreign authors Robins, 2017; Tracy, 2017; Covey, 2020; Elrod, 2016; Carnegie, 2011; Koch, 2015.

Conclusion

The article deals with the personal and social development of teachers, which is of great importance for the quality of their working and personal life. A teacher should be prepared, familiarized and educated to live his/her life in a long and full way, so that he/she transmits to his/her pupils in the best and most effective way not only his/her professional knowledge and experience, but also his/her life values and priorities. As has already been stated, the environment and profession of teaching has not been, is not and will not be easy, and the degree of psychological demand and social impact is, at times, extreme. The individual approach and responsibility of each is undeniable and crucial, but in any case some systemic help, support and facilities are needed due to the need for widespread education and social demand. It is a sensitive matter with many risks and conditions, for which we should be prepared as long as we are not indifferent to how the next generation develops, and which we should approach with great humility. It is education in personal and social development that creates the conditions and the opportunity for its improvement.

The presented model, as a form of orientation and a basis for the subsequent application of this very broad issue, which cuts across many disciplines, is in our opinion very important for a certain perspective, but also for the structuring of further education, especially at the current time,

when the society-wide awareness of the importance of education in the personal and social development of teachers is growing, but its practical application is still in its early stages. Not only the preparation for the teaching profession, but also the professional placement itself has its own gaps in personal and social development education and the provided model proposed by the author and its application in her own research, can help us to achieve the goals of quality education through balanced and personally strong teachers.

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The path to online learning at the University of Third Age or the obstacles to online education for seniors

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Abstract:

Universities of the Third Age have been providing opportunities for the senior population to learn. For decades, the usual form of education has been full-time. It was not until the global pandemic and the associated changes in educational opportunities that a new impetus was given in the form of an emergency transition to online forms of learning. In this paper, we focus on existing barriers to the use of this form of education by seniors.

Key words:

active aging, online learning, senior, senior education, the University of Third Age

Home

Nowadays, online education is already a common part of many third age universities in the Czech Republic. Traditionally, however, education at the Universities of the Third Age was associated with full-time teaching. The global SARS-CoV-2 pandemic has significantly affected these trends. In response to the rapid increase in cases of this disease, the government has banned the personal presence of pupils and students in primary, secondary and higher vocational education and in universities (MoH, 2020).

Almost overnight, the Universities of the Third Age were forced to change their existing forms of teaching and the ways of working with the elderly. Each of the universities chose its own way of dealing with the situation, which reflected both the personnel and technical possibilities of the 'home' college or university. The solutions varied on a scale between stopping senior teaching altogether and waiting for the conditions for full-time teaching to be restored after the rapid introduction of online teaching. The University of the Third Age of Mendel University in Brno (hereinafter referred to as U3V MENDELU) opted for a full transition to the online form of teaching. The path that led to this forced transition is outlined in this paper, which aims in particular to identify barriers to participation in online learning by seniors, specifically U3V MENDELU senior students.

1. Third Age Universities as part of active ageing

It is a well-known fact that European society is dynamically ageing (Fricová & Mateja, 2016; Zota, 2017). This trend does not avoid the population of the Czech Republic either. An analysis of the age structure of the population based on the 2020 census shows a continued increase in the age group of people aged 65 and over. It has already exceeded one fifth, i.e., one in five of the Czech population was over 65 years old, and the absolute number of seniors has thus exceeded 2.1 million, which is half a million more than in the previous census of 2011 (Strategy, 2019). Both in absolute and relative terms, the number and the proportion of the population defined as 'old' is increasing. This demographic trend is now widely discussed across the scientific community, not excluding the social and educational sciences (cf. Adamec & Kamanová, 2021).

It can be assumed that the education of seniors, not excluding the Universities of the Third Age, is gaining importance and will continue to gain importance in the coming decades (Rabušicová & Rabušic, 2009). As it can be seen from the analysis of data (Stříbrné, 2021) of the Information System of the Association of Universities of the Third Age, the number of seniors participating in education at the Universities of the Third Age can be observed to be increasing in the long term. In the period under review, i.e., since the academic year 2010/2011, when the Information System was launched, we can observe annual increases of about three thousand

students. From 33 607 students in the 2010/2011 academic year, the number of students has risen to 60 193 in 2010/2019. The number of courses offered by the individual Universities of the Third Age has increased by 64 percent over the period under review and the number of classes taught has risen by 72 percent.

As many research studies have shown, learning is one of the specific activities that can be used to improve quality of life in old age (Avramov & Mašková, 2003; Laslet 1991; Litwin & Shiovitz-Ezra, 2006; Nimrod & Adoni, 2006). Physical and mental activities such as sports, hobbies, reading books, visiting cultural institutions or spending time with friends or loved ones help individuals to have a proper brain function that ensures their well-being (Williams, Higgs & Katz, 2005, 2012) and can further influence their functioning in old age. A link between life satisfaction or well-being and education or learning in later life can be demonstrated (Formosa, 2014). Here, studies reveal that seniors can find meaning and satisfaction in their lives through learning. It is the processes of learning that can build networks, trust, reciprocity, and social ties - in general, they can facilitate the socialization of seniors. Thus, seniors' participation in learning activities also seems to enhance their physical, intellectual and social health (Formosa, 2014) and consequently also their quality of life (Jacob in Rut & Porcarelli, 2019) and is one element of the mosaic shaping concepts such as active ageing (Hatar, 2019; Stenner, McFarquhar & Bowling, 2011), wellbeing (Engelsen, 2022), etc.

The Universities of the Third Age, which are the focus of this text, are then an important factor in senior education. They differ from other forms of senior education, such as senior academies, late-life academies, activities of libraries or senior clubs, etc., in their connection with the university or college environment. This is the guarantor of quality both in terms of the content and the methodology. Individual Universities of the Third Age usually offer interest-based courses corresponding to the areas in which their 'home' college or university has accredited study programmes. In the specific case of U3V MENDELU, these are various semester, one-year and multi-year courses focused mainly on agronomic topics. It is therefore implicitly assumed that this type of study will reach the university level - seniors are provided with the latest knowledge in the given scientific fields. The teaching methods and organisational forms used in the University of the Third Age are the same or similar to those characterising the university. Traditionally, however, the Universities of the Third Age have mainly used the full-time form of teaching.

In March 2020, all areas of education were facing a major challenge due to the situation caused by the SARS-C oV-2 disease pandemic. As a consequence of the Emergency Measure of the Ministry of Health of the Czech Republic of 10 March 2020 to protect the population and prevent the risk of the emergence and spread of the covid-19 disease, the personal presence of students in schools was banned for a significant part of the summer term of the 2019/2020 academic year (cf. Adamec & Šimáně, 2021), not excluding the Universities of the Third Age. A similar situation occurred in the winter semester and partly also in the spring semester of the academic year of 2020/2021. The only possible option for maintaining education (not only) for seniors was the transition to emergency remote teaching (Šeďová, Nejardová & Rozvadská, 2021) using online tools, which have been used so far in the university environment, and thus in senior education, to a limited extent and which introduction has been discussed as a long-term process (cf. Naylor & Nyanjom, 2020).

2. Methodology

The presented results are based on two quantitative research surveys. Based on them, we identify the barriers to online learning on the part of seniors, specifically U3V MENDELU students.

The first research investigation was based on a custom-made questionnaire with the focus on finding out the interest in online learning and also the circumstances related to it such as barriers to its use, technical background or the level of support required from the students of U3V MENDELU. The questionnaire contained eight thematic questions (closed, semi-closed, open-

ended, scaled) and a battery of demographically oriented questions. The survey was conducted in the summer semester of the academic year 2019/2020 (March 2020) and involved 451 respondents out of a total of 806 currently enrolled U3V MENDELU students, who were sent the questionnaire electronically via Google Forms. The return rate of the questionnaire was 56%, i.e., 87.8% of women and 12.2% of men completed the questionnaire.

The second research investigation was also based on an author's questionnaire, the aim of which was to find out what experiences the U3V MENDELU students had with the already implemented online teaching. The questionnaire contained 32 questions (closed, semi-closed, open-ended, scaled) as well as a battery of demographically oriented questions. The research survey was conducted in the summer semester of the academic year 2020/2021 (April 2021). The respondents of the research survey were the participants of the online courses of U3V MENDELU who attended the courses in the summer semester 2020/2021. 333 respondents were contacted by e-mail and 181 of them completed the questionnaire. The return rate was 67%. The research sample consisted of 87.3% females and 12.7% males, which is in line with the general trend in the composition of third age university attendees, which is characterised by significant feminisation. This questionnaire was also distributed online via Google Forms.

The same analytical methods were used for both surveys. The collected data were evaluated in two ways. Part of the data was evaluated through descriptive statistical operations. Content analysis was used to analyse the open-ended questions. A similar procedure was used in previously conducted quantitative investigations (Rabušicová, Kamanová & Pevná, 2011; Adamec & Janderková, 2021).

3 Results of the research investigation

As mentioned above, the global pandemic of SARS-CoV-2 disease did not allow the implementation of the usual way of teaching, i.e., its full-time form and in case of interest in maintaining the teaching it was necessary to switch to its online form. However, the latter is surrounded by a number of myths and stereotypes, mainly concerning the level of IT skills of the elderly, their willingness and ability to use modern communication technologies or their technical background. We therefore decided to find out the specific levels of interest of seniors in online learning as well as the specific conditions and, if applicable, barriers to its introduction.

As mentioned above, one of the assumptions was that the seniors would not be interested in online learning. Education is closely linked not only to the acquisition of knowledge and skills, but also to the social aspect of the educational process. Seniors value the opportunity to meet their peers, interact with them, and find new social contacts. Furthermore, we presupposed barriers in the form of insufficient IT equipment, both in terms of the physical technical facilities themselves (PC, laptop, tablet or smartphone) and the quality of the necessary internet connection or software. We also presumed a barrier in the lack of IT skills and knowledge of the seniors and, as a consequence, the need for IT support or the financial challenges associated with online learning.

Let us now look at the resulting findings. As shown in Table 1, in the case of the online learning interest survey, 56.3% of respondents indicated that they were interested in this form of learning. The remaining respondents (43.7%) indicated that they were not interested in this form of learning. Thus, the assumption of the barrier of senior citizens' lack of interest in online learning was not confirmed.

Table 1: Interest in online learning

Are you interested in online learning?	Absolute frequency	Relative frequency
Yes	257	56,3%
No	197	43,7%
Total	451	100,0%

Source: own processing

It was important for us to find out why seniors are not interested in this form of education. The results are shown in Table 2. Based on a content analysis of the open-ended questions, answered only by those seniors who expressed disinterest in the online form of learning, two main reasons were identified. The first one, mentioned by 68.5% of the respondents, was the loss of personal contact: *'I would very much miss direct contact with the lecturer and with my classmates, which is why I signed up for the study...'* and *'Online learning is impersonal, it does not suit me.'* or *'I want to experience the lectures live, sharing everything with others, with possible demonstrations and questions, discussions.'*

This loss of interaction was perceived by seniors on two levels, namely the loss of contact with the instructor and the lack of contact with their classmates. This aspect of the importance of social contact in senior education was also confirmed in the evaluation of already implemented online courses, where the lack of personal contact was perceived as a disadvantage by as many as two thirds (64.7%) of respondents. *'I missed direct contact with friends.'* Or *'Cannot replace direct contact with the lecturer and other classmates.'*

The second reason, which was detected for 21.3% of respondents, was their technical background regarding the quality of their internet connection or lack thereof: *'Unfortunately I do not have fast enough internet'* or *'My internet is not working'*.

Table 2: Reasons for disinterest in online learning

If you are not interested in the online form of teaching, please let us know why:	Absolute frequency	Relative frequency
Social aspect - personal contact	135	68,5%
Technical difficulties	42	21,3%
Other	20	10,2%
Total	197	100,0%

Source: own processing

The IT equipment of the participants was also the subject of a separate questionnaire item. Table 3 sums up the results that showed that 91.1% of the respondents owned suitable IT equipment and only 8.9% did not. Thus, IT technology, unlike the original assumptions, was not a barrier to the implementation of online learning.

Table 3: Ownership of IT technology for online learning

Do you have IT technology for online learning at your disposal?	Absolute frequency	Relative frequency
Yes	412	91,1%
No	40	8,9%
Total	451	100,0%

Source: own processing

For the IT equipment itself, we also investigated what specific technical equipment was used by the students during the online learning. Table 4 states that the most common was the use of a laptop (49.2% of respondents), followed by a desktop PC (37.6% of respondents) and to a lesser extent tablets or smartphones (9.4% and 3.8% respectively). It can be assumed that these technologies were overwhelmingly already a common part of their households, as 94% of respondents reported that they had no additional costs associated with online learning. Where financial costs did occur, participants primarily associated them with printing study materials.

Table 4: Type of IT technology used

I have used the following for online teaching?	Absolute frequency	Relative frequency
Notebook	89	49,2%
Desktop PC	68	37,6%
Tablet	17	9,4%
Smart phone	7	3,8%
Total	181	100,0%

Source: own processing

We were also interested in whether the seniors would be interested in the option of IT consultation or support. As Table 5 suggests, 34.8% of respondents said they did not need any help in order to be able to participate in online learning. 34.6% said they did not want online consultation because they were not interested in online learning and 32.6% would use the option of IT consultation or other help to implement online learning. Thus, their lack of IT skills or knowledge could be a barrier to online learning.

Table 5: Use of IT consultancy or other assistance for possible online learning

Would you take advantage of an offer of IT consulting or other assistance in implementing online education?	Absolute frequency	Relative frequency
No, I don't need help with this because I can handle it myself.	157	34,8%
I have not used it because I do not want to take online classes.	156	34,6%
Yes	147	32,6%
Total	451	100,0%

Source: own processing

Conclusion

The covid era brought some new forms of teaching to senior education, which until then were practically taboo for this target group or were used to a very small extent. Online learning among the senior population was concealed in a number of myths and perceived barriers. However, our research has highlighted the groundlessness of some of these myths and the unjustified barriers to online learning for the senior group.

The initial research conducted showed that the seniors are interested in online learning. The assumption that the seniors would not have appropriate IT technology proved to be wrong. The real barrier to participation in online learning was identified as the loss of personal contact, both with the teachers and the classmates. For some respondents, poor or no internet connection also proved to be a barrier.

Although we predicted other barriers to online learning, it turned out that it was not IT technology or finances, but rather the loss of social contact. The analysis of the barriers to online learning for seniors clearly points to the importance of social contact for seniors, which the face-to-face form of education allows. This supports the thesis of the third age universities as places that do not only play an educational role, but also a social or socialising role for a substantial group of seniors. And at the time of retirement, they can be an important factor in reducing social isolation.

In the future, it will certainly be interesting to focus also on the analysis of the online courses for seniors themselves; namely, whether and to what extent they have become a standard form of education at the Universities of the Third Age in the post-pandemic era, what form they take, what their parameters are or how the seniors rate their advantages or disadvantages.

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Lifelong professional development of residential support workers in children's homes. Necessity, commitment, obligation

Alois Daněk

Abstract:

The paper will present the results of qualitative research that highlighted the current needs of residential support workers. We learned that residential support workers have encountered requirements for which they are not adequately prepared. Residential support workers have declared the need for good-quality further education. Based on our research, it will be possible to modify the preparation and education of residential support workers.

Keywords:

children's home, inclusion, institutional care, language codes, residential support worker

Introduction

Children's homes are an integral part of the system of institutional care. Their primary purpose is to educate children and young adults whose original family background no longer functions properly. The person responsible for the objectives and content of the education of these children are the residential support workers (Bendl, 2015, p. 12). The main intention of this paper is to present the results of qualitative research that highlighted the current needs of residential support workers in a children's home. We have learned that the milieu of children's homes in recent decades underwent considerable changes in the composition of children and adolescents. The proportion of children and adolescents requiring support based on the current findings of special-needs education has sharply risen.

These changes have placed new demands and requirements on the performance of the residential support worker's job. The residential support workers have unambiguously declared the need for good-quality further education. The presented research points to several areas of education and preparation of residential support workers that reveal shortcomings and require modification. The paper will be divided into two sections. Firstly, we will describe the research design and research context. Then we will present the research findings. In the conclusion we will describe the needs of residential support workers.

1. Methodological design of the research

We used qualitative research design, which proved successful in previous projects (Daněk, 2022). Qualitative research design may be a considerable advantage for the modern inclusive paradigm (Lindsay, 2003; Willig, 2017). The author has worked in the research context as a residential support worker and a prevention methodologist. We believe that a passive researcher may not achieve good-quality results compared to a researcher actively involved in the research context (Charmaz, 2006, p. 5). Intensive contact with the group being researched is important (Creswell, 2009, p. 270; Toušek, 2015, p.11).

Semi-structured interviews and simultaneous observation were used in the initial gathering of information. The information obtained was then processed by methods grounded in theory and interpretative phenomenological analysis. These research methods are designated by professionals as highly suitable to contexts similar to ours (Řiháček et al., 2013). The design used enables an interpretation if the "lived experience" (Alase, 2017, p. 13). We have made thorough use of the principle of triangulation, which is a research method where our findings are subjected to the critical perspective of other research methods or other researchers (Flick, 2009, p. 444).

2. The research context, target group

The research was carried out in the Children's Home in Klánovice (hereinafter referred to as CHK). The CHK is a school-type facility intended for providing institutional care, which is imposed the moment the child's family is unable to ensure a background suitable for the safe development of the child. Teaching staff–residential support worker work in the children's home. The residential support worker in the children's home obtains a professional qualification through "university studies in an accredited degree programme in the field of pedagogical sciences focused on special pedagogy or social pedagogy, or higher vocational education obtained through the completion of an accredited training programme of a higher vocational school in the field of special pedagogy or, alternatively, education provided for ordinary residential support workers through an enriched education in a lifelong learning programme undertaken by a university and focused on special pedagogy" (MŠMT, 2004, Sec. 16 para. 2). Being of sound moral character and successfully passing a psychological test are additional criteria.

Over the last two decades, the composition of residential support workers in educational terms has changed. Vocilka's monograph (1999) shows that university educated staff were the exception in children's homes. A finding that no longer applies today. In the CHK, over half of the 25 members of the teaching staff have university degrees. An additional observable change concerns the gender composition. Although children's homes struggle with the disproportionate feminisation of the education system, the team of residential support workers at the CHK have managed to achieve a staff composition that is half men. As with other areas in the education system, the CHK has an issue with the growing age of the teaching profession. The average age of a residential support worker in the research setting is 52 years.

3. Summary of the research, significant findings

During the research, we carried out interviews with 10 residential support workers, four who were men and six who were women. The youngest respondent was 35 years old, and the oldest was of retirement age. Observation of the residential support workers in their jobs was made concurrently with the interviews. We limited our research to the following three questions:

1. Is the knowledge obtained in the qualification process for carrying out the job of a residential support worker suitable for the current needs of the target clientele?
2. What fields of the educational process in the CHK achieved the most significant changes in recent years?
3. How do residential support workers perceive their role in the educational process of children at the CHK?

Based on the opinions of the respondents, the current requirements of the educational reality substantially differ from the knowledge obtained during their studies. The most marked difference was recorded among the older residential support workers. They pointed to the fact that in some cases they were being trained during the era of the collectivist grip on institutional care, which was the standard approach until 1989. The considerable gaps were noted in questions of inclusive education. Many of the residential support workers were made aware of the phenomenon during their studies. The inclusive approach acknowledges the individual differences among participants in the educational process, but it does not permit their stigmatisation (Deepler, et al. 2015). For example, the requirement to use inclusive language (American Psychological Association, 2021, p.15) is utterly unknown to many of them. In this way, language is a significant tool of social reproduction (Jones, 2013, p. 176), but it may be understood as a tool to prevent social exclusion.

The requirement for the residential support workers to have general knowledge was another noted area. Emphasis is placed on the professional knowledge of the special-needs pedagogue in their course of their professional training. Teaching methods and level of general knowledge are in the hands of the residential support workers. Education is critically important young adults. Research shows that individuals leaving institutional environments may have worse educational

competency compared to the unimpaired population (Blanchet & Goyette, 2022; Gypen et al. 2022). If the residential support workers are unable to provide children in the children's homes adequate support in domestic preparation, the children and adolescents cannot be expected to manage the requirements of today's educational reality. The residential support workers are aware of the fact that upon leaving an institution an individual may be stigmatised by society (Horn, 2020), and education may be the key factor in integrating them into the unimpaired society.

The respondents have also declared the need for regular training in the issue of substance and non-substance abuse. Children and adolescents in children's homes are at risk of the former, which poses also a serious hazard for adolescents leaving institutional environments (Csiernik et al., 2017). The range of illegal drugs on the market constantly changes and uninformed residential support workers may easily overlook signs resembling an addiction. The currently escalating problem of non-substance abuse cannot be ignored either, especially on social media and in the virtual environment (Grajek, 2022).

Alarming findings were noted in the reaction of respondents to their role in the educational process. For the vast majority, they clearly declared repeated negative experiences with other professions involved in the educational process of a children's home. It became apparent to the respondents that they are mere residential support workers and their status in the social hierarchy is markedly underappreciated. It is a depressing fact in 2022 we can encounter opinions that the residential support worker's role is to ensure the tidiness of the children's home and only de facto supervise the children entrusted in their care. The testimonies of respondents to our research, in which they describe educators, doctors and other professionals' direct refusal to cooperate when, in theory, they should all take an interdisciplinary approach, is a worrisome finding. To this is added the fact that the of the children's home as a type of institution is presented in a negative light. The result is mutual rivalry of the involved stakeholders instead of the much more needed cooperation (Szafranek et al., 2022). If the residential support workers feel unappreciated by society, it may have a negative impact on their wellbeing (Perrot, 2022, p. 24). Burnout syndrome, which may be brought on by this very sense of being devalued, cannot be ignored (Kebza &Šolcová, 2003).

Conclusion and recommendation for practice

The paper has intended to probe into the current children's home from the point of view of residential support workers. We have managed to identify a number of topics of educational reality, which the residential support workers rate as challenging areas of their profession. Based on the requests made from respondents during the research, we have defined several current needs for doing the job of a residential support worker in a children's home:

1. Need for an inclusive approach
2. Need to upgrade to the 4.0 technical revolution
3. Need for an interdisciplinary approach
4. Need for contact with educational reality
5. Need to prepare for changes to the paradigm
6. Need for wellbeing

These needs are achievable only through the intensive and continual education of the residential support workers. The quality preparedness of the residential support workers is important (Škoviera, 2022, p.59). Only then will it be possible to meet the needs of children and adolescents living in children's homes. The research presented indicates the path along which education programmes for residential support workers could be established.

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Curriculum trends in the education of penitentiary workers

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Abstract:

The study focuses on the education of employees in penitentiary (prison) institutions, and it defines mainly the curriculum trends in the education of these workers in three different geographical areas in the world – the United States of America, the Nordic countries and the Slovak Republic. Regarding the contents of the curriculum concept, the study aims at a more narrow understanding of this concept (curriculum as the contents of education). It mainly presents those educational topics in the education of penitentiary officers that have currently been at the centre of immediate attention in the given countries.

Key words:

an officer at a functional position of a pedagogue, contents of education, correctional/prison workers, paradigms of imprisonment, curriculum, topics of education

Introduction

Prison service fulfils significant and irreplaceable tasks almost in every society. In addition to providing protection for the society before perpetrators, the prison service has even a more crucial and demanding task – to provide re-socialisation of imprisoned people who will return to society one day if they are not sentenced to life imprisonment. Talking about the insignificance or even the self-serving character of sentenced people`s education cannot be present in the modern society of the 21st century. This approach is also valid for educating employees in daily contact with sentenced people because they are crucial in their re-socialisation.

Society is changing dynamically as a macro-world, and similarly, the prison micro-world is dynamically changing as well. Prison officers represent a specific professional group, and their primary task is to accompany sentenced people in the re-socialisation process to live their lives thoroughly after being released. These employees can cope with demanding work performance and prepare for ongoing new changes they have to face at work, mainly with education. The study can serve as a point of reference or inspiration for practice in the education of officers working at functional positions of pedagogues in Slovak conditions.

1. Paradigmatic approaches to imprisonment

What paradigm of punishment prevails as a fundamental idea in a given country impacts all components of the system – from understanding the purpose of punishment and treating prisoners to training the penitentiary workers themselves.

To illustrate the different approaches to imprisonment, there are three basic paradigms, which subsequently influence the understanding of the purpose of punishment and the prison system itself:

- the conservative approach – prison is supposed to be a deterrent, incapacitating, unpleasant, or even painful for the offender, and it is supposed to deter rationally thinking people. On recidivism, the sentence is to be longer than the previous sentence. People perceive prisoners as bad and weak, and society needs to protect itself from them. Prison is an exile on the periphery (social and geographical). Prison is a „wilderness".
- the liberal approach – involves rehabilitation and personality change. Its essence is rehabilitation programmes. This approach comes in the period from the 19th century. Prison is a „redemption".
- the radical approach – not the dominant approach, sees prisons as tools of the powerful to enslave the powerless. Imprisonment serves only economic purposes (Pollock, 2014).

A conservative approach has been somewhat prevalent in the American prison system until now. Prison is governed by the principles of *isolation*, *obedience*, and *diligence* and promotes respect for order and authority. The current approach to punishment in the USA, as reflected in sentencing policies, is built on the idea that the only thing an offender deserves is punishment. The narrative (from the media or politicians) is that it is necessary to toughen punishment (despite some referring to the USA as a „gulag nation"). They also say that the USA has a problem with high crime rates, which statistics do not support (crime rates are the lowest in 30 years). Punitive incarceration and increasing sentences have accompanied the USA for at least the last 20 years, and prisons are designed for large numbers of convicts. (Pollock, 2014)

In contrast to the USA, the Nordic countries are an example of a liberal approach to imprisonment. Their fundamental value is *„The art of balancing a strict and gentle approach"* (The Danish Prison and Probation Service – in brief, 2012, p. 2). The Nordic prison system is exceptional. Prisons in these countries are smaller, which creates closer relationships between staff and convicts. Prisoners have better opportunities for autonomy and privacy. The Nordic prison system depends on the fundamental principle that the only thing prisoners lose is their freedom. All other rights are preserved because the more closed the prison system is, the more difficult it is to reintegrate convicts into society. Prisons are relatively open, and prisoners have a certain degree of autonomy and freedom in their daily activities. There are rooms, televisions or communal kitchens, gyms and, in some places, solariums. Of course, there are also prisons for offenders of severe crimes, which are more closed, but the living conditions replicate as closely as possible those outside prisons. There is also a difference in security – Nordic prisons are known for their excellent staffing and facilities. (Skrabek, 2020)

In the Slovak Republic, several norms were amended in 2005, with the primary aim of changing the philosophy from passive acceptance of activities by convicted persons to the offer of activation aimed at resocialisation. These official changes also renamed correctional-educational institutions to today's penitentiary institutions. (Líšková, 2005)

1.2 Penitentiary workers focused on resocialisation and re-education.

Human resources, human capital, is a fundamental element in any organisation – in the penitentiary environment, it is all the more important (as in other jobs and professions where human personality is shaped and developed). These penitentiary workers are the alpha and omega of the resocialisation process. Furthermore, they also represent the entire effort of penitentiary institutions. In the USA and Nordic countries, prison staff do not have separate positions where they are directly responsible for one of the areas of resocialisation or re-education, as in the Slovak Republic. On the contrary, they are all part of a multidisciplinary team.

In the USA this group of workers is poorly remunerated compared to the police or other security forces, which results in a relatively high turnover (Hill, 2016). In Nordic countries, the position of a prison officer is a prestigious and attractive job perceived by society as non-stressful (Skrabek, 2020). In Slovak conditions, working in the prison system is perceived as relatively dangerous, has one of the lowest social statuses and is harmful to health (Polák, 2004).

1.3 Job description

As we have already mentioned, the specialisation of officers in charge of individual areas of resocialisation and re-education work with convicts is one of the specifics in Slovakia, in contrast to the USA and the Nordic countries. The **officers**[1] directly dealing with the convicts' education in Slovakia are **in the position of a pedagogue** and **special pedagogue**[2]. The work activities of pedagogues are extensive – they perform independent professional specialised activities in the treatment of convicts. They are responsible for elaborating, implementing and evaluating treatment programmes in the entrusted group of convicts.

In the USA, the job description of a correctional officer is broader and has a primarily repressive character. Correctional officers interact with convicts, build relationships with them,

counsel them, supervise their unrestrained movement and escort them, enforce rules and regulations, and write disciplinary incident reports. They intervene in critical situations (which may involve the use of force), handle inmate correspondence, report damaged inventory, maintain health, safety and sanitation in the jail, and implement health procedures for inmates with infectious diseases. With colleagues, correctional officers maintain constant vigilance for their health, establish positive relationships with them, and participate in mandatory or voluntary training concerning their own self-development. (Hill, 2016)

In Nordic countries, penitentiary officers are responsible for prisoners' protection, safety, and rehabilitation. They promote desirable social behaviour and minimise prisoners' offensive behaviour. It is part of public services. (European Penitentiary Training Academies, 2021)

1.4 Outline of institutional provision for education

There is no single education strategy in the USA. Simply put, each state has its own rules [3]. Several jurisdictions view training as an „additional" expense (mainly for financial and staffing reasons), the purposes of which can be met in other ways – new staff often work under the supervision of more experienced staff (Hill, 2016). Correctional officers in the USA have a system consisting of the following:

- compulsory education (academies, vocational training programmes and annual competence training),
- voluntary education includes internal training (provided by the prison institution itself) and external training. There is also formal education (several colleges offer hybrid, online or accelerated courses) and online training (many online and offline seminars, webinars, podcasts, reports and libraries[4]) (Porche, 2019).

In the European context, the training of penitentiary staff is centralised in each country. Since 2010, there has been an organisation of European importance, *The European Penitentiary Training Academies* (EPTA). It aims to develop cooperation in the education of penitentiary workers in Europe and to strengthen awareness of their work in the public space. Several manuals and handbooks on various penitentiary topics are freely available on the organisation's website, and they also provide an e-learning platform.

In Nordic countries, independent institutions provide training for prison staff.[5] Education in Finland has its basis on four core values: respect for human dignity, fairness, safety and belief in the human potential for growth and change (Degree Programme in Prison and Probation Services, 2018, p. 9). In Denmark, this education has six principles: normality, openness, responsibility, safety, intervention when necessary and optimal use of resources (The Danish Prison and Probation Service – in brief, 2012, p. 3). The education system for prison staff is composed of two areas:

- basic education,
- further education and management training (Degree Programme in Prison and Probation Services, 2018).

Since its establishment in 2004, the *Institute of Education of the Prison and Judicial Guard Corps, based in Nitra, has* provided training for staff and officers in Slovakia. In 2014, the education system underwent re-evaluation, and now it includes three areas:

1. vocational training of officers, consisting of
- Basic vocational education, and
- Specialised vocational training,
2. the specialised training for the Prison and Judicial Guard Corps officers (vocational courses for individual functional positions and socio-psychological training courses),
3. the vocational training for Prison and Judicial Guard Corps employees (Institute of Education of the Prison and Judicial Guard Corps, 2019).

2. Methods

It is possible to categorise the current trends in selected educational topics for correctional workers in the USA, the major Nordic countries and the Slovak Republic into three areas: safety and legislation, treatment of convicts, and the working life of penitentiary officers. We describe these themes in the following section, drawing on data from the *Lexipol* education company in Texas (online at www.lexipol.com/industries/corrections/) and the European institution *EPTA* (online at www.epta.info/about/). We also include information from individual penitentiary education institutions in Finland, Denmark, Norway, and Sweden (online at www.prisonstudies.org, www.rskk.fi) and the contents of the available current educational programmes of the *Institute of Education of the Prison and Judicial Guard Corps* implemented in Slovakia (Educational Programme Basic Vocational Education (2019) and Specialised Vocational Education (2018)).

3. Results – Trends in the content of penitentiary education
3.1 Safety and legislation

In the USA, one of the educational training topics for correctional workers in this area is the ***control and dismantling of drug contraband****.* Prisoners in American prisons and their relatives and visitors smuggle drugs, mobile phones or other prohibited items into the prison in various ways, including by drones. Therefore, staff must be prepared to handle mail, work within the framework of personal searches, and have contact between the prisoner and the staff member. Such training should include how to recognise and respond to withdrawal symptoms and overdoses, such as mental illnesses influenced by drug and alcohol use, how to recognise, locate and document contraband, how to recognise manipulative tendencies on the part of inmates and new ways of transporting prohibited items into the prison.

Another topic in the USA is legislation, particularly **the PREA law.** The most recent emphasis has been on the law from 2003 called the *Prison Rape Elimination Act*. Despite being put into practice almost 20 years ago, many prisons in the USA still do not comply with it. However, this federal law intends to protect prisoners and staff from exploitation, harassment and sexual abuse. The reason for this is that, up to date, there are few legal penalties for its non-compliance. Thus, correctional staff or management often see compliance as only voluntary. For these reasons, it is imperative to educate staff in this area on specific topics such as the importance of sexual safety in prisons and the consequences of non-compliance with obligations, preparation for potential audits, and protection of LGBTQ and transgender inmates.

In Nordic countries, compliance with applicable laws and regulations is also a top priority in education. Compliance between ***prison regulations and their compliance by the staff*** represents one of the most crucial factors, so education ensures compliance, clarity and transparency of the rules. This approach also affects citizens' confidence in the ability of the state and prison services to implement penal policy. The topic of ***searches*** also falls under the heading of security*.* Such searches aim to ensure the security of the prison establishment, including staff and inmates, through regular premises and body searches. However, staff participate in training to respect the rights and dignity of convicts, and it is customary to conduct personal searches with minimal use of direct physical contact.

Another training topic for the staff is ***crisis management***. It prepares prison staff to respond to a disruptive and unexpected event that may threaten the organisation or its stakeholders. It is preparation for situations that threaten the organisation; the element of surprise is present, and there is a short time to decide. Such training involves learning the skills and techniques needed to identify, assess, understand and deal with a problematic situation up to the recovery phase. Another theme in Nordic prisons in the security area is so-called ***dynamic protection.*** It is a process whereby prison staff build positive relationships with prisoners, provide them with a safe environment and thus know what is going on in prison. This approach helps improve the flow of information because the staff build a professional working relationship with inmates and a culture

of trust. This approach has four key elements: good staff-prisoner relations, a strict regime, a secure environment and minimising inclinations and opportunities for escape.

In Slovak conditions, the topic of safety is also given attention in education. These are topics such as ***theories of law, independent national and international organisations and bodies active in the field of human rights protection***, but these are only partial topics represented in the scope of 2 lessons. The topic of ***emergencies*** in the Corps is covered in 2 lessons; 38 lessons deal with the pursuit of fugitives and the scope of training in using coercive means. Nine lessons are devoted to ***communication in stressful situations and conflict resolution*** through model situations.

3.2 Treatment of convicts

In the USA, another theme in education is ***contact between staff and prisoners.*** Prisoners and staff are often in close contact, and emotionally charged situations can often arise in such an environment, resulting in conflict. For this reason, staff must be trained in the correct policies and procedures when interacting with inmates. They should learn how to take control of a situation professionally, the ethical behaviour of correctional officers, the importance of maintaining boundaries and self-control, and recognising and resisting manipulative techniques. They must recognise the warning signs that a staff member is in a dangerous situation. In the USA, another topic discussed is ***mentally unstable prisoners and suicide prevention.*** According to American statistics, nearly 15 % of men and 30 % of women have mental illnesses such as schizophrenia, depression, or bipolar disorder. Suicide is the leading cause of death in the United States (Hayes, 2010). For these reasons, employees need to understand mental illness, recognise suicidal tendencies, and know how to prevent self-harm. Such training should include topics such as recognising suicidal tendencies, proper procedures for reporting mentally disabled inmates, legislation governing this area and its impact on the prison environment, techniques for communicating and interacting with inmates with mental disorders, and identifying and understanding mental disorders and knowing the different types of psychopharmaceuticals.

In Nordic countries, there is a great deal of emphasis on specific target groups of convicts, which also applies to the training of prison staff in this area. The educational themes here emphasise groups of ***difficult convicts*** (interestingly, they do not call them problematic convicts) representing convicts with repeatedly violent behaviour. Another group represent ***convicted women***, for whom they draw attention to the impact of even short-term imprisonment on these women and their families, which is extremely profound. These women have special needs (especially medical needs), are more likely to be victims of domestic or sexual abuse, and are more likely to have mental health problems (up to 75 %, according to local statistics) and addiction. They are more likely to develop such illnesses and suicidal behaviour in prison than men. Nordic countries place further educational emphasis on the ***juvenile population*** (14-18 years), where staff learn to determine their socio-cultural background and educational needs and to set priorities and steps for an individualised rehabilitation intervention process. For the ***newly incarcerated inmates,*** prison staff training focuses on adapting and coping with the deprivation of loss of liberty, finding connections between the two lifestyles of inmates (the life before their imprisonment versus the life in a prison governed by rules and regulations). Another group is ***sexual abusers***, where staff are encouraged not to discriminate against any prisoner regardless of the crime committed.

In Slovak conditions, ***specialised execution of punishment*** is included, for example, in 6 lessons (specialised execution of punishment of imprisoned women, juveniles, foreigners and stateless persons in Basic Vocational Education).

In addition to the above-mentioned special groups of prisoners, they pay much attention to ***health care*** in Nordic countries. Overcrowding is a problem in many prisons, which contributes to health problems among convicts, especially the spread of infectious diseases. Drug use is also widespread (between 16 % and 79 % in the European Union, according to the WHO). Prison can represent an opportunity to help tackle addiction. The prison population also has a

disproportionately high proportion of people suffering from mental or behavioural problems, according to the WHO, and their condition is worsening. As many as 10-15 % of prisoners in Europe have a severe mental illness, according to the EPTA. There is also a higher prevalence of transmissible diseases (e.g. HIV, hepatitis B, hepatitis C, syphilis, gonorrhoea, chlamydia, tuberculosis) in this environment, which is also a risk to the health of prison staff. Active case detection, early diagnosis, treatment and prevention of disease transmission must also be vital preventive measures and topics in prison staff education.

In Slovak conditions, the topic of *drug addiction and the treatment of addicted convicts* is covered in 2 hours. The *health training* takes six lessons, during which the penitentiary staff prepares to provide first aid and its training.

Furthermore, Nordic countries also focus on *prevention* in the treatment of convicts, and they adapt the training of prison staff to this topic. It is possible to identify two main areas, namely *suicide prevention* and *violence prevention*. Through comprehensive suicide prevention programmes, prison staff learns to implement efficient strategies, even if it is impossible to prevent all prisoner suicides. Violence prevention is based on the premise that violence is preventable, but preventing it requires an investment of resources, people, leadership and commitment.

Prevention of all forms of discrimination and manifestations of intolerance is the subject of one lesson in the Slovak Republic, and the treatment of incidents of *self-harm* and *suicide* is the subject of two lessons.

A topic that remains one of the current challenges and priorities in the prison environment, according to the EU and the Council of Europe, is *radicalisation*, as the EPTA institution emphasises. Prison services need to be able to detect, prevent and de-radicalise convicted offenders. However, the problem is that the state of knowledge in this area still needs to be sufficiently developed rather than based on scientific evidence. Hence, prison services need help finding the right approach and methods to address these issues.

Also, in Slovak conditions, this educational area is included in the procedures for dealing with *radicalisation, terrorism and extremism* in prison. The training takes two teaching hours.

3.3 Working life of penitentiary workers

Another topic in the USA is the *mental health of correctional officers*. The educational institution Lexipol (online at www.lexipol.com) reports that according to some US studies, correctional officers suffer from depression and suicidal thoughts more often than the general public. American prisons are stressful environments because inmates can physically attack or provoke staff anytime. It is crucial to help staff cope with stress and process traumatic incidents. Important topics in this area are stress and anxiety management, resilience support, post-traumatic stress, recognition and prevention of burnout syndrome, and suicide prevention.

In Nordic countries, the focus is primarily on *leadership*, which is crucial. In prisons, leaders face many complex challenges – from financial remuneration to motivating staff or adapting to new technologies. Social responsibility and public sensitivity to the clientele of penitentiaries (in both positive and negative meanings) are just two of many variables that increase the demands placed on those at the helm of such an institution. Prison management represents one of the most challenging jobs here.

In the Slovak Republic, more focus is on the officers' rights and duties, service discipline, service relationship and disciplinary jurisdiction (about 12 lessons). One lesson is devoted to *mental health and a healthy lifestyle*. *Fundamentals of social communication* are covered in 3 lessons, and *training in social-communication skills* takes 31 lessons. There are topics such as social perception, basic manners or assertive behaviour and training in assertive techniques. The *management* area includes two lessons. The topics focus on managing and leading people in the workplace, basic management styles and the principles of managing a department or groups in the facility.

4. Discussion

Penitentiary institutions are naturally different today than they were a few years or decades ago. They are constantly changing due to political, technological, cultural, and economic circumstances, and working in them brings along new conditions and challenges for correctional officers.

The work of the correctional officer is more challenging than ever – security risks are increasing, but so, *paradoxically*, is the oversight by national and international human rights organisations, which places prison staff under similar scrutiny to that exercised by them themselves. The education of penitentiaries has two primary objectives. It enables them to experience intensive learning (beyond short-term memorisation) and to develop transferable skills. Therefore, it is crucial to design this education by professional prison staff in collaboration with people involved at the national level. The content must comprise international standards and the prison system of the particular country. It needs to adapt to the participants' educational level, and the curricula should be flexible due to constant updating and innovation (Hill, 2016).

The importance of education is also crucial in Slovakia. The latest concept document states that „... an important part of the issue of staff care is their education...“ which must be based „... primarily on progressive learning in the form of various professional development, innovative or inspirational types of learning.“ (Concept of Applied Penological Research 2016-2026 ..., 2016, p. 14)

Competences that were once essential are becoming less relevant as whole prison concepts are changing, and, naturally, so are the practices applied. Learning through experience alone does not provide complete competences and often even reinforces incorrect habits. Formal training and ongoing courses to improve and acquire new competences are essential to protect prisoners, staff and the public. Education has a circular character because this staff education process also significantly impacts all elements of the penitentiary system (including the resocialisation process) and the convicts. Although education is crucial to the functioning of *any* system if it is to be efficient, we conclude by asking whether the *education of penitentiary staff is subject to sufficient and reasonably frequent innovation on an appropriate scale to reflect these changes*.

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Key competences of academic staff reflecting the current strategic plan for higher education

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Abstract:

The aim is to present partial results of a survey carried out within the framework of a project focused on the development of HR at a public university in the Czech Republic. The survey was part of a broader strategic activity aimed at creating a concept of education and development of university employees. The paper focuses on the evaluation of the competency model for students of doctoral programmes. This is related to the Ministry's Strategic Plan, a sub-objective of which is to increase the quality of doctoral studies.

Key words:

competency models, doctoral students, human resource development, public university, strategic plan

Introduction

Universities are learning organizations that use their own activities and evaluation of experiences to improve themselves. They adapt their organisational models and processes to changing social, economic and technological conditions and bring innovative practices to all their activities. Developments in academia are increasingly complex, multifaceted and highly knowledge- and skills-intensive (cf. Winter et al., 2017; Linquist, 2018). The Ministry's strategic plan for the higher education sector for the period from 2021 onwards selects six strategic objectives as priorities, which are elaborated in detail to the level of specific actions. Strategic capacities at national and institutional (university) levels are prioritised to advance these areas. For example, one of the expected measures at the university level is that all relevant staff have access to professional support for their educational activities and continuously develop and update their competences (Strategický, 2020). The issue of competences has long been addressed, for example by Veteška and Tureckiová (2020).

This requirement is particularly important for early career teachers and those who are using new educational technologies or practices for the first time, or innovating the content and organisation of courses or programmes. These are usually doctoral students. The development of pedagogical competences of staff (see Trabalíková & Hrebeňárová, 2022) can be linked to their evaluation or career progression and, for relevant groups, can be made mandatory.

At some universities, academics are trained in cultural awareness, language skills, leadership, career planning, communication, presentation skills, project management, statistics, conflict resolution, work-life balance, publishing strategies, project funding, ethics and culture. A wide range of educational methods and forms are used. Mass seminars and workshops are organised, employees have the opportunity to receive individual feedback, supervision from experienced colleagues or to be coached individually by professionals and to receive consultancy services from internal or external experts.

Information about the project and the methodology for validating the competence model

Mendel University in Brno has subscribed to the principles enshrined in the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers (Evropská, 2006). In 2021, a sub-project of the Institutional Plan focused on the career development of employees was implemented. The work was inspired by examples from other foreign universities where interesting trends in the field of education can be observed. The project activities were mainly

focused on a group of academic staff, including PhD students. One of the activities was the design and validation of competency models for types of staff. These were divided according to the HR Award methodology into groups R1, R2, R3 and R4, where R1 represents Ph.D. students and R4 professors. Two questionnaires were used to collect data and validation using the 270° feedback method. The first questionnaire represented a form of self-evaluation and respondents used it to assess their own competencies. The second questionnaire was sent to selected raters among colleagues, supervisors, etc. The competencies were rated on a percentile scale, which was categorised in tens, with the categories marked with numbers 1-11 (cf. Adamec, Kryštof, 2022). A group of doctoral students was also assessed as part of the research. Competencies for this target group were measured in seven areas – *research project, organisational culture, self-management, flexibility and innovation, teamwork, communication, teaching and working with students.*

Results of the validation of the competency model for doctoral students

10 people from the R1 group participated in the self-evaluation and a total of 42 people from among their colleagues, supervisors, etc. evaluated them in 270º feedback. The table below summarises the evaluation of the individual competences within the proposed competency model for group R1. The table contains the average values of the self-assessment and the average evaluation by the evaluators. The table includes a column expressing the difference between the ratings including the sign. Thus, a + sign means that the evaluation of the environment is more positive than the evaluation of the self.

Table 1: Definition of individual competences and their assessment

area	K	Competence specification	Auto-evaluation	Rating by others	The Difference
Research project	1	Demonstrates detailed knowledge of their research area, can critically evaluate sources and is able to formulate research questions and hypotheses.	7,9	9,7	+1,8
	2	Focuses on findings from other disciplines and fields related to research. Is able to further use and process the knowledge in research.	8,1	8,9	+0,7
	3	Demonstrates the ability to design a research project using adequate methods, data collection and analysis. Can effectively report and interpret results including critical discussion.	7,2	9,3	+2,1
	4	Demonstrates the ability to place the details of the research within a larger framework in order to be able to articulate broader and longer-term research goals.	7,8	9,0	+1,2
Organisational culture	5	Conducts research in accordance with accepted University policies and procedures, e.g. occupational health and safety, fire protection, etc.	10,2	10,3	+0,1
	6	Conducts research according to professional standards and values, e.g. scientific integrity and methodology, ethical and legal requirements, working with own data and	9,7	10,2	+0,5

		sourcing where appropriate, sharing data with colleagues.			
	7	Is aware of the vision, mission, goals and strategy of the University. Understands the impact and context of own decisions and activities on the University, colleagues, students and potential clients.	8,8	9,4	+0,6
Self-management	8	Can work effectively under time pressure. Copes effectively with stress. Focuses on achieving set goals despite obstacles, setbacks, opposition or distractions.	8,0	9,6	+1,6
	9	Actively seeks opportunities to improve and grow in profession. Is able to quickly identify and proactively solve problems.	8,9	9,6	+0,7
	10	Critically evaluates own behaviour and attitudes and is open to feedback from others. Is able to learn from feedback and welcomes it as a way to grow.	9,2	9,8	+0,6
Flexibility and innovation	11	Works systematically with supervisor/trainer. Fulfils conditions. Is able to learn from supervisor/trainer.	9,3	9,9	+0,6
	12	Adaptable and flexible to changes in the research environment. Can adapt to new conditions, whether material, financial or social (interpersonal relationships, workplace atmosphere).	9,0	10,0	+1,0
	13	Develops new ideas, applications or creates innovative solutions to a problem by pushing the existing boundaries of science.	8,2	9,1	+0,9
	14	Seeks opportunities and possibilities for the development of commercial ideas and is willing to take healthy risks.	7,4	8,6	+1,2
	15	Develops and maintains a network of contacts inside and outside the university and uses them (e.g. international internship, research data, etc.).	8,3	9,0	+0,7
Teamwork	16	Conducting research, effectively sets and plans realistic and measurable goals in accordance with time and financial capabilities. Works in harmony with supervisor/mentor.	8,6	9,1	+0,5
	17	In leading the research team, supports co-workers in their growth through providing advice, feedback, instruction and encouragement.	9,7	9,7	-0,05
	18	Adds to the outputs of work those that are not directly related to research but may be relevant to colleagues. Approaches the research of others with respect. Promotes a positive attitude towards the teams in which is involved.	9,6	9,7	+0,1

Communication	19	Communicates assertively. Engages effectively in face-to-face communication with one or more people with different research interests. Demonstrates skills in verbal and non-verbal communication, listens openly.	9,7	9,9	+0,2
	20	Dealing with others, can articulate demands in a polite and respectful manner.	10,0	10,0	0
	21	Present ideas clearly, comprehensibly and concretely to different types of listeners in different situations (conversation, group work, conferences).	8,9	9,8	+0,9
	22	Write clearly and comprehensibly in different formats (qualification papers, PR, grants, CV). Knows spelling rules. Structures text with a clear writing style.	8,5	9,7	+1,2
	23	Communicates and presents in a foreign language, e.g. English, at professional meetings (e.g. conferences). Can write professional texts in a foreign language.	7,2	8,8	+1,6
Teaching and working with students	24	Is able to define learning objectives based on discussion with the course supervisor. Prepares lessons taking into account the target group, the objectives of the course, the content and expected outcomes and the relationship of the course to others.	9,3	9,8	+0,5
	25	It appropriately structures teaching and its individual sections, combines methods and teaching aids. Responds to questions, in an appropriate manner, explains the educational content with regard to the target group.	8,9	9,9	+1,0
	26	Creates space for objective and fair evaluation of students. Formulates clear and specific questions that reflect the stated learning objectives.	8,8	10,0	+1,2
	27	Together with students, specifies the assignment of the qualification work, sets the schedule effectively, provides timely, structured and professional feedback.	9,8	9,8	0

Evaluation respondents (PhD students) generally see themselves more positively than evaluators in only one competency – K17. The largest differences between self-assessment and assessors were found for competencies K3, K1, K8, K23. The lowest rated competency by self-assessment was K3 and K23. The lowest rated competency by assessors was K14. The highest rated competency by both groups was K5.

Summary and conclusion

For any person, the beginning of a career in academia is challenging. Ever-increasing pressure forces people to excel in a range of areas and skills, especially contextual ones (Matthews et al., 2014; Ragupathi, 2021). Discussions about the competencies of academics – especially teaching or research staff - have been ongoing for many years and new demands are constantly emerging,

not only in the Czech Republic (Rončević et al., 2016; Deaker et al., 2016). In the academic world, activities aimed at developing competences in PhD students and/or early career researchers needed for managing their own work, career advancement in academia, sharing experiences and/or pedagogical skills are gaining popularity (Skakni et al., 2022; Popkochev et al. 2019). At the same time, many universities have ongoing processes aimed at evaluating the quality of doctoral study programmes precisely with regard to increasing students' competences (Verderame et al. 2018; Lopez, 2021). The strategic plan of the Ministry of Education of the Czech Republic takes all these aspects into account, sets trends, and individual universities respond to these recommendations in their strategic plans and implement measures to increase the competences of academic staff, starting with doctoral students.

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University support system for students with specific needs in Slovakia and in the Czech Republic

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Abstract:

The presented study compares theoretical and empirical starting points oriented towards the system of support for students with specific needs at universities in Slovakia and the Czech Republic. The topic is part of the solution of the project E+: Changing Our Story: The Pursuit of Inclusive Education, which focuses on supporting the inclusion of students with specific needs. In tertiary education, only mainstream education is available for students with specific needs, which means creating conditions in which they will be able to develop their potential with a strong inclusive support system and with the participation of a collaborative team of experts who work directly and indirectly at universities in both countries.

Key words:

counselling, inclusion, students with specific needs, support system for students, university

Introduction

University is a social institution closely associated with important societal issues reflected in the ongoing transformation of the system of higher education. Today's high education does face several problems, including the need to modernize and equip universities, as well as the need to perceive and respond to new educational challenges, especially the inclusive nature of the university system, which is one of the priorities of the reform efforts in the education sector in Slovakia (Skyba et al, 2020). Inclusion in education has become a topic not only discussed by experts, teachers, psychologists, sociologists, but also a topic strongly politicized and subsequently publicly mediatized.

However, the understanding of inclusion is far from unanimous, not even among erudite professionals or academic personalities (Slowík, 2018). Successful inclusion of university students with specific needs requires working together to ensure that all students feel welcome and valued and receive the right support to help them develop their talents and achieve their goals. When education is truly inclusive, it brings real benefits to all students. But, at the same time, it should be noted that many difficulties are associated with the process of including students with specific needs in mass educational institutions. One of the most significant and still unresolved problems is the problem of creating educational and methodological complexes for the successful inclusive education of all categories of students in university institutions (Dubiaha & Shevchenko, 2022).

An inclusive education system is a system of services with a combination of special and inclusive education elements. Inclusive education is based on dialogue within the framework of partnership, cooperation, subject-subject relations with a healthy environment, and the principles of coexistence, mutual sovereignty, freedom of joint development, unity in decision-making, etc (Lopatynska, et al., 2022). Establishing inclusion, developing attitude, enhancing meaning, and engendering competence are conditions for internal motivation in students from socially disadvantaged environment, from different cultures and students with specific needs (Pirohová, et al., 2020). Inclusive education was originally developed for younger pupils, prior to its application within higher education.

However, as more students with disabilities successfully complete their elementary, secondary and high schooling, the need to move towards inclusive practices within university education has increased (Moreno, 2016). Education represents a key factor for every person by entering the labour market and by getting and keeping the job. This assumption is also valid when talking about students with specific needs because their educational level can become the factor

neutralising the existence of their disability and it helps them to obtain a dignified position at the labour market (Jedličková, 2019). In addition to acquiring professional knowledge, university students must develop their personality and enhance some of their qualities, as well as a personality-developing pedagogical approach that develops students' love for learning and enables them to meet the challenges which they, as students with specific needs usually experience very often (Csehi, et al., 2020).

Inclusionist appeals logically backfire: explicitly they are expansionist, urging the stretching of boundaries of membership so as to include those who were previously excluded; but every inclusion implies an exclusion, so indusionist appeals are implicitly consenting to a closed community (Goodin, 1996). The other fact is that a student is not either completely included or excluded, but that he/she is included in or excluded from the different communities in different degrees (Qvortrup, Qvortrup, 2018). However, inclusive education requires special support not only for students but also for teachers who teach these students. This means the use of a wide range of support measures and aids (Sender, 2021).

Today's meaning of a word inclusion is often used as phrase or term by universities in many countries to highlight ongoing efforts to rectify the problems that are linked to students with specific needs, non-academic staff, and academic staff (Wolbring & Lillywhite, 2021). The management of commitments by universities to inclusion presents significant challenges. This creates the challenge as to how universities may articulate and act on commitments which go beyond formal inclusion, and which maybe expected to build a culture of a real inclusion (Scott, 2020). Despite the international and increasingly strong promotion of inclusion in the field of education, the topic of social inclusion (that is, inclusion in the wider social space) remains and continues to be a controversial topic of hot discussions (Slowík, 2018).

1. Inclusive Education at Universities in Slovakia And The Czech Republic

The Czech Republic is one of the European countries with a long history of education its citizens including people with disabilities. Four hundred years ago Czech educator and philosopher Jan Amos Komenský (1592-1670) initiated the first strategies focused on improvement of the quality of life for people with special needs. After the Second World War was the Czechoslovak educational system was shaped by theories of Soviet ideological leaders. Children with disabilities were educated in segregated special schools. Two generations of non-disabled did not interact with disabled which developed the negative attitudes towards people with special needs. In the past four decades special education sector has undergone through a significant reform.

After the „Velvet Revolution" in 1989 the Czech education went through significant changes in the field of special education. In 2016 there was a new decree on inclusive education, more specifically on education of students with special needs and students who are „exceptionally gifted". The changes on improving integration of pupils with mental health issues in the basic school level and to promote and implement inclusion were done within the whole Czech Republic. Around fifteen thousand pupils with special educational needs were moved from special schools to regular public schools. The reaction of the public was not very warm and since that there are still many prejudices towards inclusion.

However, the situation has stabilized in recent years and the teaching staff is increasingly accepting the ideas of inclusion. The major documents guiding to the educational reform in The Czech Republic are: Act No. 564/1990 Coll., Administration in Education, Act No. 104/1991 Coll., Convention on the Rights of the Child Decree No. 291/1991 Coll., Setting up Special Schools and Special Educational Classrooms, National Plan of Measures to Reduce the Negative Impact of Disability, September 1993, Act No. 111/1998 Coll., Higher Education Act, Act No. 561/2004 Coll., Education Act, Long-Term Plan of Education and Development of Educational Policy of the Czech Republic 2019–2023.

In Slovakia, inclusion in education is officially covered by several legal regulations, especially in the Constitution of the Slovak Republic (Articles 38, 42) in the Act of the National Council of the Slovak Republic No. 245/2008 Coll. on upbringing and education (School Act); in the Decree of the Ministry of Education of the Slovak Republic No. 325/2008 Coll. on school facilities for educational counselling and prevention; in the Model Statute of Special Pedagogical Counselling Facilities approved by the Ministry of Education of the Slovak Republic under No. 382/1999-44 on 21 December 1999. Also Act of the National Council of the Slovak Republic no. 365/2004 Coll. on Equal Treatment in Certain Areas and on Protection against Discrimination (Anti-Discrimination Act) states that compliance with the principle of equal treatment consists in prohibiting discrimination also on the grounds of disability. To exercising this right without discrimination and based on equal opportunities, the Contracting Parties shall ensure an inclusive education system at all levels ... '. It follows that such conditions must be (and in our view necessary) ensured at universities as well, while respecting, protecting, fulfilling, and promoting the rights of persons with disabilities.

Since 2020, show an inclusive approach in Slovakia, emphasized by the Ministry of Education, Science, Research and Sport of the Slovak Republic. For the first time in history, a separate Department of Inclusive Education was established at the Ministry of Education of The Slovak Republic. Given that the provision of inclusive education is regionally very specific, it will require the cooperation of all stakeholders at different levels. Changes in some schools and school facilities are also necessary. However, the goal of the Ministry of Education, Science, Research and Sport of The Slovak Republic is to focus on the "path of the possible" - that is, to look for solutions as possible. At the same time, the Ministry of Education of The Slovak Republic plans to incorporate the concept of inclusion and define it in the Education Act. With a view to implementing measures in the field of inclusive education as soon as possible, the Ministry identified in its document the Zero Action Plan Strategies for Inclusive Approaches in Education, which was prioritized in 2022.

Further steps for the long-term and strategic development of inclusive education in the Slovak Republic will be identified in the forthcoming Strategy for Inclusive Approaches in Education. The creation of a comprehensive and long-term Strategy with the first action plan for the period 2022 - 2024 is covered by the Ministry of Education of Slovakia in cooperation with other ministries and experts from practice. The Zero Action Plan is therefore the primary starting point for the rapid start of functional changes to increase inclusiveness in education. Authors consider it necessary to clarify the classification of health disadvantages. According to Act 131/2002 Coll. in Higher Education Institutions, specific needs are defined in § 100 Support for students and applicants for studies with specific needs of this Act. In the first point, it is emphasized that the university creates a generally accessible academic environment also by creating appropriate study conditions for students with specific needs without reducing the requirements for their study performance. A student with special educational needs is a student:

- with sensory, physical, and multiple disabilities,
- with a chronic disease,
- with health impairment,
- with a mental illness,
- with autism or other pervasive developmental disorders,
- with learning disabilities.

The number of students with specific needs at universities in Slovakia and The Czech Republic has been on the rise since 2015. In 2022 there were more than four thousand students with specific needs registered at universities in The Czech Republic (Graph 2). By analysing the descriptive method, we concluded that in the last two years, due to the pandemic situation, the number of registered students in Slovakia has stabilized from 2018/2019 to 2021/2022 (Graph 1). The slight decline in 2021/2022 in number of students with specific needs in Slovakia was partly influenced by the distance studies at which universities have started since the declaration of a state

of emergency in the Slovak Republic in March 2020. Not every student with specific needs managed the transition to online education.

Graph 1: The number of students with specific needs at universities in Slovakia
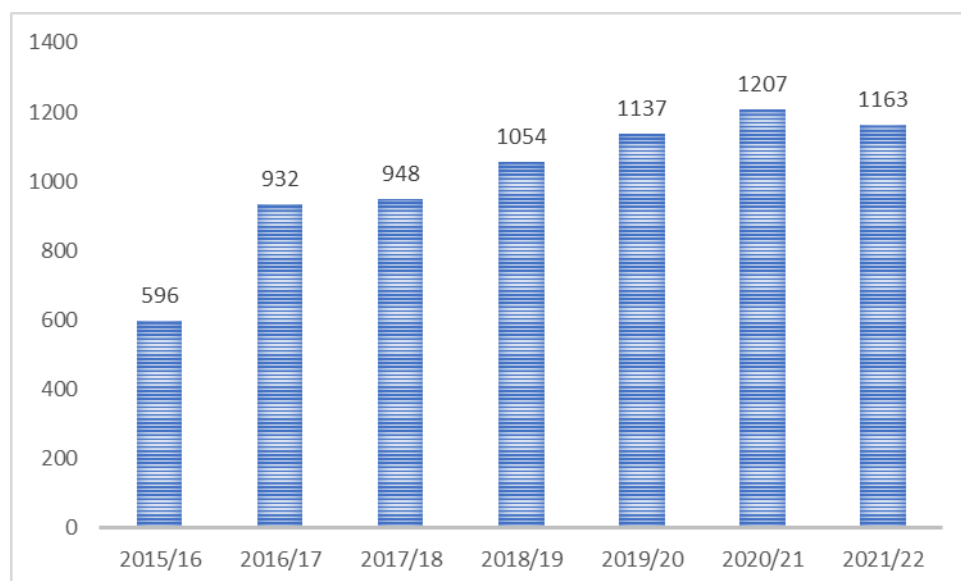
Source: Author's own work

Graph 2: The number of students with specific needs at universities in The Czech Republic
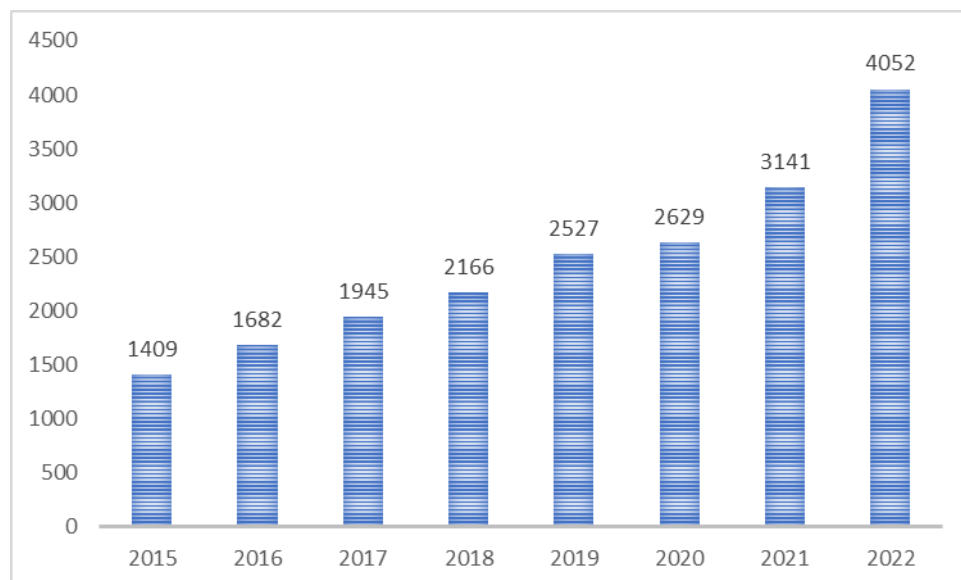
Source: Author's own work

2. System Of Support for Students With Specific Needs As A Tool For Improving The Quality Of Inclusive Education At Universities

Specific needs mean the special education arrangements which are in place for people with disabilities. Veteška et al. (2022) declare that one of the effective tools in teaching students with specific needs is co-teaching, especially the coordination and cooperation of ordinary university

teacher and university counsellor of students with specific needs is required. Counselling for students with specific needs is a special type of professional service designed to provide information, advice, and recommendations to find a solution to problems related to personal or study issues. This counselling takes place at university counselling and support centres. Its major task is to increase the proportion of successful graduates and prevent study failures and drop-outs. The aim is to support students' motivation and to help them address the problems they face. The counselling services offer at universities and colleges is now their standard component. These services cover several typical and fundamental topics. University counselling focuses on learning, psychological, social, or social-legal, special pedagogical and career-related issues (Adamec & Janderková, 2021). The concept of social support is a key function in works devoted to the social context of health, illness and coping strategies of an individual. However, it can also perform a similar function in educational and counselling practice, as everywhere it relies on thoughtful help for students with specific needs on guiding them to self-regulation (Veteška, et al., 2020). Counselling services clients are not only dealt with in the form of group activities courses, seminars but, above all, in the form of individual consultations (Adamec & Janderková, 2021). The aim of the centres is to help its clients (applicants and students) understand issues and make informed decisions to address their problems or overcome various setbacks and difficulties they face in their personal, study and career life. The concept of "education for all" has remained at the centres of attention of the university management and departments. Study-related counselling for applicants and students with specific needs is focused on the provision of information, advice, recommendations, and solutions concerning problems related to the optimal choice of an educational path leading to an appropriate profession. Counselling is focused on:

- providing information about study programmes (presentations, open days, etc.),
- understanding their own interests, capacities, and aptitudes,
- organisation of preparatory courses for entry examinations,
- help in adapting to a university style during the first couple of months.

A counsellor working in a university environment with students with specific needs should be (Opatřilová, 2005, In: Jedličková, 2014):

- professionally competent and equipped with theoretical knowledge and skills,
- patient and emotionally balanced, so as not to transfer his problems to the workplace and not show inappropriate reactions towards students with specific needs,
- tolerant not only to students, but also to his colleagues on a professional basis,
- an expert who pursues his goal, does not give up in the face of difficulties, but looks for alternative solutions,
- creative to find such solutions in the educational process that they are new, correct, attractive, fun, and especially beneficial for the student,
- humanistically oriented and sufficiently empathetic to prove,
- perceive the feelings and experiences of his clients and tried to understand them,
- communicative in relation to the client and colleagues.

University counselling and support centres act as the point of entry for individuals who have documented learning disabilities and physical or psychological specific needs (i.e., students with visual impairment, hearing impairment, physical disability, specific learning disability, disorders of speech and language, behavioural and emotional disorder, autistic spectrum disorder, chronic disease and mental disorder or disease). The specific needs services coordinators work to provide a reasonable study environment to students with special needs and to ensure that university programmes and activities are accessible to individuals with disabilities. Inclusive activities have been enriched with psychological, social, and legal counselling services. Benefits of inclusive education for the students with specific needs:

- diagnosis is not a goal anymore – focusing on abilities, not disabilities.

- difference is one of the „ingrediencies" of normal life - each student has strengths, weaknesses and challenges. Inclusion gives them the possibility to learn in their own way,
- inclusive education develops a higher level of acceptance and respect for diversity and fosters attitudes of respect, understanding and empathy,
- professional development of academic and non-academic staff, improved teaching, and communication skills,
- inclusion requires content communication and cooperation between academic staff, administrators, counsellors and students, inclusion improves their collaborative skills,
- inclusive education aims for better preparation of all students for the real-world success in community life, employment etc.

3. Strategies For the Development Of Inclusive Education In The University Environment

University counselling and support centres, which are part of the university system in both countries, strive for the development of inclusive education using a variety of strategies and conditions. Considering the inclusive philosophy of both countries, the effective inclusions strategies are:

- Concentrate on individual students, not syndromes.
- Think about possible accommodations and modifications that might be needed.
- Emphasize the importance of respecting everyone's perspectives.
- Use inclusive language.
- Learn each other's names, including preferred nicknames and pronunciations.
- Establish prior knowledge.
- Relate learning to students' lives using interest inventories.
- Pre-plan lessons with structured objectives, but also allow for inter/post planning.
- Vary types of instruction and assessment, with multiple intelligences and cooperative learning.
- Proceed from the simple to the complex by using discrete task analysis, which breaks up the learning into its parts.
- Reinforce abstract concepts with concrete examples.
- Provide opportunities for success to build self-esteem.
- Give positives before negatives.
- Use modelling with both teachers and peers.
- Establish classroom environment that encourages students to ask questions and become actively involved in their learning.
- Keep learning more about your students' abilities and the many ways you can reach, teach, and include.

Figure 1: Conditions for successful inclusion

Source: Author's own work

It is clear from the attached figure that, according to the authors, the basic conditions of inclusive education in a university environment include:

- Collaborate = the environment for „healthy" inclusion is interaction between various education participation (students, academic and non-academic staff).
- Achieve = the achievement of inclusive education is carried through understanding and accepting all students, incl. their differences.
- Engage = the attraction of students´ interest in university education by offering programmes to high school scholars.
- Participate = everyone's voice is always listened to, and the decisions are made with students rather than for them.
- Enjoy = the entertainment (i.e. university education) without any hardship and stress.

Using an analytical and comparative method, we tried to achieve a comparison of the support set for students with specific needs at selected Slovak and Czech universities. Every university must be based on legislative regulations. The decree on the minimum requirements of a student with specific needs describes the spatial, material and study-related requirements for each type of specific needs in individual tables (Tab 1). Coordinators and individual universities, or counselling centres adjust the setting of the support system, which is based on the decree and on the universities' own possibilities.

Tab.1 Example of minimum requirements for a visually impaired student from the decree

students with visual impairment / moderate or severe visual impairment	space requirements	material demands	study-relaied requirements
Czech Republic	special orientation before the start of new academic year	use of electronic study resources	individual approach
	adaptation supportive activities, practicing study and working strategies	free of charge copying od study resources	individual consultations with teachers
	occasional study and technical assistance	free of charge compensatory aids rental possibilities	occasional study a pedagogical assistance
		transcription of lectures 'records	increase time allocation to conduct exams/tests
Slovakia	Support in practicing orientation, independent and safe movement in the premises of the university	Borrowing literature from the academic library for an extended period of time	Individual schedule for fulfilling study obligations
	Access to study-related information in a barrier-free1) way	-	Support in providing basic study literature, materials from lectures and assignments from exercises
	Barrier-free work in the academic information system	-	Support in providing study materials in an accessible form
	Access to information and materials of the academic library in a barrier-free way	-	-

Source: Author's own work

It consists of comprehensive information and counselling services for students with specific needs. They concern the selection of a suitable study program regarding the disadvantage, screening, and registration of students. Academic support during studies is mainly focused on providing proposals for appropriate adjustments and providing support services during studies and individual evaluation of the extent of support for students with specific needs, as well as assistance in providing interpreter services for the deaf students. Intervention and therapy services are aimed at addressing specific learning disabilities. Technical support is aimed at providing suitable technical equipment, providing study literature in an accessible form, assistance in providing interpreter services for the deaf, providing assistive technologies according to the type of disability etc,

Graph 3: Overview of support at individual universities in the Czech republic and Slovakia
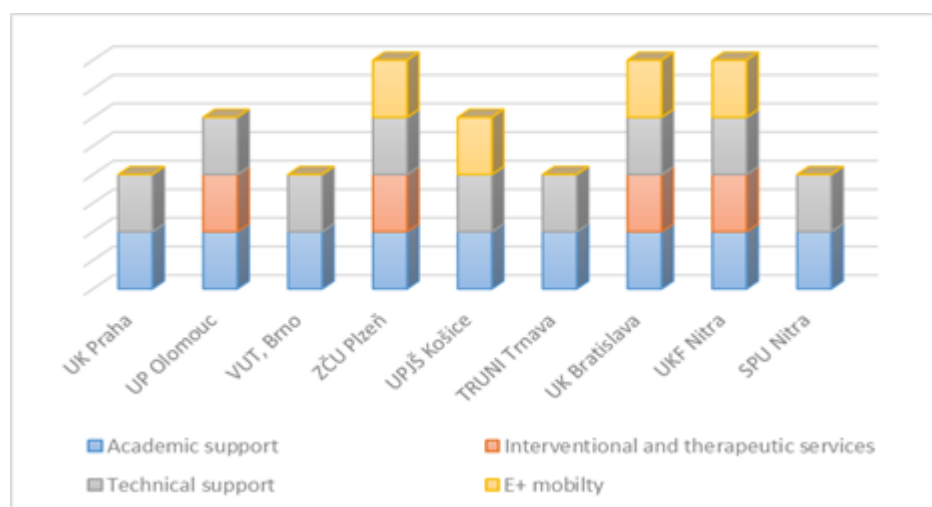
Source: Author's own work

Conclusion

University support system in both countries try to develop an academic environment fair for everyone and gives everybody the opportunity to achieve their education. Counsellors and academicians carry the main responsibility for the students. These professionals often do not have a teaching background. Professional development is lacking for counselling staff at the university level. Both academic and counselling staff have a need for training to provide inclusive environments for students. Due to inclusion support at the primary and high school levels, there is an increasing number of students with specific needs at universities. Consequently, there is awareness of shortcomings in the environment for students with disabilities in higher education, but there are other students such as LGBT+ or those from foreign countries who also remain marginalized. In addition, some populations such as the Roma hardly ever make it into the university.

All universities in Slovakia and Czech Republic provide optimal conditions for the study of intact students and students with specific needs and try to create a generally accessible academic environment and corresponding study conditions for students with specific needs without reducing the requirements for their study performance. We agree with Seidler et al. (2013) who state that inclusion can only be achieved by changing the thinking of every individual in society and by enthusiasm to accept and accept an individual who is exceptional in his abnormality. Indeed, inclusive education is a vast project of research and action that touches on the most fundamental questions (Stapele, 2022). In conclusion, we would like to quote Kolek and Veteška (2018), who confirm that "higher education plays a fundamental role in society, especially for the reason that

it is considered to support innovation, strengthens economic development and, on a more general scale, is understood as improving the well-being of citizens".

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Literacy of the adult population of Slovakia and Ukraine in health maintenance issues

Olena Voliarska

Abstract:

The article is devoted to the study of health literacy of adult population in Slovakia and Ukraine. It has been established that health literacy of the adult population is formed on the basis of theoretical and practical knowledge in the field of health care. It is proved that the task of the state is to ensure the formation and implementation of the policy on improving the health literacy of the population, proper financing of the activities in the field of formal and non-formal education of the adult population.

Key words:

adult education, adult population, health literacy, medical competence, Slovakia, Ukraine

Introduction

In the modern world, health literacy (hereafter the "HL") is one of its key determinants, and the effectiveness of strategies to prolong life and improve health depends directly on the literacy levels of the entire population, countries' governments and public health professionals.

Summarizing European studies, we noted that the most vulnerable groups are those with low social status; with poorer health status, determined by self-assessment of health status, the presence of chronic diseases and limitations in activity due to health disorders; the elderly (Sorensen, 2014).

The situation of Ukrainians on the Slovakian territory which was developed today as a result of the spreading of the C-19 (coronavirus) epidemic, illustrated the low level of HL of a significant part of the population and officials, who should take care of this problem (from managers to specialists "in the field"), as well as representatives of the media. In Slovakia, in 2021–2023, the First Research is being implemented as a part of the VEGA solution project of the Ministry of Education, Science, Research and Sport of the Slovak Republic No. 1/0293/21 "Health literacy of adults". The data are collected, stored and analyzed in accordance with ethical standards and protection of the participants' right to voluntariness, anonymity and confidentiality.

Scientific literature (Cesar et al., 2022; Mospan et al., 2022; Ryngach, 2020) reflects impact of C-19 on public health systems around the world.

Comprehensive results of research on HL of the AP of Slovakia and Ukraine in response to the C-19 pandemic are absent now. Although there have been attempts to study the level of HL of physicians.

Methodology

The aim of the research - to conduct a theoretical analysis of partial empirical research on adult HL in Ukraine and Slovakia.
Research tasks:
1. To describe and compare the results of Ukrainian and Slovakian adult HL researches.
2. To identify common features of research problems in HL among Ukrainian and Slovakian respondents.
3. To develop recommendations for improving AHL.

Research methods: empirical: interviews with respondents, observation, questionnaires; content analysis (to examine current approaches to HL assessment); statistical methods. The

questionnaire includes questions on adults' awareness of risk factors, activities to remedy risk factors, and counselling on relevant issues at the primary health care level.

The methodological approaches used in the study are as follows: andragogical, axiological, competency-based, cultural, person-centered, and systems-based.

The scientific originality lies in the assessment of the level of medical literacy of different age categories of the AP of Slovakia and Ukraine in terms of awareness of the main risk factors, which seems to be insufficient – there is a considerable gap between awareness and concrete actions of citizens.

The study used a broad grouping of the AP, human development concepts.

Results

Our study focused on the level of HL of Slovakian and Ukrainian adults and specific target groups of adults without predefined categorization. English-language articles, which were included here, provided qualitative and quantitative justification of the empirical findings.

Research included in the final selection (n = 15; 100%), had been published between 2014 and 2022, basically in English and selected articles in Ukrainian. A small proportion of articles (n = 2; 13.33%) reported on HL among health workers, followed by characteristics of health workers' responses to HL. Several studies (n = 3; 20.0%) addressed the importance of HL for company employees. Study in educational institutions was identified in three studies (n = 3; 20.0%).

The review showed that HL for different categories of adults was mainly addressed by representatives of medical, sociological and psychological spheres of knowledge and was paid small attention by professionals in the field of adult education. The quantitative analysis of publications shows that there is a significantly more numerous representations of works, which were carried out by representatives of medical professions, in contrast to psychological and pedagogical works.

A survey of citizens in eight European countries in 2012 by the questionnaire, which was developed by The European Assessment Tool for HL (EAL) (Sorensen et al., 2015), found that 12% of respondents have poor (insufficient) public HL and 35% rate it as problematic. Limited (poor and problematic) HL ranges from 29% in the Netherlands to 62% in Bulgaria, meaning that it is a problem for a significant proportion of the population in Europe. The results of the study on HL levels show that almost half of the Europeans surveyed have insufficient or problematic health skills. Low HL is associated with poorer health, less health self-sufficiency, more frequent hospital admissions and higher adult healthcare costs.

In our study, HL is understood as a key determinant of health, as an important form of social capital (Marteau et al., 2011; Zheng et al., 2018).

We present and analyze the results of a HL survey of a selected AP in Slovakia and Ukraine. In Ukraine, Ryngach (2020) conducted a targeted survey (2018–2019) among physicians and health facility management's representatives who had attended continuing education courses.

The survey was conducted using a specific HL assessment tool (The European HL Survey Questionnaire, HLS_EU_Q47). The answers to these questions allow us to assess adults' subjective perception of their difficulties in dealing with health-related problems. A four-point scale "easy/somewhat easy/somewhat difficult/difficult" is proposed for the assessment.

Respondents (n = 96; 100%) were physicians and health management professionals of various basic specialties and job levels who had received continuing education. They were qualified professionals with at least five years (most with more than ten years) of postgraduate medical education between the ages of 30 and 62 years. Data were collected and processed in a manner that protected participants' right to anonymity and confidentiality.

This research has shown that there are many problems. For example, Ukrainian physicians were most ambivalent when asked about the ease of making decisions to improve their health, the impact on their well-being, participation in general activities that improve health and well-being at home or in the workplace and in the community.

Analyzing the responses of the focus group respondents, the researcher expected that he would obtain an almost 100% rating for ease of access to, understanding of and awareness of the importance of the necessary information for themselves, and that there were no difficulties in these processes – after all, the respondents were professionals with higher medical education and sufficient experience. As a result, despite the relatively high level of health awareness among doctors, HL is not high even among this group of respondents.

In the light of international instruments (for children, students and postgraduate students), Ukraine has started to develop educational materials on healthy lifestyles and disease prevention. It is also necessary to ensure that patients are informed of risk factors, their detection and possible correction at all levels of medical care and to alert adults to the need for regular preventive check-ups (World Health Statistics, 2018). The development of educational programs is also planned, and it is envisaged to develop introduce thematic training for doctors and health professionals working at primary care level.

A study on HL in Slovakia is currently in the data collection phase. According to the hypothesis of the study, it is expected that low levels of HL will prevail among AP. This was partially confirmed by the results of a survey conducted in September 2022 among social workers of the humanitarian center.

The results of the research on the HL of individual categories of the AP can be used in the developing of state policy in the field of health, adult education and gender statistics. Also, it can be used in public administration, development of concepts of demographic policy, study of legislation, educational and methodological materials, activities of social and psychological services for the citizens, etc.

Interpretation of results

Summarizing the results of the empirical research, we found out that in both Slovakia and Ukraine:
1. Interdependence of social health and level of HL of adults from a formal education.
2. HL is a predictable characteristic.
3. Interdependence of a low level of HL and social status.
4. There is a need to increase citizens' control over their own health and its determinants by harnessing the potential of digital technologies.
5. A government should provide a social environment conducive to healthy living to its citizens.

In terms of health, in the survey, the majority of adult indicated that they can use the resources of libraries, social networks and the Internet. Based on our interviews, we found out that people with higher education (and often with academic degrees) tend to turn to non-traditional methods of treatment or medication. We believe that halting the transition to a critical level of HL is an urgent problem.

Discussion

Summarizing the results of the survey by questions, we see that the most difficult thing for adults (both Ukrainians and Slovakians) was to make a decision in the block about forming their own opinion or a certain activity.

A common problem has been identified as evidenced by publications by researchers from Slovakia and Ukraine (Matulčík, 2022; Lukianová, 2022) a large proportion of physicians and patients are not prepared for interaction in distance technologies.

At the same time, the need for skills development through distance and combined adult education was also highlighted in the articles of Ukrainian researchers in the field of adult education (Nychkalo et al., 2022).

We would like to focus specifically on the issue of competitiveness in the labor market and HL, which is important for today's adults. For our research, the interest is in results (Hochmuth &

Sorensen, 2021) that describe how companies and organizations currently apply the concept of HL in their efforts to protect the health of their employees. Today's labor market requires employers to take a holistic approach to approaching and mitigating their employees' health risks, as employers with higher corporate health scores (a common way of quantifying a "culture of health") tend to have lower health trends in the cost of care without having to cut benefits or pass on additional costs to their employees (Gunther et al., 2019).

From the perspective of businesses and organizations, participation in the health of employees and their environments can be collectively referred to as a "corporate culture of health" (Kyle et al., 2019; Whitney et al., 2017).

It is important to note that international research claims that employers can play an active role in helping their employees gain the skills needed to manage their own health as well as the health of those around them.

Conclusion

Improving HL strengthens the ability of individuals and social communities in Slovakia and Ukraine to cope with adverse external influences, helps to overcome social inequalities in the provision of health services to the population, and improves the overall health and well-being of the AP.

HL of the population is serves as an indicator of the effectiveness of the state's approach and the principle of participation of the whole society in the protection of the health and well-being of citizens. The assessment of the level of HL among the population of Ukraine and the Slovak Republic and in certain socio-demographic groups should become the basis for the development and implementation of measures to increase its level as a concrete result and perspective of health improvement in the process of achieving success-economic development.

Improving AHL in Slovakia and Ukraine can be achieved by providing information to different categories of adults, effective communication and structured non-formal education.

In perspective a digital online learning to keep people healthy and increase HL levels would be useful to continue sociological research based on the HLS_EU_Q47 questionnaire on a representative sample of the population of Ukraine and Slovakia, with further comparative analysis of the results obtained and results in other countries.

In a broader context, this could be a further exploration of AHL levels enhanced by the use of distance technologies in formal and non-formal adult education.

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Professional characteristics of social and legal child protection workers

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Abstract

The paper is focused on presentation of the results of the research of the professional characteristics of social workers who participate in the social and legal protection of children and youth in the environment of social exclusion. The research was carried out using the standardized BIP method (Hossiep & Paschen, 2011) on a sample of 134 respondents. The results can be the basis for planning the professional development of this group of social workers.

Key words:

professional characteristics of workers, professional development, social exclusion, socio-legal protection of children, social work, social worker

1. Introduction and Theoretical Background

In the past two decades, social work in the Czech Republic has undergone significant development associated with its professionalization (Divoká, 2017). Weiss-Gal and Welbourne delineated thematic areas that can be considered essential for professionalization in this field: *public recognition, monopoly over types of work, professional autonomy, the knowledge base, the professional education, the professional organizations, the existence of codified ethical standards and, lastly, the prestige and remuneration of social work* (Weiss-Gal & Welbourne, 2008).

A specific area of social work is the socio-legal protection of children and youth, which in the past decades has also undergone development both in the Czech Republic (Gojová et al., 2020), and in other countries (D'Cruz & Stagnitti, 2008; Roose et al., 2014; Spratt et al., 2015; Welbourne & Dixon, 2016; Churchill & Fawcett, 2016; Seim & Slettebø, 2017; Devaney, McGregor & Cassidy, 2017 and others). Social and legal protection of a child consists in securing the child´s right to life and favorable development, to parental care and family life, to the child's identity, freedom of thought, conscience and religious conviction, education, and employment, it also includes protection of a child from any physical or mental violence, neglect, abuse or exploitation (Ministry of Labor and Social Affairs, 2022).

High demands on the professional and personal competences of social and legal child protection workers are applied within the Czech Republic primarily in areas with a high incidence of so-called socially excluded localities (Svoboda & Morvayová, 2010; Hurrle et al., 2016; Kříž et al., 2021). A high occurrence of this type of locality in the Czech Republic is typical for so-called structurally disadvantaged, possibly also coal regions (Alves Dias et al., 2018). Social problems in the stated regions are manifested, among other things, by inequalities in education (Schleicher, 2019). Workers in the social and legal protection of children and youth are therefore important partners in overcoming inequalities in education and implementing steps leading to the support of children in education (Svoboda & Zilcher, 2019; Němec, 2021; Svoboda, 2022) and promoting inclusive principles in education (Zilcher & Svoboda, 2019) or prevention of early drop outs (In detail Volfová, Svoboda et al., 2023). Equally important is the area of cooperation between workers of social and legal protection of children and facilities for substitute educational care (Smolík, 2016; Smolík, Svoboda et al., 2012).

The operation of the institutions of the social and legal protection of children in this specific environment must have such a set of competences, knowledge, and skills (competence is necessary) that they will always be able to respond adequately and above all professionally in relation to a child at risk. However, within the framework of the social and legal protection of children, it is constantly discussed whether the main purpose of the work is the support

and protection of the child's family or its social control. This is one of the most ethically problematic areas of social work. The work of social and legal protection of children always combines elements of control and support.

Within our research we therefore focused attention on selected characteristics of workers in the sphere of social and legal protection of children. The analysis of these characteristics is a prerequisite for planning and implementing the further professional development of social workers. As part of the research, we used a standardized BIP questionnaire.

The BIP-Bochum Personality Questionnaire (Hossiep & Paschen, 2011) is aimed at diagnosing the self-concept of abilities that are decisive for success at work. The goal is a standardized assessment of self-image, taking into account the demands of the profession itself. However, there are significant differences between what is commonly understood as personality today and the concept of the term in a professional context. In a detailed comparison not only of andragogic specialist literature, but it should also be noted that the terminological definition of the given area itself is not assigned a completely uniform content. This is because an individual's personality plays a more significant role in an individual's work performance than his/her age or gender (Cejthamr, 2010). Because personality represents the sum, context or connection of a person's character, temperament, abilities, and constitutional properties. It is therefore a relatively stable, consistent, and complementary system of signs, contents, and manifestations of a person for certain behavior (Cakirpaloglu, 2012).

However, it is necessary to realize that personality as a hypothetical construct is not directly observable. However, we can observe real behavior and presume some personality characteristics based on that. (Šnýdrová, 2008) In our concept, we understand personality as the arrangement of all dispositions towards a certain behavior, including motivational structures and even individual value attitudes (Hossiep & Paschen, 2011). Professional characteristics include personal and social aspects enriched by professional skills, experience from the work environment, interests, and goals (Evangelu, 2009).

2. Methodological Resources

The tool used by us for the conception and necessary collection of quantitative data of empirical research contains a total of 210 questions. These are divided into a total of fourteen personality dimensions, with assignment to four different areas of professional prerequisites.

Picture 1: Concepts of the dimensions of the BIP-Bochum Personality Questionnaire scales

Occupational Orientation
■ Achievement Motivation
■ Power Motivation
■ Leadership Motivation

Occupational Behaviour
■ Conscientiousness
■ Flexibility
■ Action Orientation

Personal characteristics relevant to work

Social Competencies
■ Social Sensitivity
■ Openness to Contact
■ Sociability
■ Team Orientation
■ Assertiveness

Psychological Constitution
■ Emotional Stability
■ Working under Pressure
■ Self-Confidence

Source: Hossiep & Paschen (2011, p. 17)

From the point of view of the individual areas themselves, professional orientation consists of Achievement Motivation (AM, 14 items), Power Motivation (PM, 12 items), Leadership Motivation (LM, 15 items). A striking dimension of the field of professional orientation related to Achievement Motivation (AM), is understood as the readiness to cope with high work standards, as well as the effort to continuously measure one's own performance and possibly increase it. The very construct of this motive is based on the requirement that most human behavior is directed towards a certain goal (Blatný et al., 2010). In addition to cognitive abilities, we can consider the second general characteristic or a group of characteristics relevant to professional success, i.e., generally understood achievement motivation (Tirpák, 2022). Another dimension of personality in the field of professional orientation is the power motivation (PU), including the readiness to stimulate other people to an action that they would hardly do themselves without this stimulus. Within the framework of the standardized investigation, a strict distinction is made between direct social influence (leadership motivation) and by affecting processes and structures (power motivation). Leadership motivation is a state of mind whose characteristic feature is the motive (wish, desire, need, interest) to make decisions and lead people (Tureckiová, 2004).

The second range of professional prerequisites of the standardized BIP questionnaire is work behavior, including: conscientiousness (C, 14 items), flexibility (Fl, 14 items), action orientation (AO, 14 items). Conscientiousness (C) construct is a distinct motive, characterizing persons with high values who are significantly conscientious in planning and carrying out work activities. The dimension of flexibility (F) characterizes the high readiness and ability of the worker to adapt to new and unforeseen situations and tolerate uncertainty. Action orientation (AO) is the last scale of the field of work behavior, enabling the quick implementation of a specific decision through a targeted activity, as well as the protection of the chosen activity alternative against other proposals (Hossiep & Paschen, 2011).

The third area of professional prerequisites is social competence, representing: social sensitivity (SS, 12 items), openness to contact (OC, 16 items), sociability (S, 15 items), team orientation (TO, 13 items) and assertiveness (12 items). The construct of sensitivity (SS) can be thought of as a good feeling for weak signals in social situations. Openness to contact (OC) represents a strong preference for addressing known and unknown people, an effort to establish and maintain social relationships. Sociability (S) is a marked preference for social behavior, characterized by friendliness and consideration. Team orientation (TO) subsequently represents a high evaluation of teamwork and cooperation. Assertiveness (A) is a scale measuring the extent of readiness to actively assert oneself despite obstacles (Hossiep & Paschen, 2011).

The last reflected range of professional assumptions within the research investigation is the psychological constitution, containing: Emotional stability (ES, 16 items), working under pressure (WP, 13 items), self-confidence (SC, 16 items). Emotional stability (ES) determines the disposition to a generally balanced basic emotional attitude, which is the basis for adequate control of one's own emotional reactions. While emotional stability mainly captures emotional coping with challenging situations, the questions of working under pressure scale (WP) are directed more towards psychological attributes. The mentioned dimension represents a self-image measure of the extent to which the proband perceives himself as (physically) robust against difficulties (Hossiep & Paschen, 2011). Working under pressure is referred to in the literature as frustration tolerance. This is the limit beyond which an individual is able to handle stress without distorting their perception and triggering maladaptive reactions. It is about the level of working under pressure and the ability to quickly regenerate vigor (Cimrmannová et al., 2013). The last dimension of the psychological constitution is self-confidence (SC), characterizing the willingness to openly uphold one's own ideas, goals, and ways of behaving. Part of self-confidence is self-knowledge, i.e., accepting new information about oneself. Self-knowledge is an essential condition for quality work with other people. However, this is a lifelong process, so perhaps it would be better to use the term getting to know (Kolařík, 2019).

3. Results and discussion

We conducted the research on a sample of 134 social and legal child protection workers, of whom 15 were men (11%) and 119 were women (89%). This distribution corresponds to the real gender distribution within this profession. The average age of the survey respondents was 37 years, with an average length of experience of six years. The collection of data took place designedly and the relevant departments of social and legal protection of the municipal authorities of municipalities with extended powers in the Ústí Region were addressed in particular.

For the calculations, we used the so-called Student's t-test. This is one of the most well-known statistical tests of significance for metric data and analysis of variance i.e., ANOVA (analysis of variance) at the $\alpha = 0.05$ significance level. The procedure for verifying the hypotheses unfolded according to the level of measurement on which the given items were constructed. The research tool works with interval scales; therefore, it is possible to use both parametric and non-parametric methods of statistical data analysis. Therefore, the data were first subjected to tests to determine the normality of the data distribution using the Shapiro-Wilk test. We must also say that from the point of view of statistical evaluation of the data, the creation of histograms of relative frequency and the graphs themselves, Statgraphics Centurion XV software was used. The templates included in the manual and the test file are used for the BIP evaluation itself. In the overall data analysis, we decided to compare the always achieved percentile rank according to the length of experience and the age of the respondents.

Arithmetic averages were calculated from the percentile ranking of individual workers in the social and legal protection of children, where AM = achievement motivation, PM = power motivation, LM = leadership motivation, C = conscientiousness, F = flexibility, AO = action orientation, SS = sensitivity, OC = openness to contacts, S = sociability, TO = team orientation, A = assertiveness, ES = emotional stability, WP = working under pressure, SC = self-confidence, t = test criterion of the appropriate type of Student's t-test with equal or unequal variances for comparing the arithmetic means of two independent data samples, P_t = the observed significance level of the test criterion of the respective type of Student's t-test, F = test criterion of the Fisher-Snedecor test (F-test) for comparing the variances of two independent data samples, P_F = the observed test significance level of the Fisher-Snedecor test criterion, SD = standard deviation (variance of a set of values).

The first researched area was professional orientation, which consists of: achievement motivation (AM), power motivation (PM), leadership motivation (LM). Due to the research investigation, we therefore compared the results of the arithmetic averages of the percentile ranking of individual workers in the social and legal protection of children within this area. To compare the results, we used ANOVA analysis of variance (analysis of variance) at the $\alpha = 0.05$ significance level. This compares the mean values of two or more groups in the sample. The value of the first test criterion in the area of professional orientation was F 4.53 and P 0.011, i.e., less than 0.05. Therefore, the monitored variances are not the same between the compared files. Interval graph 1 also presents the demonstration of the whole situation, where MVy = 31.291, SD_{MVy} = 19.924, MU = 29.955, SD_{MU} = 21.774, MVe = 37.179, SD_{Mve} = 20.951, TOT = 32.816, SD_{TOT} = 21.078. When the P value is less than $\alpha = 0.05$, we subjected the research survey data itself to a post-hoc analysis (Table 1).

From graph 1 and table 1 below, significant differences in the percentile of the research survey probands in the area of leadership motivation (LM) are clearly visible. The latter is statistically significantly better compared to the areas of achievement motivation (AM) and power motivation (PM). We believe that the results are closely correlated with the important content of the work of social workers. This is largely made up of management and represents a great many activities, mainly related to preventive and advisory activities. An important activity of these workers is, for example, deciding on educational measures to protect children. The actual performance of this profession therefore combines not only the role of client evaluator, but also his advocate, adviser, intermediary of other services, provider of direct assistance, mediator, coordinator of the activities

of other helping entities (in detail Matoušek & Pazlarová, 2016). The presented results of the research correspond with the mentioned theoretical findings and document the relevance of the influence and the necessity of high motivation for leadership among workers in the social and legal protection of children.

Graph 1: Interval graph of results depending on the percentile of the measurement in the area of professional orientation/all respondents of the research survey (AM = achievement motivation, PM = power motivation, LM = leadership motivation)
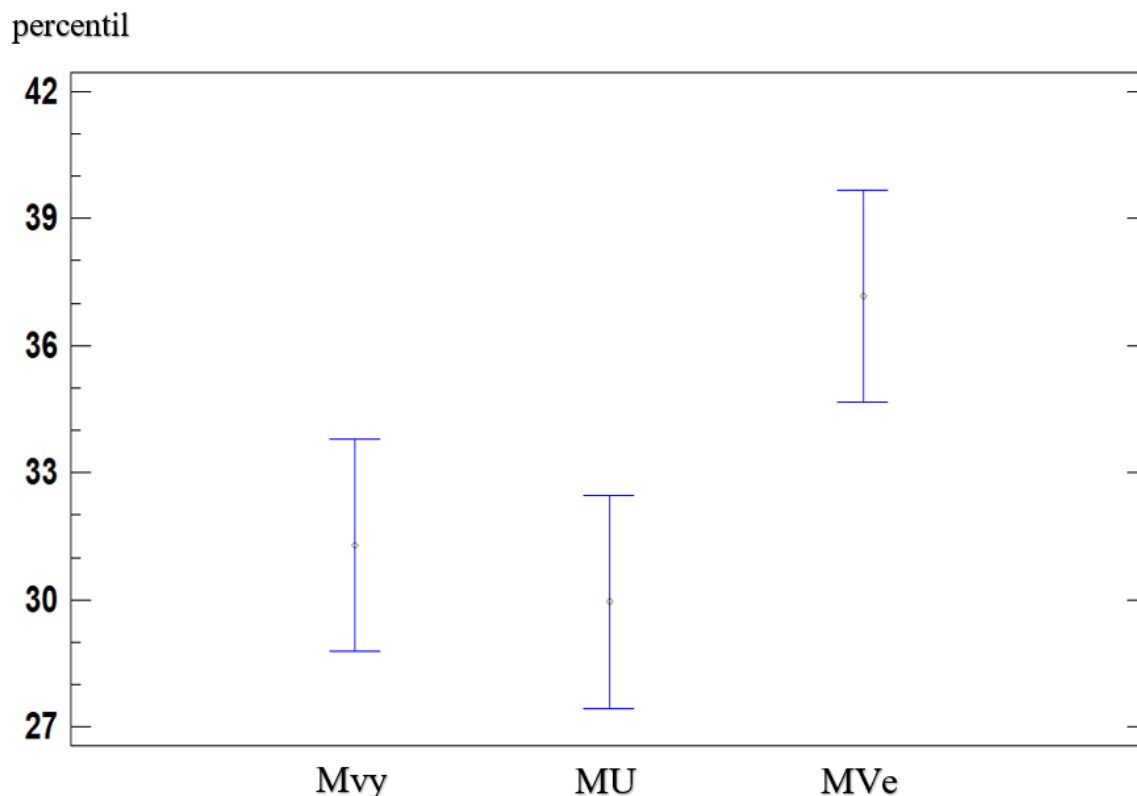
Resources: own elaboration

Chart 1: The observed values of the post hoc analysis of the results depending on the percentile of the measurement in the field of professional orientation/all respondents of the research survey (AM = achievement motivation, PM = power motivation, LM = leadership motivation)

	AM	PM	LM
AM	--------	$P_t = 0.601$	$\mathbf{P_t = 0.019}$
PM	$P_t = 0.601$	--------	$\mathbf{P_t = 0.006}$
LM	$\mathbf{P_t = 0.019}$	$\mathbf{P_t = 0.006}$	--------

Resources: own elaboration

The second monitored professional area is work behavior. The overall results of the arithmetic averages of the percentile ranking of individual workers in the social and legal protection of children showed us two basic values, depending on the measurement. The F-value was 6.16 and the P-value was 0.002, again less than 0.05. Therefore, the monitored variances are not the same between the compared files. Interval graph 2 presents a demonstration of the whole situation, where Sv = 43.575, SD_{Sv} = 23.170, Fl = 37.910, SD_{Fl} = 15.018, Ro = 35.612, SD_{Ro} = 18.267, TOT = 39.032, SD_{TOT} = 19.359.

The observed significance level of the test criterion is less than α = 0.05. In the table below (table 2), the data of the research investigation itself can be found as part of the post-hoc analysis. The procedure for verifying the hypotheses unfolded according to the level of measurement on which the given items were constructed. Research survey data were therefore always first subjected to tests for normality of data distribution using the Shapiro-Wilk test. For the statistical evaluation of the data obtained by the standardized survey, the appropriate type of t-test was subsequently used to compare the arithmetic averages of two independent data samples.

Graph 2: Interval graph of results versus percentile of work behavior measurement/all survey respondents (C = conscientiousness, F = flexibility, AO = action orientation)
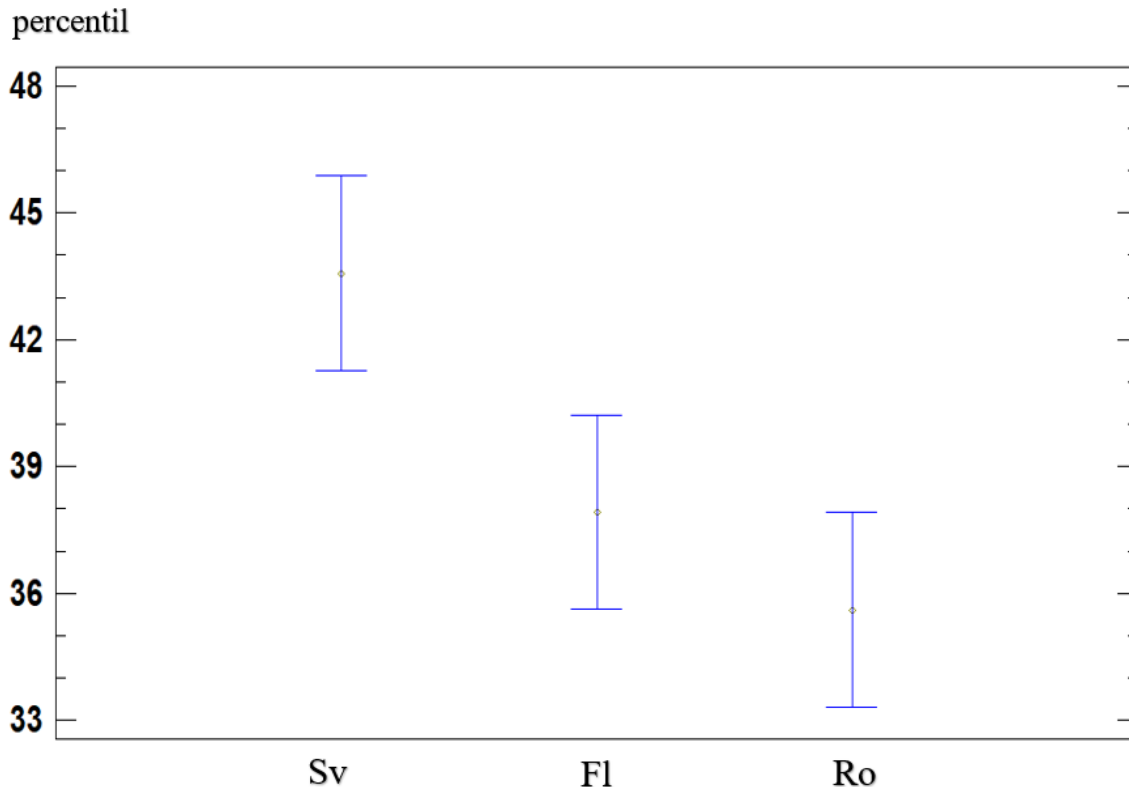
Resources: own elaboration

Table 2: Findings of post hoc analysis of the results depending on the percentile of measurements in the area of work behavior/all survey respondents (C = conscientiousness, F = flexibility, AO = action orientation)

	C	F	AO
C	--------	**$P_t = 0.018$**	**$P_t = 0.002$**
F	**$P_t = 0.018$**	--------	$P_t = 0.262$
AO	**$P_t = 0.002$**	$P_t = 0.262$	--------

Resources: own elaboration

From the comparison of the arithmetic averages of the ranking percentile, a statistically significant difference can be traced again in relation to the area of conscientiousness (C). The dimensions of flexibility (F) and action orientation (AO) are statistically worse in comparison. The results do not surprise us, because conscientiousness must be a necessary part of the work of social workers. This is a personality trait manifested, among other things, by discipline and reliability at work and a very responsible approach to completing tasks. People with a high level

of conscientiousness at work achieve extraordinary results. They work very thoroughly on themselves, try to understand themselves and apply the learned procedures in their lives with the same enthusiasm. In relation to conscientiousness, we are talking about a certain tendency to be ready and willing to solve tasks effectively, reliability to fulfill duties responsibly and follow rules, disciplined perseverance, and the ability to resist distractions, prudence in thinking things ahead. (Boyes, 2021) A high level of conscientiousness means greater persistence and reliability in completing tasks, a greater tendency to see things through (Procházka et al., 2013).

The third area of professional characteristics monitored by us is social competence, where the arithmetic averages of the percentile rank for workers in the social and legal protection of children showed us two basic values, depending on the measurement. The F value was 1.76 and the P value was 0.134, greater than 0.05. Therefore, the monitored variances are the same between the compared files. Interval graph No. 3 presents a demonstration of the whole situation, where Sen = 30.769, SD_{Sen} = 19.288, SK = 32.209, SD_{SK} = 16.686, So = 29.889 SD_{So} = 19.999, OT = 33.881, SD_{OT} = 17.903, SP = 34.955, SD_{SP} = 17.635, TOT = 32.340, SD_{TOT} = 18.383.

Graph 3: Interval graph of results depending on the percentile of the measurement in the area of social competences/all respondents of the research survey (SS = sensitivity, OC = openness to contacts, S = sociability, TO = team orientation, A = assertiveness)
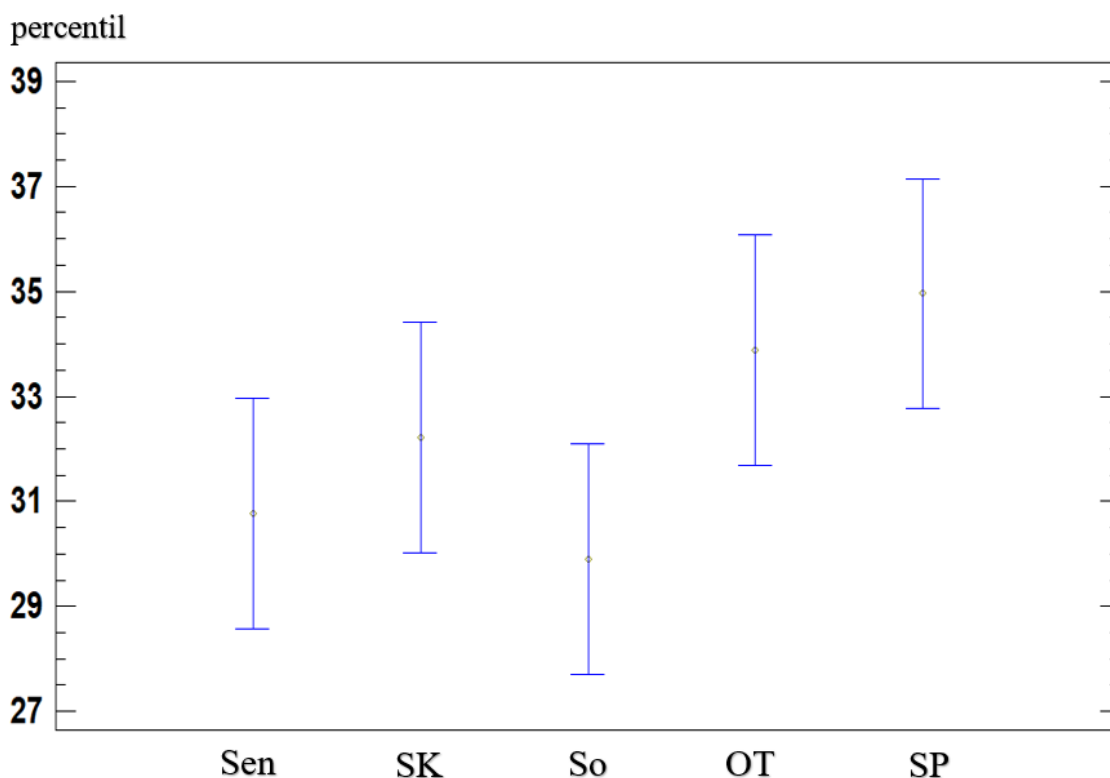
Resources: own elaboration

The results do not indicate statistically significant differences in the measurement percentile of the social competences of workers in the social and legal protection of children. The Code of Ethics of the Social Worker of the Czech Republic states that social work is a profession that supports social change, social development, solving problems in interpersonal relationships, social equality, strengthening and empowering people in an adverse social situation. It is the obligation of the social worker to carry out this work conscientiously, responsibly, initiate cooperation and adhere to the highest possible standards of professionalism. The job position itself and the activities listed by us, which primarily require holding roles associated with leading and

managing people, for which appropriate social competence is a necessary condition. The specificity of this area is also enhanced by the fact that possible subjective factors influencing social competence include personality traits, motivational profile, and ongoing management of professional and work positions. On the other hand, such characteristics as low ambition, lack of self-confidence, excessive timidity or anxiety, tendency to underestimation, or vice versa, excessive self-confidence or insufficient self-criticism can lessen the mentioned area of work behavior. A person's overall passivity and excessive situational focus on immediate benefit can also have an adverse effect. Person's success at work therefore depends on managing the job position and the corresponding performance of the work role (Bedrnová & Nový, 1998).

The last area we monitored was psychological constitution. During a detailed comparison of the results of the arithmetic averages of the percentile ranking of individual workers in the social and legal protection of children, the measurements showed us two basic values. The F value was 2.17 and the P value was 0.116. We can therefore claim that the monitored variances are the same between the compared sets. Interval graph 4 presents a demonstration of the whole situation, where $ES = 48.075$, $SD_{ES} = 19.044$, $OZ = 44.022$, $SD_{OZ} = 14.854$, $Seb = 44.679$ $SD_{Seb} = 17.159$, $TOT = 45.592$, $SD_{TOT} = 17.155$. The results could be expected, because the psychological constitution is a professional characteristic of the personality, which is one of the areas decisive for success in employment. In the selected sample, no statistically significant differences were found in the field of emotional stability, resistance to stress or self-confidence among workers in the social and legal protection of children.

Graph 4: Interval graph of the results depending on the percentile of the psychological constitution measurement/all survey respondents (ES = emotional stability, WP = working under pressure, SC = self-confidence)
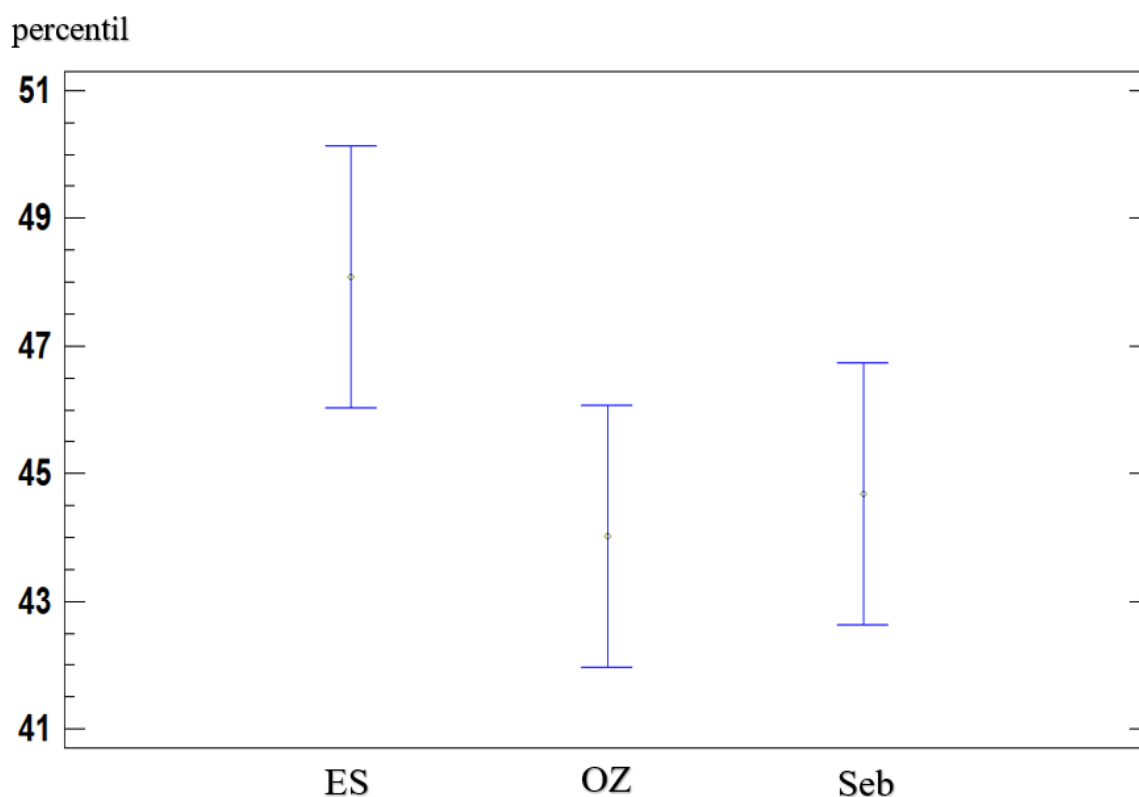
Resources: own elaboration

3. Conclusion

The paper is devoted to the issue of examining the professional characteristics of workers in the social and legal protection of children. The research included a sample of 134 respondents, of whom 15 were men (11%) and 119 were women (89%). The collection of data took place designedly and the relevant departments of social and legal protection of the municipal authorities of municipalities with extended powers in the Ústí Region were addressed in particular. The average age of the survey respondents was 37 years, with an average length of experience of six years. In the overall data analysis, we decided to compare the achieved percentile rank.

For example, we can consider as important findings the clearly visible significant differences in the percentile ranking of the probands of the research survey in the field of professional orientation, in relation to the leadership motivation (LM). From the calculations of the arithmetic averages of the rank percentile, the mentioned dimension is statistically significantly better compared to the area of achievement motivation (AM) and to power motivation (PM). We believe that the results reflect the important content of the work of social workers. This is largely made up of management, as the actual performance of this profession combines not only the role of a client evaluator, but also his advocate, adviser, mediator of other services, provider of direct assistance, mediator, administrator, evaluator, and coordinator of the activities of other helping subjects.

Furthermore, comparison of arithmetic averages of percentile order in the field of work behavior clearly results in significant difference in relation to the area of conscientiousness (C). Dimensions of flexibility (F) and action orientation (AO) of workers in social and legal protection are substantially worse. The results are not surprising again, as the high level of conscientiousness means greater endurance and reliability in performing tasks, greater tendency to finalize things. In planning and performing activities, significantly conscientious persons manifest themselves as very reliable.

Among the compared sets in the area of social competences and psychological constitutions, the monitored percentiles were the same in all employees of social and legal protection of children. Therefore, no statistically significant contradictions in these areas of professional characteristics were found in the probands of our research.

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Satisfaction of students in schools using quality management systems

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Abstract:

This paper presents the results of a comparative study, in which students' satisfaction with the quality of teaching, teachers and technical equipment was determined at schools that use one of the quality management systems (hereafter QMS), and subsequently compared with the opinions of students at schools that do not use these systems. Five schools formed the main research group, sixteen schools formed the control group. In the individual indexes, it was shown that students of schools that use a QMS rated their school better in some aspects than students where quality management systems were not implemented.

Introduction and theoretical framework

Quality management systems are transferred to the education sphere from the industrial sphere and are therefore primarily focused on the customer and his satisfaction (Corrigan 1995; Neves and Nakhai, 1993; Sallis, 2002; Terzic, 2017 and others). Research on student satisfaction and school climate is increasing with the development of positive psychology, but these researches often deal with specific areas of satisfaction in schools, teacher satisfaction (e.g. Zarzuelo et al., 2018), or they deal with aspects of the school climate in the entire breadth of the issue. Students' satisfaction with school can be perceived from different angles and time dimensions. It is influenced by a number of factors on the part of the student, teacher, environment and school. The customer theory assumes that the difference between expectations and the customer's perception of reality determines his level of satisfaction with the quality of the services provided (Harvey & Kamvounias, 2008).

However, student satisfaction is not a homogenous and sufficiently researched construct. Findings (Wiers-Jenssen et al., 2002) support the criticism and show that it is a concept strongly influenced by a number of contextual factors independent of teaching quality. As an argument against equating student satisfaction with the quality of teaching, Richardson (2005) referenced to the research results of psychologists dealing with the intellectual development of students (Perry, 1970; Baxter Magolda, 1992), whose findings confirm that intellectual development is associated with a certain discomfort. Kursch also pointed out the connections between students' satisfaction with their talent (Kursch, 2017) and methods of supporting their talent (Kursch 2018; Veteška & Kursch, 2018).

Vašťatková & Michek (2010), Jirečková (2011), Nenadál (2015) and others consider two concepts to be the most historically anchored and used in the European environment, namely standards based on requirements defined within ISO 9000 and the concept of TQM (Total Quality Management), actually used according to various models, in the European environment most often in the form of the EFQM model of excellence, or of the CAF self-assessment framework.

A number of foreign studies indicate that quality management systems provide schools with more advantages than disadvantages, although some do exist (Cheng, Lyu & Lin, 2004; Detert, Schroeder & Mauriel, 2000; Johnson & Kattman, 2003; Stensaker, 2007; Díez et al ., 2018). Michek (2006) supports the use of the EFQM model in education but points out the long-term implementation of the model and the fact that results do not appear immediately. Trnka (2002) perceives the advantages of the ISO standard in the transparency of the description – when the procedure is documented, its repeatability is guaranteed, and the omission of partial activities is

eliminated. According to Maťašová (2006), Michka & Vašťatková (2010), Jirečková (2011), Kursche (2021) and others, QMS strive for complete satisfaction of the client's requirements, their effectiveness depends on the way the school is run, leadership, understanding of the model, use of digital technologies and teachers' motivation for teamwork. He sees the advantages of the systems in the possibility of continuous and systematic analysis of the state of the school according to a proven model, the definition of corrective measures and the formulation of an effective solution plan.

1 Methodology

The aim of this study was to analyze the level of satisfaction of secondary school students in schools that use one of the QMS (self-assessment framework CAF, EFQM and ISO 9001 standards), and to compare this level with students in schools where none of the QMS is used. During the investigation, two main and three sub-hypotheses were verified.

H1: Students who attend a school where a quality management system is implemented will be more satisfied with their school than students where the school's quality management system is not implemented.

H2: The opinions of principals and students in schools with a quality management system are closer to each other than the opinions of principals and students in schools without a quality management system.

The first hypothesis was divided into three sub-hypotheses determining satisfaction with the quality of teaching, the quality of teachers and technical equipment. All formulated hypotheses generally claim that the effect of quality management systems is not zero.

1.1 Research sample

To select the schools, the database of the Ministry of Education and Culture of the Czech Republic was used, through which 883 principals of secondary schools in the Czech Republic were approached, teaching fields of H", i.e. fields of education providing secondary education with a certificate of apprenticeship, "L", i.e. fields of education providing secondary education ending with a matriculation exam , in which the education also includes professional training and the fields of education of extension studies, and "M", i.e. fields of education providing secondary education ending with a matriculation examination.

The research was conducted in two stages. First, a questionnaire was distributed to school principals with a request to fill in and enable the survey among students. After their approval, a questionnaire for students was distributed to the principals in the second phase. The research was conducted exclusively among full-time students, the data collection itself was carried out electronically via the Microsoft Forms platform.

Two basic requirements were set for the selection of the sample. Firstly, the schools must have been using the QMS for at least three years, and secondly, the school principal must have been in his position for at least the last three years. The research sample consisted of 6,454 students from 21 secondary schools from seven regions of the Czech Republic and 21 principals. Taking into account the size, specifics of the sample (size of schools, region, founder) and the effort to provide all involved principals with feedback on the results of student satisfaction, all schools whose principals expressed willingness to cooperate were included in the research, and a random sample was not created.

1.2 Research methods

A translated standardized questionnaire (Attachment 1) created at the University of Hanover was used for data collection, which is used to determine student satisfaction and the quality of

secondary schools. (Handbook: Schulisches Controlling, 2011). The questionnaire contained 41 items, which were divided into two parts. Questions 1 - 24 determined students' satisfaction with the school, questions 25 - 41 verified students' attitudes towards the school. Respondents answered on a four-point Likert scale. In order to collect data from principals, the questionnaire was expanded to include a section that, in the form of open-ended questions, sought basic information about the school and the principal, along with motivation and experience with QMS. The questionnaire was professionally translated by an interpreter from the German language and checked by an approved high school teacher of the German language.

Since the German manual for the questionnaire did not contain the division of items into more detailed factors that would take into account the focus of individual questions, with the aim of verifying the interrelationships, structure and reliability of the questionnaire, an exploratory factor analysis (EFA) was performed on the pilot data, on the basis of which nine factors were identified with value greater than 1 (53% variance), the five strongest factors (42% variance) were named according to the items that saturate them, indexes were created from them (teaching, teacher, school, technical equipment and school climate) and their internal consistency parameter was calculated. Four of the five indexes were accounted for in the first and partial hypotheses.

The pilot research data were further analyzed by calculating the relative frequencies and means of the three main indexes (overall index 1 – 41; satisfaction index 1 – 24; attitude index 25 – 41) and indexes in the five observed factors (teaching, teacher, school, technical equipment and climate) that were created based on an EFA of domain-specific questionnaire items.

In parallel with the piloting of the questionnaire for students, a questionnaire for school principals was also developed. In order to verify understanding, test how long it takes to complete and eliminate possible illogicalities, this questionnaire was piloted on a sample of five principals of secondary schools in September 2020. The main research was carried out from October to November 2020. The data obtained was processed and analyzed using descriptive statistics methods. Basic calculations of average values, relative frequencies and interrelationships of responses in individual factors were performed.

Differences were also sought in individual questions. Differential analysis (two-sample t-test, F-test) was used to search for differences between the perception of satisfaction among school students in individual indexes using the SPSS v.21 software, and null hypotheses were tested. One-way analysis of variance (ANOVA) was used to compare all schools in aggregate. School principals' questionnaires were analyzed and compared through descriptive statistics.

1.3 Results

From Table 3, which presents the calculations of all monitored indexes for both groups of schools, it can be deduced that in all monitored indexes, the average index is slightly higher in schools that have implemented one of the quality management systems. Since the level of statistical significance "p" achieved is significantly less than 0.01 in all the indicated indexes, the null hypothesis that the schools in the two groups do not differ from each other can be rejected. It is also possible to reject the null hypothesis of partial hypotheses that the schools in both groups do not differ in the individual determined factors.

Table 1 Overall statistics of all monitored indexes

Variable (ISO, CAF) 0 = schools without QMS 1 = schools with QMS		Amount	Average	Standard deviation	Cohen's d	Hedges' g
Overall index	0	4368	3,08	0,44	0,1838	0,1831
	1	2086	3,16	0,43		
Teaching index	0	4368	2,96	0,51	0,1817	0,1798
	1	2086	3,05	0,48		
Teacher index	0	4368	3,31	0,52	0,0989	0,0979
	1	2086	3,36	0,49		
School index	0	4368	3,21	0,59	0,1538	0,1533
	1	2086	3,30	0,58		
Technical equipment index	0	4368	3,06	0,59	0,3620	0,3598
	1	2086	3,27	0,57		
School climate index	0	4368	3,00	0,59	0,1944	0,1915
	1	2086	3,11	0,54		
Satisfaction index 1 – 24	0	4368	3,06	0,47	0,1757	0,1737
	1	2086	3,14	0,44		
Approach index 25 – 41	0	4368	3,10	0,46	0,1935	0,1942
	1	2086	3,19	0,47		

Source: own processing

A comparison of the averages of students' answers in the individual indexes (table 1) shows that students are most satisfied with questions related to the quality of teachers. The biggest difference in favor of schools with a quality management system is in the assessment of the school's technical equipment (0.21). This fact is also confirmed by the one-dimensional analysis of variance ANOVA, where the value of the test criterion is F = 37.842.

The analysis of the connections between the opinions of principals and students was viewed through a double lens, through individual indexes (table 2), specific schools (table 3) and individual questions. The assumption that the opinions of principals and students in schools where QMS is implemented are closer to each other than in schools where QMS is not implemented was confirmed. It is clear from the comparison of the overall averages of the students' and principals' assessments that the students' assessment is lower than the principals' assessment in both cases. However, when comparing the differences in answers, the opinions of students and principals are slightly closer in the group of QMS schools (difference 0.5). This result is evident both when looking across individual schools, where two schools with a quality management system (2 and 15) show the lowest difference in responses, and also when looking across individual indexes (with the exception of the teacher index).

It follows from the differences in the evaluations of students and principals in all factors that, with the exception of the "teaching" index, the difference in all monitored indexes is greater in schools that do not use any of the quality management systems. Hypothesis 2 was therefore accepted and can be considered valid.

Table 2 Comparison of the responses of students and school principals from the point of view of individual indexes

	Overall	Teaching	Teachers	School	Technique	Climate	Overall	Teaching	Teachers	Schools	Technique	Climate
	Students						Principals					
Schools with QMS	3,15	3,04	3,35	3,3	3,25	3,09	3,4	3,22	3,48	3,56	3,48	3,25
Schools without QMS	3,09	2,99	3,34	3,23	3,07	3,02	3,39	3,23	3,38	3,7	3,34	3,28
Difference	0,05	0,05	0,02	0,06	0,18	0,07	0,01	0,02	0,1	0,14	0,14	0,03

Source: own processing

Table 3 Comparison of the responses of students and principals from the perspective of schools

	School without QMS																Schools with QMS				
School	1	11	12	13	14	16	17	18	19	20	4	5	6	7	8	9	10	15	2	21	3
Students	2,99	3,11	3,06	3,06	3,14	3,07	3,26	3,11	3,19	3,18	3,05	3,05	2,98	3,04	3,03	3,19	3,05	3,19	3,29	3,06	3,14
Principals	3,12	3,22	3,27	3,61	3,44	3,37	3,63	3,61	3,32	3,54	3,37	3,56	3,20	3,37	3,20	3,44	3,59	3,27	3,22	3,66	3,27
Difference	0,13	0,11	0,20	0,55	0,30	0,30	0,37	0,50	0,13	0,36	0,32	0,51	0,22	0,33	0,16	0,25	0,54	0,08	-0,07	0,60	0,13

Source: own processing

The statistical results of the research in all monitored indexes showed a difference between the perception of satisfaction of school students with QMS and without QMS. In all monitored indexes, the average index is slightly higher in schools that have implemented one of the quality management systems. The biggest difference is in the technical equipment index. The "p" value is less than 0.01 for all indexes, therefore the null hypothesis can be rejected. From a statistical point of view, both the first and the three sub-hypotheses can be accepted. Descriptive analysis suggests the validity of the second hypothesis. When comparing the overall differences in responses, the opinions of students and principals are slightly closer to each other in the group of schools with QMS. The results found are more prone to extreme values, and even with regard to the selection of the sample, they are highly debatable.

Discussion

Looking at the connection between the opinions of students and principals across individual schools, it is clear that especially in schools 2, 3 and 15, which use QMS (EFQM), the opinions of students and principals align slightly more and reach more balanced values. However, it is necessary to consider the influence of other variables and it is impossible to talk about the range of provability of the results. From the group of schools that have not implemented any of the QMS, schools 1, 11 and 19 are comparable when looking at the individual schools with the above-mentioned schools, where the average rating differs by approximately one tenth. When looking for a possible explanation, the director's experience, i. e., the length of his teaching experience in the given school, the level of managerial education achieved, the size of the school, the type of management system implemented and the preferences of the school.

The unifying criteria proved to be the length of teaching experience (from 17 to more than 19 years), management education at the level of functional study II and the schools' orientation to the area of school climate. On the contrary, the influence of the type of quality management system used (they have ISO, CAF and EFQM), the influence of the managing entity (both private and

public) and the influence of the school size (from 175 to 866 students) was not proven. The results of schools 21 and 10 that use the QMS point to limitations in sample selection.

It turned out that school principals are significantly less critical than students when evaluating their school, especially in matters related to availability, technical equipment, school organization, staff friendliness and the quality of school meals. Principals of schools with QMS agreed on an absolute assessment for questions related to the technical equipment of the school and the awareness of students in the field of organization. Although students in schools with QMS rate the school's technical equipment significantly better than in schools without QMS (3.27:3.04), the differences in the assessment of students and principals are significant (4:3.27 and 3.50:3.04) . Taking into account the absolute values of the principals of schools with QMS in the questionnaire, it can be assumed that ensuring high-quality technical equipment of the school is a priority for these principals. However, students do not perceive it as such. Other differences between the evaluations of students and principals are in items related to teachers' behavior towards students and students' motivation to learn. Students rate these items worse than principals. On the contrary, students rate their general satisfaction with the school, the preparation of teachers for teaching and the use of information technology better than school principals.

The results of the study correspond with the current conclusions of Spanish authors who investigated the impact of ISO:9001 standards on the climate and satisfaction of members of the wider educational community in the autonomous regions of Spain (Fernández-Cruz, Rodríguez-Mantilla & Fernández-Díaz, 2020). The authors of the study came to the conclusions that the implementation of ISO:9001 standards has a relatively relevant impact on the substantial improvement of the school climate and the satisfaction of the members of the educational community. Similar conclusions were reached by Zarzuelo, Rodríguez-Mantilla, Cruz & Diaz (2018), who, on a sample of 2,901 teachers, compared the difference between the impact of the EFQM model and ISO 9001 on their satisfaction and school climate, thus verifying older studies dealing with a similar topic (e.g. Lasida, Isola & Sarasola, 2016).

Conclusion

The aim of this study was to analyze the level of satisfaction of secondary school students using quality management systems for a period of more than three years and to compare the level of satisfaction with schools that do not use QMS. Although there are differences between the results of students in schools with and without QMS and all hypotheses were accepted, it must be emphasized that, based on the data obtained, it is not possible to determine a causal relationship between the use of QMS and student satisfaction (however, this was not the aim of the presented study anyway).

From a substantive perspective, it is possible to state that the most satisfied students are in schools where the principal cares about the quality and climate of the school, regardless of QMS. It can thus be assumed that schools whose principals care about quality and have a rational grasp of the area of quality through various areas, and schools where the principals also claim that they care about quality, but have practically not mastered it were compared. It transpired that the decisive factor in the quality and climate in the school is its principal, who cares about good relations and is looking for tools that will help him influence the climate in the school.

The research conducted has its limits and limitations. The first limitation is the very goal of the research, i.e. determining student satisfaction, which many authors consider a concept unrelated to the quality of the school. The results do not indicate that – on the contrary, it became clear that the satisfaction of secondary school students is related to the quality of the school, more precisely the quality of teaching, teaching staff themselves and technical equipment. Another limit can be perceived in the sample of respondents and the methodology used.

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Attachment 1: Questionnaire for students with individual factors

		Factor								
		1	2	3	4	5	6	7	8	9
Q_1	The lessons' content and structure can generally be well understood.	0,379	0,243	0,102	-0,047	0,136	0,073	0,025	0,099	0,063
Q_2	The lessons' objectives are clearly defined to me.	0,534	0,257	0,055	0,088	0,130	0,075	0,081	0,070	0,100
Q_3	The lessons' content is related to the field I'm studying.	0,428	0,058	0,148	0,162	0,066	0,041	0,101	0,030	0,123
Q_4	The lessons support self-development and autonomous task fulfilment.	0,490	0,041	0,106	0,127	0,014	0,007	0,131	0,042	0,162
Q_5	The lessons have a clearly defined structure.	0,438	0,360	0,151	0,017	0,070	0,078	0,091	0,098	0,098
Q_6	The teachers are always well-prepared for the lessons.	0,175	0,530	0,144	0,109	0,107	0,051	0,132	0,086	0,073
Q_7	The lessons' content is diverse.	0,484	0,101	0,074	0,125	0,172	0,059	0,020	0,084	0,099
Q_8	The teachers' demands on our performance are reasonable.	0,286	0,173	0,146	-0,022	0,312	0,039	-0,033	0,075	0,242
Q_9	I don't have to be scared of making mistakes during the lessons.	0,274	0,192	0,203	0,057	0,382	0,000	-0,047	0,150	0,256
Q_10	Information technology is used purposefully during the lessons.	0,302	0,154	0,044	0,387	0,153	0,045	0,080	0,076	0,075
Q_11	The structure of performance evaluation has been explained to our class.	0,175	0,251	-0,023	0,158	0,151	0,003	0,092	0,029	0,366

Q_12	Teachers evaluates my performance fairly.	0,171	0,367	0,141	0,036	0,189	-0,025	-0,097	0,065	0,388
Q_13	We do not waste time with unimportant things during the lessons.	0,277	0,189	0,112	0,080	0,085	0,054	0,169	0,070	0,016
Q_14	Teachers demonstrate a high level of expertise in their area of teaching.	0,297	0,552	0,076	0,150	0,084	0,021	0,099	0,092	0,087
Q_15	I respect my teachers.	0,141	0,417	0,138	0,133	0,222	0,037	0,161	0,151	0,074
Q_16	Teachers treat me seriously.	0,146	0,469	0,122	0,091	0,273	0,066	0,084	0,111	0,280
Q_17	Teachers start their lessons on time.	0,197	0,268	0,063	-0,008	0,120	0,034	0,215	0,007	0,058
Q_18	Teachers help foster my desire for studying.	0,407	0,324	0,260	0,082	0,305	0,047	0,116	0,093	0,110
Q_19	I learn a lot during the lessons.	0,450	0,330	0,226	0,156	0,190	0,089	0,164	0,057	0,009
Q_20	Teachers are interested in my further development regarding further study / profession.	0,433	0,113	0,234	0,074	0,231	0,096	0,163	0,104	0,170
Q_21	I find that teachers get along very well with my class.	0,179	0,175	0,170	0,062	0,531	0,083	0,172	0,090	0,007
Q_22	Teachers respond appropriately to distractions during the lessons.	0,118	0,151	0,028	0,171	0,507	0,039	0,171	0,052	0,130
Q_23	Teachers create a friendly atmosphere during the lessons.	0,290	0,191	0,273	0,117	0,484	0,031	0,106	0,158	0,048
Q_24	I am overall satisfied with the teaching provided to me.	0,499	0,250	0,466	0,118	0,212	0,092	0,022	0,117	-0,001
Q_25	I feel comfortable within the school's premises.	0,198	0,221	0,503	0,457	0,125	0,039	0,020	0,115	0,057
Q_26	Our school's technical equipment (computers, iPads, data projectors etc.) is satisfactory.	0,057	0,064	0,141	0,661	0,061	0,043	0,031	0,045	0,053
Q_27	I am provided with the opportunity to study by myself outside class (computer classrooms, atrium, kiosks etc.).	0,219	-0,103	0,116	0,446	0,027	0,088	0,150	0,126	0,320
Q_28	I consider the school's non-classroom spaces to be satisfactory.	0,056	0,155	0,165	0,605	0,074	0,123	0,133	0,066	0,107
Q_29	I consider the food in our school canteen to be satisfactory.	0,095	0,060	0,066	0,071	0,008	0,944	0,038	0,085	0,022
Q_30	We are informed about the counselling services our school provides (career counselling, the school psychologist, the educational counsellor, the special education counsellor, prevention methodologists).	0,143	0,056	0,035	0,269	0,036	0,035	0,212	0,091	0,382

Q_31	We are informed in a timely and sufficient manner about organizational matters (substitutions, examinations).	0,173	0,148	0,079	0,126	0,047	0,068	0,079	0,241	0,285
Q_32	The school's secretariat staff is helpful and friendly.	0,144	0,140	0,054	0,157	0,082	0,094	0,010	0,769	-0,001
Q_33	Operational staff (reception, economy, maintenance) and other staff are available and helpful when needed.	0,063	0,076	0,118	0,019	0,119	0,128	0,050	0,446	0,183
Q_34	The school is easily accessible transport wise.	0,089	0,064	0,127	0,141	0,105	0,054	0,030	0,150	0,103
Q_35	If necessary, I am able to contact the school's management staff.	0,207	0,139	0,345	0,227	0,127	0,055	0,144	0,228	0,359
Q_36	Consistent care is taken to adhere to the rules of conduct during the lessons.	0,141	0,174	0,124	0,089	0,101	0,040	0,627	0,016	0,093
Q_37	Consistent care is taken to adhere to the rules of conduct outside of the lessons.	0,160	0,120	0,040	0,168	0,146	0,026	0,720	0,063	0,068
Q_38	I feel safe at our school.	0,137	0,177	0,448	0,262	0,137	-0,036	0,118	0,227	0,240
Q_39	In general, I am satisfied with my school.	0,370	0,191	0,667	0,191	0,111	0,055	0,063	0,058	0,028
Q_40	I feel comfortable in my class and like working there.	0,252	0,094	0,561	0,194	0,258	0,107	0,176	0,059	0,093
Q_41	The selection and quality of meals offered at our school canteen is good.	0,147	0,064	0,046	0,149	0,112	0,678	0,044	0,158	0,045

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Early drop out prevention in Ústí Region

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Abstract:

The paper is focused on the presentation of the results of a qualitative study thematically focused on one of the areas of career counseling provided at elementary and lower secondary schools in the Ústí Region. The results can contribute to the discussion about the possibilities of improving the quality of this type of counseling activity in schools.

Key words:

career counselling, drop out prevention, school drop out, social disadvantage, school counselling

Introduction

In 2021, 9.7 % of 18–24-year-olds in the European Union had completed at most a lower secondary education and were not engaged in further education or training (we refer to this target group as "early leavers" (Eurostat, 2022). According to Eurostat statistics, in the European context, the Czech Republic is among the countries that show a below-average rate of early school drop out, however, since 2010 their number has been increasing (from 4.9 % in 2010 to 7.6 % in 2020). The Czech Republic is thus one of only a few European countries where the proportion of students dropping out is growing.

The Czech Republic is also characterized by significant differences in various aspects of education between individual regions. The Ústí Region has long been among the so-called structurally disabled sometimes also called "EU coal regions". In 2020, the Ústí Region had the worst results among all regions in the Czech Republic in terms of early school leavers. In the case of early drop outs, even NUTS 2 – Severozápad (Northwest), which includes the Ústí Region and the Karlovy Vary Region, unlike the Czech Republic as a whole, reached a total dropout rate of 17.4 %, i.e., well above the EU average (Eurostat, 2021, 2022). A total of 5.5% of pupils in the Ústí Region did not continue in secondary education at all after completing nine years of compulsory schooling (CSI CR, 2020). We consider this specific type of drop out to be the most significant one. Students who belong to this group are consequently the most problematic to succeed on the labor market. They often become long-term unemployed, with all the negative consequences for their lives. That is why we focused our research on the topic of drop out prevention in elementary schools within the framework of compulsory school attendance.

Theoretical Resources

There is a certain terminological inconsistency in the interpretation of terms in the area of "early school leaving" and "drop out". The difference in meaning is usually related to the age of the student who completed education, or to the level of education (according to ISCED).
Eurostat uses the term **early school leaving (ESL)**, which includes persons aged 18-24 who meet two conditions; they have completed education and vocational training after achieving only lower secondary education or even lower and are no longer participating in education and vocational training.

The term **drop-out** usually expresses leaving school before the end of compulsory schooling, leaving before reaching the minimum qualification or before finishing secondary school. In the Czech environment, this term refers to early leaves before the end of the ninth year of primary school and cases of interruption or termination of school attendance at secondary school.

For the purposes of this study of drop outs we consider three groups of cases where:

- pupils (age 15 or 16) decide not to continue to a higher level of secondary education already during their education at the middle school. Pupils do not even apply for secondary school and only complete nine years of compulsory schooling;

- students fill out an application for upper secondary education and formally apply to secondary school, but do not subsequently start their studies;
- students, for various reasons, already during the first year of attending secondary school, finish their studies in the field they entered or completely finish their education.

Early school leaving (or drop out) is a complex phenomenon, and it remains one of the major challenges in education policy. It is considered as overly complex since each case has a distinct history with interconnected causes in the background. Research shows that there is a strong link between early school leaving, social disadvantages and low levels of parental education, with low socio-economic status also being one of the key factors increasing the risk of early dropout (TPF, 2021). Leaving school without qualifications is also correlated with poor health and inactive citizenship (Vanttaja & Järvinen 2006). In the professional literature, drop out is also often associated with school absence (Tanner-Smith & Wilson, 2013), truancy, addictions, or addictive behavior in relation to psychoactive substances or the Internet (Šavrnochová, Holdoš & Almašiová, 2020), possibly other factors in the school or home environment (Alexander et al. 2001; Battin-Pearson et al. 2000).

The decision to leave school can also be affected by several characteristics of the education system (Rumberger, 1995; Goldschmidt & Wang, 1999; Lee & Burkam, 2003; Tillner, 2013). European countries differ strongly in the way students are grouped together. In this debate, there are typically two extremes: the (early) grouping of students based on their ability (in e.g., Germany and Austria) versus a comprehensive (lower) secondary education (in e.g., Sweden and Norway). The first type of grouping (note: which is also characteristic of the Czech education system) has been greatly criticized in the literature (De Witte et al., 2013).

Early school leaving (drop out) results in a range of negative consequences, such as significant disadvantages on the labor market and unemployment, social exclusion, and as a possible effect, physical and mental health problems, or reduced participation in society (TPF, 2021).

Methodological Procedure

Career counseling implemented in primary schools is considered one of the tools through which it is possible to shape pupils' attitudes towards further education in the long term, support the development of competences for an adequate choice of the next educational pathways and support motivation to prepare for obtaining qualification and applying on the labor market (Svoboda & Volfová, 2021).

Within the framework of the research, we therefore conducted a total of 32 research interviews with career counselors working at primary schools in the Ústí Region. The condition was that, as part of their work, they should ensure the career counseling agenda within the school where they work. The length of the interviews ranged from 37 to 119 minutes.

The semi-structured interviews were thematically focused on the broader concept of career counseling at the given school, on the description of the activities used or cooperation with parents and other entities. Specific research questions also included the following ones: How do career counselors identify pupils at risk of dropping out? What activities do they carry out as part of drop out prevention? How do they support pupils at risk of dropping out?

The course of all semi-structured interviews was recorded on a recording device with the consent of the respondents and subsequently transcribed verbatim. The texts of the transcripts were subjected to a critical content analysis, using data coding and categorization procedures (Hsieh & Shannon, 2005).

The research sample included teachers from primary schools in the Ústí Region. The selection of schools was limited to those that cope with a higher proportion of socially disadvantaged pupils and the schools were selected through the Ministry of Education, Youth and Sports into the segment of schools with an above-average representation of socially disadvantaged pupils (Ministry of Education, Youth and Sports, 2022).

The results are amended by direct quotations from the respondents, which are given in italics and marked with the respondent's number, gender (F/M) and his/her position at school (EC – educational counselor, CC – career counselor).

Results

The first thematic area of the interview was focused on **the identification of pupils at risk of early drop out**.

The ability to formulate clear criteria that counselors consider to be indicators of the threat of early drop out varied quite significantly. Only approximately half of the respondents applied a more comprehensive view and were able to identify a wider spectrum of these indicators. On the contrary, in some cases the respondents hesitated and marked only more general areas. *"Probably performance and behavior. I don't know what else to add to that."* (R3, F, EC)

Part of the respondents focused more or exclusively on external factors (factors occurring outside the school, mostly in the family environment). On the contrary, quite rarely did the respondents mention only internal factors that manifest themselves in the school environment.

According to the respondents, the dominant external factor is *"the unfavorable socio-economic situation of the family"*. In this category, respondents mainly include families living in so-called socially excluded localities (very often they are Roma, but ethnicity was not explicitly stated), families receiving social benefits, single mothers or families living in hostels with low housing quality. These are often families with a larger number of children. "They are mainly children from socially disadvantaged areas, children from an unstimulating environment or we had a boy here whose mother was a single parent and wandered around asylums and had about seven children. (R11, F, CC)"

According to the respondents, another risk factor is a "*divided*" family. In this category, respondents pointed to the fact that pupils grow up, for example, in the environment of divorced families, extended families (in which, for example, there are frequent conflicts, relations between parents are not resolved, etc.) or families where children are raised by their grandparents. *" The divorced partner often does not try to help the other, on the contrary, when the children come to him/her, he/she allows them everything to enjoy a nice weekend, but this is then reflected in the fact that the child repeats the school year."* (R9, F, CC)

A specific factor was identified by counselors working in schools near the state border. Part of the parents here commute abroad for work, and the time burden related to work trips reduces the possibility of more intensive support for children in education. *"The family lives separately, the children actually grow up alone, the parents, or the mother often works abroad, and they simply can't handle the care of the children."* (R17, M, CC)

According to several respondents, the influence of the family is also related to gender stereotypes, especially in the case of Roma communities. Respondents point to the "traditional division of roles in the family" where *"the woman takes care of the household, and the man earns the money"*. One of the respondents also reported on her experience with the fact that some girls already become mothers during the period of compulsory schooling. She even evaluates this situation as a targeted strategy of the part of young Roma girls, who will thus *"secure financial resources"* through social benefits intended for mothers with children (similarly Svoboda & Volfová, 2021).

The respondents also stated that one of the reasons for not supporting children in further education is the fact that the parents themselves usually have only basic education or even incomplete basic education.

The second thematic area of the interviews was **the implementation of activities in the area of support for pupils at risk of early drop out.**

In general, it can be stated that schools are able to identify pupils at risk of early drop out. However, the activities they offer as part of the prevention of this phenomenon are very limited and essentially do not differ from the activities implemented in relation to all pupils. The

differences are manifested rather in the conditions for the implementation of activities, or in the intensity of efforts to cooperate with parents and other entities.

Often, the first serious sign of a threat of early drop out for counseling staff is the fact that the pupil (or his parents) hesitates to submit an application and to continue his/her education at secondary school. In such a case, counselors try to contact the family, offer individual consultations, and try to positively influence the parents' decision-making. However, the success rate of the intervention is very low. It comes late and the pressure of the socioeconomic conditions of the family is very strong.

"But mostly these children come from an environment where school is really not a priority for them, and such an attitude is difficult to change. We should have more time." (R21, F, EC)
At the same time, the respondents pointed out that they do not have effective tools at their disposal with which they could more significantly correct the influence of the family on the student's decision-making. Some of the counselors thus make only a symbolic formal endeavor. They argue that pupils have completed the compulsory part of schooling and further education at secondary school is a matter of voluntary decision. Counselors *"cannot force the student or parents to do anything"* and their task is *"only to consult and recommend"* (R18, F, EC).

More significant effort is often made by counselors from schools that are catchment areas for socially excluded localities. They have long-term experience with pupils at risk of dropping out and more often use cooperation with social and legal child protection authorities or with social service providers.

"Uncooperative family, here we had one every month, we set rules with them. (...) The Body for Social and Legal Protection of Children monitors them every month. The boy is not simple. There, it rather comes from an unstimulating environment. Nevertheless, they accepted him as a chef, and he wanted to be a chef because he really likes cooking. So, I also called that school there to see if there was a problem, I talked about the boy, what he is like, that he is not a truant, he just has a very unstimulating environment." (R29, F, EC)

Active counselors also try to influence parents' strategies and explain the negative impact of the decision to end the child's education.

"I constantly consult with them; I also invite the parents several times and explain to them (...) how the social system works when the child has not completed education. What this means for the family? What a burden it is for them. What are the future prospects for that child. I work more intensively with the parents here." (R13, F, CC)

Rather rarely, schools offer pupils at risk of dropping out targeted visits to suitable secondary schools, which they can also visit with their parents, or motivational visits to potential employers in the region. Similarly, we have very rarely noticed an effort for cooperation between primary and secondary schools, with the aim of coordinating activities related to the child's transition to the next level of secondary education.

Discussion

We can state that counseling staff can identify students at risk of dropping out. However, they predominantly look for the causes of danger in the family environment. In agreement with the results of numerous researches and statistics (e.g., De Witte et al., 2013; Eurostat, 2021, 2022) they associate drop out with social disadvantages and low levels of parental education, low socio-economic status, and social exclusion of families. They consider school underachievement and low motivation to be the result of these external factors.

On the contrary, respondents basically do not admit or at least do not mention possible negative influences on the part of the school environment, such as school climate and teacher-pupil relations (European Education Area, 2020), but also the prejudices of some teachers towards families living in socially excluded localities and towards Roma, which are proven by research in Czech schools (Svoboda & Morvayová, 2010; Svoboda & Zilcher, 2019; Kříž et al., 2021; Svoboda, 2022).

Respondents only rarely reflected on the influence of the school system and the absence of effective cooperation between primary and secondary schools in supporting the pupil's transition. Sutherland et al., (2010) for example, draw attention to this problem in the European context.

Overall, two main approaches of schools to support pupils at risk of dropping out can be identified. In the first of them, schools tend to offer advice and support, and if there is no interest from the parents, they basically accept the situation. This approach is based on the belief that the task of the school is not to create pressure to change parents' attitudes. The second approach is more typical for schools with significant representation of socially disadvantaged pupils. Here, school or career counselors are aware of the limits of the family environment and try to influence pupils and parents more intensively in their choice, they try to make more significant use of cooperation with other entities.

However, even these schools confirm that they have few tools for effective change of the situation and more significant long-term support for pupils and families (for example, the lack of guidance staff in schools). The pressure of the family's social situation is very strong in this area, and it is rarely possible to create conditions for its sufficient reduction and overcoming (likewise Svoboda & Morvayová, 2010).

Conclusion

The rate of early drop out in the Czech Republic is highest in the coal regions with the most pronounced social problems. A significant proportion of pupils at risk of dropping out are therefore pupils from schools with an above-average representation of socially disadvantaged pupils. The ability of schools to act preventively against early drop out is very severely limited. We consider it necessary to provide these schools with intensive systemic support. In the Czech Republic, the starting point for change in this area is the support provided to schools belonging to this group as part of the National Recovery Plan (Ministry of Education, Youth and Sport, 2022). Another fundamental systemic change, in our opinion, should be the extension of compulsory school attendance by at least two years of pre-professional training.

It is necessary to ensure sufficient personnel capacities for the provision of counseling services directly in the school, ensure networking of support provided in schools, ensure support from social service providers for families with children, and support quality ECEC programs. Last but not least, we consider it necessary to develop programs for early screening and providing long-term, individualized support to pupils at risk of dropping out. Methodological support within one of the possible programs aimed at comprehensive support of pupils in the transition between primary and secondary school is offered to schools and career counselors within one of our publications (Volfová & Svoboda, 2023).

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Security issues in the context of ongoing curriculum revision in the Czech Republic

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Abstract:

This article deals with the issue of incorporating security issues into framework educational programmes in the Czech Republic. Inter-ministerial discussions between the Ministry of Education, Youth and Sports, the Ministry of the Interior, the Ministry of Defence, the Ministry of Health and the Ministry of Transport pay marginal attention to the views of the instigators of changes themselves, teachers in practice. The article presents data from a research survey conducted among primary and secondary school teachers who are actively involved in teaching security topics in practice with security issues as part of their qualifications.

Key words:

curriculum; health and safety education; security literacy; safe schools, revision

Introduction

The development of education in the field of security issues reflects the development of the perception of security threats within our country in the context of historical events. By security issues, we mean the protection of people from common risks and emergencies, traffic education, preparation of citizens for the defence of the state, health training, crime prevention, and the fight against terrorism and extremism. (Osher, Dwyer & Jackson, 2004; Mayer & Jimerson, 2019; O'Toole, 2000). The development of society brings changes in the security environment, which requires a search for new forms and methods to ensure the basic human values (Timm,2015). Security science reflects the risks that the development of civilization entails and provides a conceptual framework for the theory and practice of security issues (Porada, 2011). The current curriculum revision proposes combining the issues of "health" and "security" into a single health and safety educational discipline. (Brück, 2013) (Occupational safety and health and education: a whole school approach, EU OSHA, 2013). Among external factors, a person's health is primarily influenced by lifestyle, then his or her security is primarily influenced by the lifestyle of society, which is made up of activities that go beyond the dimension of the individual (Sak, 2018).

The first effort to return security issues to the curriculum, after the abolition of national defence education in 1991, was an experiment conducted between 1995 and 1997 in selected primary and secondary schools to verify whether, within the framework of the valid curriculum of the time, some topics related to human protection in emergencies could be included in the teaching of selected subjects and meet the desired objectives without creating a separate subject (Kavan, 2020).

Following the results of the experiment, the Ministry of Education, Youth and Sports issued Instruction No. 34776/9822 (of 4 May 1999), which, from 1 September 1999, required all schools providing primary and secondary education to incorporate this issue into teaching. According to a Resolution of the Government of the Czech Republic1 and the recommendations of the Czech School Inspectorate, the Ministry of Education, Youth and Sports updated these instructions in 2003. Based on an Instruction of the Ministry of Education, Youth and Sport (Ref No. 12 050/03-22) on the incorporation of the issue of human protection in emergencies into educational programmes, this issue was included in school curricula. By an amendment to teaching documents on "Human Protection in Emergencies" (Ref. No. 13 586/03-22 of 4 March 2003), the applicable teaching documents were supplemented as follows: The topic of "Human Protection in Emergencies" shall be included in teaching documents for primary schools, secondary schools and higher vocational schools and in teaching documents for special schools in a minimum scope

of 6 teaching hours per year for each school year. The content of the education was based on methodological materials prepared by the Fire Rescue Service of the Czech Republic. Since 2002, several other methodological materials for teachers and textbooks for primary and secondary school pupils have been published in the Czech Republic for the needs of practice.

Based on this instruction, the issue of human protection in common risks and emergencies was developed into individual framework educational programmes. The curriculum concerning human protection in common risks and emergencies in the Framework Educational Programme for Primary Education (FEP PE, 2005) was divided into several educational areas, the key area being Humans and Health. Modifications to the FEP PE in 2013 include, among other things, the expansion of topics related to human protection in common risks and emergencies, transport education, health protection and first aid, crime prevention, the fight against terrorism and extremism, and new topics of preparation for national defence. These changes are effective from 1 September 2013 to date (FEP PE, 2013). The purpose of the modifications was to draw greater attention to security topics, to add to them and to emphasize their importance.

However, the adopted adjustments did not meet expectations (Tupý, 2018). There is no inter-ministerial consensus on the scope and content of education in this area in the current so-called major curriculum revision. For the success of the ongoing "major revision" in the area of security topics, it is important to obtain teachers for the specific changes, to define a core and expanding curriculum, and to set the level of inter-ministerial cooperation in the implementation of teaching. A final decision on the content and scope of the planned changes should therefore take into account the views of the bearers of these changes themselves, teachers in practice. An approving attitude of teachers towards security issues and their participation in curriculum development are important prerequisites for the success of the ongoing reform.

Research Method

Descriptive statistics and nonparametric statistical methods were used for the analysis. *Mann – Whitney test, Spearman's Rank correlation coefficient* (Hebák, 2013). The data from the questionnaire are also ordinal, nonparametric statistical methods were used for further analyses.

Mann – Whitney test for two independent samples, the test compares medians, or the whole distribution of variables, and tests their conformity. As it is based on ordering of all measured values in ascending order of their size, it can also be used for ordinal variables. The test criterion U is the number of all cases in which the values of one selection precede the values of the other. The hypothesis can be verified by comparing the resulting P-value with the significance level, usually chosen as $\alpha = 5\%$. If the P-value is greater than 0.05, we cannot reject the tested hypothesis of the same level in the groups. On the contrary, it can be rejected at a value lower than 0.05 which proves dependence of the level on the factor observed. (Pecáková, 2011)

Spearman's Rank correlation coefficient

The Spearman's coefficient measures the intensity of dependence of the order of the characters of the variable observed. It is used to measure the association of two ordinal variables for which nonparametric testing is required. It takes values between <-1; 1>; extreme values denote absolute dependence, the sign indicates the direction: plus for direct, minus for indirect dependence. Lower values mean weak or moderate dependence. The statistical significance of this coefficient is verified using the test and its respective P-value. If it is lower than the selected significance level, often 0.05, the dependence measured by the coefficient is considered statistically significant. The strength of the correlation is determined by the value of this coefficient. (Hebák et al., 2013)

The following chapter presents the results of the survey "Revision of the Framework Educational Programmes in Security Issues from the Perspective of Health Education Teachers" conducted in September 2022 among teachers of health education and security issues. The selection of respondents was based on current school practice, current teaching of health education

and security issues, and a degree in health education. From a total of 430 respondents, 298 were included in the evaluation.

Objectives of the survey
1. To find out teachers' opinions on the inclusion of security issues in health education.
2. To elicit views on the definition of the educational content of security issues.
3. A subjective assessment of teachers' preparedness to teach security issues.

Hypotheses
1. The inclusion of security issues in the teaching content of health education is assessed as the right decision by respondents who assess security issues as important for the education of individuals (readiness for life).
2. Topics assessed by respondents as necessary for inclusion in the core curriculum are more likely to be considered core curriculum topics.
3. The assessment of subjective competence to teach security issues depends on the length of teaching experience.

Outcomes
Evaluation of hypotheses
    1. The inclusion of security issues in the teaching content of health education is assessed as the right decision by respondents who assess security issues as important for the education of individuals (readiness for life). (questions 5 and 6)
    There are no statistically significant differences in the assessment of the importance of issues between people who think issues should be included in education, and people who do not, for any of the monitored issues (all p-values for the two-sample Mann White test are greater than the significance level $\alpha = 5$ %).

Table 1 - Relationship between the assessment of the correctness of including security issues in education and the assessment of the importance of these issues for the education of individuals and their readiness for life

6. By modifying the educational content of health education, the content was expanded to include the following security issues. On a scale of 1-10, rate the importance for an individual's education	5. In 2013, the educational content of health education was modified to include security issues. Do you consider this decision to be correct?								Mann White test	
	Yes				No					
	Quantity	Average	Median	Direction Discrepancy	Quantity	Average	Median	Direction Discrepancy	Test criterion	P-value

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(readiness for life) of each topic (where 1 is the least important and 10 is the most important)										
safe behaviour and communication	288	9.4	10.0	1.2	10	7.8	8.0	1.8	5678.0	0.487
safe movement in a high-risk environment	288	9.0	10.0	1.3	10	5.6	7.0	2.3	5514.0	0.338
dangers of communicating via electronic media	288	9.7	10.0	0.9	10	9.2	10.0	1.2	5706.0	0.453
safe school environment	288	9.3	10.0	1.2	10	7.0	8.0	2.7	5774.0	0.630
protection of the population (warnings and shelter, evacuation, risk of panic, etc.)	288	8.5	9.0	1.6	10	7.2	8.0	2.1	5388.0	0.243
transport and safety	288	8.7	9.0	1.7	10	6.2	7.0	2.8	5720.0	0.585
first aid	288	9.5	10.0	0.9	10	9.0	10.0	1.3	5562.0	0.299
natural disasters in the Czech Republic (floods, fires, strong winds, etc.)	288	8.1	8.0	1.7	10	6.6	6.0	2.3	5698.0	0.570
natural disasters in the world	288	7.1	7.0	2.1	10	5.6	5.0	2.8	4998.0	0.063
epidemics and pandemics	288	8.2	8.0	1.9	10	6.6	6.0	2.3	5552.0	0.400
hazards arising from	288	8.0	8.0	1.8	10	7.2	7.0	2.3	5682.0	0.552

	Quantity	Average	Median	Direction Discrepancy	Quantity	Average	Median	Direction Discrepancy	Test criterion	P-value
human activities, accidents (chemicals, radiation)										
extremism and terrorism	288	8.3	9.0	1.8	10	7.4	7.0	2.0	5576.0	0.424
violent behaviour	288	9.3	10.0	1.1	10	8.4	9.0	1.7	5196.0	0.090
safety in the open countryside	288	8.6	9.0	1.6	10	5.4	6.0	2.6	5510.0	0.350
national defence	288	7.4	8.0	2.0	10	5.6	5.0	2.5	5558.0	0.412

2. Topics assessed by respondents as necessary for inclusion in the core curriculum are more likely to be considered core curriculum topics.

In all statistically significant issues, except for transport and safety, we can confirm the hypothesis that topics assessed by respondents as necessary for inclusion in the core curriculum are more likely to be considered core curriculum topics, i.e. more necessary.

In the case of transport and safety, there are statistically significant differences between the groups, but the assessments are reversed, i.e. those who assessed this topic as a developing issue assess it as more necessary on average than those who rated it as a core issue.

Table 2 - Evaluation of the need to include issues in education according to the assessment of the type of issue

Assessment of the need for inclusion in compulsory primary education of individual thematic areas (where 1 is the least important and 10 the most important)	Core				Developing				Mann White test	
	Quantity	Average	Median	Direction Discrepancy	Quantity	Average	Median	Direction Discrepancy	Test criterion	P-value
safe behaviour and communication	250	9.4	10.0	1.1	48	9.4	10.0	1.2	5288.0	0.151
safe movement in a high-	182	9.1	10.0	1.3	116	8.3	8.0	1.6	7084.0	<0.001*

risk environment										
dangers of communicating via electronic media	234	9.7	10.0	0.8	64	9.8	10.0	0.5	7096.0	0.352
safe school environment	224	9.1	10.0	1.5	74	8.5	9.0	1.8	6916.0	0.018*
protection of the population (warnings and shelter, evacuation, risk of panic, etc.)	146	9.0	10.0	1.5	152	7.4	8.0	2.0	5948.0	<0.001*
transport and safety	**198**	**8.7**	**9.0**	**1.7**	**100**	**8.1**	**9.0**	**2.1**	**8486.0**	**0.033***
first aid	250	9.4	10.0	1.1	48	9.5	10.0	1.3	4998.0	0.026*
natural disasters in the Czech Republic (floods, fires, strong winds, etc.)	154	8.7	9.0	1.6	144	7.3	7.0	1.8	6138.0	<0.001*
natural disasters in the world	72	7.6	8.0	2.2	226	6.6	7.0	2.3	6120.0	0.001*
epidemics and pandemics	140	8.7	9.0	1.6	158	7.2	7.0	2.1	6294.0	<0.001*
hazards arising from human activities, accidents (chemicals, radiation)	106	8.7	9.0	1.6	192	7.2	7.0	2.0	5772.0	<0.001*
extremism and terrorism	180	8.7	9.0	1.5	118	7.4	8.0	2.4	7180.0	<0.001*
violent behaviour	236	9.3	10.0	1.1	62	9.2	10.0	1.5	7106.0	0.688
safety in the open countryside	188	8.7	9.0	1.6	110	7.5	8.0	2.1	6764.0	<0.001*

national defence	86	8.4	9.0	1.9	212	6.7	7.0	2.5	5282.0	<0.001*

Note: *statistically significant differences between groups at α = 5% significance level

3. The assessment of subjective competence to teach safety topics depends on the length of teaching experience.

In almost all of these cases, the correlation coefficients are positive, i.e., as the length of experience increases, teachers feel more competent to teach these issues. The only exception is the issue "protection of the population (warnings and shelter, evacuation, risk of panic, etc.)", where subjective competence decreases with increasing length of practice.

For the remaining issues, there is no statistically significant linear relationship between length of experience and subjective competence.

Table 3 - Relationship between competence to teach and length of teaching experience

Assess your own competence to teach the selected security issues. (where 1 equals the least competent and 10 the most competent)	1. Years of teaching experience	
	Correlation coefficient	P-value
safe behaviour and communication	0.290	<0.001*
safe movement in a high-risk environment	0.167	0.004*
dangers of communicating via electronic media	0.018	0.752
safe school environment	0.242	<0.001*
protection of the population (warnings and shelter, evacuation, risk of panic, etc.)	-0.164	0.005*
transport and safety	-0.083	0.154
first aid	0.081	0.164
natural disasters in the Czech Republic (floods, fires, strong winds, etc.)	-0.107	0.064
natural disasters in the world	-0.107	0.065
epidemics and pandemics	-0.103	0.076
hazards arising from human activities, accidents (chemicals, radiation)	-0.092	0.111
extremism and terrorism	0.065	0.265
violent behaviour	0.179	0.002*
safety in the open countryside	-0.025	0.670
national defence	0.028	0.629

Note: *statistically significant relationship at α = 5% significance level

Discussion

The inclusion of security topics in the national curriculum is also linked to problems in other European countries. The issue of "securitization of education" has been discussed, especially with the revision of the English national curriculum in 2014 (Dvořák, Holec & Dvořáková, 2018). The problem of reforms is to find ways to prevent the radicalization of young people through education

and to develop respect for basic social values that ensure security, while not succumbing to the militarisation of education.

The survey found that teachers cited national defence as the second least important topic for preparedness, with an average score of 7.3, just behind "natural disasters in the world" with an average importance assessment of 7.1. The view of the topic of national defence as unimportant for preparedness has not changed compared to previous research (Kovaříková, 2016, 2015) even after the beginning of the war in Ukraine. The need for a change in the approach to this issue in schools, as well as sufficient didactic resources are essential for the successful implementation of all security issues. National defence is also the subject in which teachers feel least competent and I also find the subject challenging to prepare for. The assessment of security issues as important for the education of an individual (readiness for life) by all teachers, including those who did not agree with the inclusion of security issues in health education, is gratifying. (CSI, 2014)

The finding that with an increasing length of experience, teachers consider themselves more competent to teach these issues, with the exception of the issue "protection of the population (warnings and shelter, evacuation, risk of panic, etc.)", where subjective competence decreases with an increasing length of experience. These are issues that are subject to compulsory and regular exercises in schools. In this regard, the need for adequate teaching staff must be pointed out. Marádová (Marádová , 2010) and Tupý (Tupý, 2018) point out, for example, the shortcomings of supplementing a teacher's working hours with health and security education lessons. These results may also be related to a lack of didactic materials and the failure to develop the didactics of emergency situations.

Summary

The proposed changes in security issues in the curriculum will also need to be explained not only to the teaching community, but also to parents and the rest of the public, so that schools are not required to teach in an area where teachers do not perceive a social demand. Schools play a key role in shaping individual safety awareness, but they cannot manage without the cooperation of parents, the public and other social institutions. For a successful reform, it is necessary to explain the sense and purpose of the proposed changes and the proposed implementation method.

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Changes in population development in the Czech Republic and their impact on the education of students at the University of Defence

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Abstract:

The article describes and analyses changes in the development of the population in the Czech Republic and their influence on the number of additional future officers - students of the University of Defence for the needs of the Armed Forces of the Czech Republic. The review study maps the development of the population in the Czech Republic in the age spread of 19 to 21 years in both sexes from 2013 to 2026. It shows the development of the number of students and graduates of secondary schools in the Czech Republic from 2012 to 2021 who form the initial available base of applicants for the full-time military study at the University of Defence between 2010 and 2022.

Key words:
demographic development, education, graduates of secondary school, recruitment, study programs

Introduction

The quality, sufficient number and motivation of personnel, especially professional soldiers, are important for fulfilling the mission of the Army of the Czech Republic. Medically fit, motivated, mentally resilient and educated individuals form the basis of the organization and functioning of the armed forces. The ever-increasing requirements for expertise and managerial skills of the corps of commanding officers are the basis for the implementation of the educational process in the training of future officers - students of the University of Defence. Using approved study programs, professional teaching and the comprehensive educational process of future officers and commanders are implemented while obtaining a university education.

The possibility of obtaining a high-quality university education and knowledge of foreign languages, together with the possibility of extracurricular activities, the attractiveness of the military profession, a very decent level of remuneration and a guarantee of long-term employment are a certain assumption that there will be a sufficient number of students and graduates to realize a natural turnover of personnel in the armed forces. Although the personnel marketing process tries its best to clarify all the positives and negatives of the service, in the long term it fails to meet the set recruitment targets and the number of graduates who will fulfil the tasks of the armed forces.

1. The present state of the investigated issues

Population changes were investigated in a professional setting. Spatial differences in the behaviour of the Czech population based on its socio-demographic structure and its development were described. The level of education was selected as an indicator of social and economic status (Vrtiška & Maier, 2022). In the examined period from 2015 to 2020 (including the impact of the Covid-19 pandemic) this research is followed up by Morávek and Koukalová (2021), and Němečková (2014). Křesťanová and Kurkin (2020) analyse the demographic situation in the Czech Republic in 2019 and place it in the context of demographic trends in the last decade. The study describes the development of individual components of the demographic development and their effects on population size, age and marriage structure of the population. The population of the Czech Republic was growing as a result of the positive balance of foreign migration. The

natural change was slightly negative in 2018, total fertility as well as total divorce rates stagnated. Marriage rates was increasing along with life expectancy at birth in men and women.

The overall abortion rate decreased slightly (Křesťanová & Kurkin, 2020). No less important is the relationship between the productive population and the Czech economy by 2060. Research shows that the Czech Republic will be strongly confronted with population ageing and an appropriate combination of different policies will be needed. The fundamental question is to what extent the development of labour productivity and technical progress can prevent a radical increase in the retirement age. Capping this basic economic parameter at the age of 65 will shift the economic burden to the productive population, which will have to respond (Sixta & Safr, 2022). Dufek and Minařík (2009) also investigated the issues of population ageing in the period 1998 – 2007.

A number of experts deal with the education of cadets in foreign publications. Yu (2015) investigated the analysis of value types and factors that influence military cadets (Yu, 2015). Best practices for teaching and learning in the US (West Point) are mapped by (Ender et al., 2021; Hill et al., 2020; Lewis, 2020). Similar efforts have been made to streamline and modernise military education in Romania (Grigore, 2011; Ratiu, 2011).

Terziev and Nichev (2017) analysed the environment for the functioning of the military education system and examined its influence on the training of cadets for military professional activity in the Republic of Bulgaria (Terziev & Nichev, 2017; Terziev & Nichev, 2017; Hristov, 2018). Hurbišová and Davidová (2016) focused on identifying the status, opinions and attitudes towards the issues of the training of commanders within the Lithuanian and Austrian Armed Forces (Hurbišová & Davidová, 2016). Information technology has also become an important area in cadet education (Wang et al, 2019). Likewise, new mobile technologies in teaching English to military students have become the object of research. (Maier & Yukhymenko, 2022).

In the Czech professional setting, Kubínyi and Veteška dealt with the education of military students. They focused their attention on the importance of further education of soldiers in the context of career development and management (Kubínyi & Veteška, 2017; Kubínyi et al., 2022). The first of the above-mentioned authors further investigated learning competencies and the possibilities of their development in military professionals (Kubínyi & Saliger, 2021). Based on theoretical approaches, they identified the possibilities of using the most up-to-date approaches to increase the degree of effectiveness of educational and training processes in military professionals of the Army of the Czech Republic. Burita and Odryhal investigated the teaching of informatics at the University of Defence (Burita & Odryhal, 2005) and Hošková (2010) investigated innovations in the teaching process of mathematics in military students (Hošková, 2010).

However, changes in the development of the Czech population were not examined in relation to the Army of the Czech Republic, or more precisely what impact will population changes have on the future fulfilment of the recruitment target of the Army of the Czech Republic, nor how the education of military students at the University of Defence changes due to the changes in the security environment.

2. Population development in the Czech Republic in the required age spread and the number of secondary school students

Supplementing human resources for the needs of the armed forces is implemented in two ways. The first method represents the acquisition of people in the form of direct recruitment, when an individual is enrolled in basic training after meeting all the requirements set by law. After completing it, he is assigned to a specific job position that was assigned to him (usually by mutual agreement of the service authority and the applicant) within the whole structure of the Armed Forces of the Czech Republic. This is how the selection of people for service jobs in the rank of non-commissioned officer and warrant officer is carried out. The second method represents the selection of people for study at the University of Defence, where students receive a full-fledged university education (Engineer´s degree) and start their military career in the rank of lieutenant

with the assumption of further career growth in the rank of officer for a period of at least 10 years of service.

In order to determine the career direction of individual applicants, the personal interest of each individual, the level and status of education and the requirement for his eventual growth and any potential consideration of the length of the employment relationship are decisive. The ideal applicant for service in the armed forces in the form of direct recruitment is an individual in the age spread of 18 to 25 years who is physically and mentally at the peak of his strength and abilities.

From the viewpoint of selecting an applicant to study at the University of Defence - a future officer of the armed forces, the ideal age spread is 19 to 21 years. Within the cross-sectional structure of the population of the Czech Republic, Table 1 shows the total number of men and women in the age composition of 19 to 21 years.

Table 1: Age composition of the population aged 19-21, both sexes, variant: Medium

Age	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
19	122,669	108,863	97,994	92,578	92,546	92,244	91,129	92,458	94,512	96,236	97,236	101,093	106,020	109,293
20	124,037	123,422	109,624	98,762	93,349	93,318	93,016	91,904	93,234	95,288	97,012	98,012	101,870	106,794
21	132,374	124,908	124,294	110,505	99,649	94,241	94,211	93,911	92,799	94,129	96,182	97,908	98,909	102,765

Source: processing and editing by the authors using Czech Statistical Office data: Projection of the population of the Czech Republic until 2065, (online), [2022-20-10], tab. 8. Available from: https://www.czso.cz/csu/czso/projekce-obyvatelstva-ceske-republiky-do-roku-2065-n-58t98jgowg

For the needs of supplementing the officer corps of the Armed Forces through the studies at the University of Defence, the available number of students - graduates of secondary school studies (upper secondary education level) is decisive. Table 2 shows the number of secondary school graduates in the Czech Republic between 2011 and 2021 who could, within the framework of personnel marketing, be approached for a future career as the officer of the Army of the Czech Republic with a prerequisite for studying at the University of Defence Brno.

Table 2: Numbers of pupils and graduates of secondary schools between 2012 and 2021

Academic year		Students		Newly admitted students to the 1st year		Graduates	
		Total	Of which in the daily form of education	Total	Of which to the daily form of education	Total	Of which to the daily form of education
2011/12		501,220	470,347	128,453	117,525	106,816	100,724
2012/13		470,754	443,719	121,583	111,927	101,055	95,588
2013/14		448,792	423,863	120,053	110,402	90,076	85,454
2014/15		435,542	412,532	117,725	109,105	83,822	79,619
2015/16		427,107	405,631	116,077	108,053	78,385	74,303
2016/17		424,849	404,087	115,617	107,399	78,602	74,363
2017/18		421,535	403,018	114,041	107,316	78,056	74,271
2018/19		420,814	403,957	113,513	107,509	79,477	75,432
2019/20		423,838	408,088	116,183	110,095	84,462	80,350
2020/21		432,906	417,302	118,293	112,295	90,012	85,489
2021/22		446,254	430,216	125,167	118,401		.
Interannual change (20/21–21/22)	grad.	13,348	12,914	6,874	6,106	.	.
	in %	3.1%	3.1%	5.8%	5.4%	.	.
Change in 5 years (16/17–21/22)	grad.	21,405	26,129	9,550	11,002	.	.
	in %	5.0%	6.5%	8.3%	10.2%	.	.
Change in 10 years (11/12–21/22)	grad.	-54,966	-40,131	-3 286	876	.	.
	in %	-11.0%	-8.5%	-2.6%	0.7%	.	.

Source: processing and editing by authors using the Czech Statistical Office data: Schools and school establishments – school year 2021/2022, tabular part, secondary schools in total (without conservatories) 2011/2012 – 2021/2022, on-line, [2022-20-10], tab.3.1.1. Available from: https://www.czso.cz/csu/czso/tabulkova-cast-230042-22

Table 2 shows that the number of secondary school graduates was consistently decreasing between 2011 and 2019, and only starting with the year of graduation in 2020 there is a slight increase. In the graduation year 2021, the number of graduates is approximately the same as in 2014.

3. Development of the number of students at the University of Defence

The process of selecting and accepting secondary school graduates to study at the University of Defence is relatively complex and time-consuming. Students must submit an application to study at the University of Defence, complete an admissions procedure (prove the required knowledge in the theoretical area and also perform a physical fitness test); at the same time they must fulfil all that is further stipulated by law (conditions for the administrative and security screening of applicants).

Table 3: Overview of the development of the number of students in the recruitment process (entrance examination) at the University of Defence of all specializations - military bachelor's studies

Academic year	2010/2011	2011/2012	2012/2013	2013/2014
1. Recruitment target (target)	341	309	322	184
2. Number of the students admitted	421	349	433	390
3. Number of the students enrolled	294	328	313	260
4. Number of students who terminated their studies early	163	168	164	119
5. Number of graduates	131	160	149	141
Graduation year	2013	2014	2015	2016

Source: processing and editing by the authors using the Data subset of the Register of Students, 2022.

It is clear from Table 3 that the number of students admitted to the bachelor's study program in the period from 2010 to 2013 always exceeded the recruitment target. This situation resulted from the assumption that a certain natural decrease in the number of students was expected during the course of study (students who terminate their studies early). By comparing the number of enrolled students and the number of graduates, we find out that the decrease in the number of students in individual years ranged from 44.5 to 54.2 %.

The rise in requirements for the quality of education, knowledge and skills of the University graduates has resulted in a change in the entire system of training of the University of Defence students. In the 2014/2015 academic year, a continuous five-year master's study program was introduced, which included four special separate blocks (Practical Training I and II in the winter and summer semesters of the 4th year and Research Fellowship I /in the summer semester of the 4th year/ and Research Fellowship II / in the winter semester of the 5th year/). The goal was to maximally connect the students' theoretical knowledge acquired during their studies during their practical verification and confrontation with the professional reality at a designated duty station in a specific military unit.

The transition to the five-year form of study was supposed to increase the attractiveness of the military education system, which, together with other elements of personnel marketing, was supposed to increase the number of applicants for study. New study programs for full-time military five-year study at the Faculty of Military Leadership and the Faculty of Military Technology were accredited; at the Faculty of Military Health Sciences there are only partial adjustments to existing study programs without adjusting the length of study.

At all three faculties of the University of Defence, the effort is to achieve the largest possible number of accepted and subsequently enrolled students to study before the recruitment target is set with the prediction of a certain natural decrease in the number of students during their studies. This trend was maintained only at the Faculty of Military Leadership - (with the exception of the academic years 2019/2020 and 2020/2021) - see Table 4. At the Faculty of Military Technology, the number of admitted students by 2016 was higher than the set recruitment target. However, the number of students enrolled to study and subsequently the number of graduates has long been well below the required level of the recruitment target (target) for specializations taught at this faculty – see Table 5. The same problem is also being solved at the Faculty of Military Health Sciences, which, with some exceptions, meets the trend of a higher number of accepted students compared to the recruitment target. However, the actual number of students enrolled to study and subsequently the number of graduates is significantly lower than the numbers required as part of the natural turnover of the personnel of the specializations studied - see Table 6.

Table 4 Overview of the development of the number of students in the recruitment process at the University of Defence/Faculty of Military Leadership – military master's study program

Academic year	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
1. Recruitment target (target)	96	140	120	154	167	175	303	131
2. Number of the students admitted	191	225	255	297	277	271	306	381
3. Number of the students enrolled	128	134	158	217	195	167	180	234
4. Number of students who terminated their studies early	62	69	65	127	74	36	53	54
5. Number of graduates	66	65	93	92	the assumption of the number of graduates			
					121	131	127	180
Graduation year	2019	2020	2021	2022	2023	2024	2025	2026

Source: processing and editing by the authors using the Data subset of the Register of Students, 2022.

Table 5 Overview of the development of the number of students in the recruitment process at the University of Defence/Faculty of Military Technology – military master's study program

Academic year	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
1. Recruitment target (target)	132	132	258	272	338	344	310	247
2. Number of the students admitted	217	162	208	139	137	193	281	468
3. Number of the students enrolled	116	81	128	97	111	107	137	189
4. Number of students who terminated their studies early	61	51	81	55	47	38	47	59
5. Number of graduates	55	30	47	42	the assumption of the number of graduates			
					64	69	90	130
Graduation year	2019	2020	2021	2022	2023	2024	2025	2026

Source: processing and editing by the authors using the Data subset of the Register of Students, 2022.

Table 6 Overview of the development of the number of students in the recruitment process at the University of Defence/Faculty of Military Health Sciences – military master's study program

Academic year	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022
1. Recruitment target (target)	30	30	31	29	27	37	37	35	35	36	24	40
2.Number of the students admitted	38	31	25	28	40	39	31	41	59	48	50	71
3. Number of the students enrolled	35	24	22	16	32	18	30	27	38	36	30	48
4. Number of students who terminated their studies earlier	4	3	9	4	8	7	14	8	9	11	4	4
5. Number of graduates	31	21	13	12	24	11	16	3				
Graduation year physicians (6 years)								the assumption of the number of graduates				
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
	27	18	11	11	22	8	12	18	26	24	14	26
Graduation year Dental surgeons. pharmacy (5 years)	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	4	3	2	1	2	3	4	3	3	1	2	4

Source: Processing and editing by the authors using the Data subset of the Register of Students, 2022.

4. Changes affecting the educational process

The main goal of training military personnel of the Ministry of Defence is "a professional who is characterized as a qualified expert in a voluntary service relationship, educated in the military and specially prepared for military practice, fulfilling a socially significant role in ensuring the defence of the state" (Concept, 2011, p. 17). The Ministry of Defence provides professional soldiers with education that can be used for the duty performance at an establishment post, for the performance of tasks in combat missions.

The education of students at the University of Defence is focused on the preparation of military personnel, in the field of education entitled Security. The university implements education in all types of accredited study programs according to the needs of the Ministry of Defence in accordance with the legal definition. It prepares graduates-officers to perform basic command, staff and professional activities. The graduates of the Faculty of Military Leadership are prepared to serve as platoon commanders or staff officers. The graduates of the Faculty of Military Technology are prepared to perform specialized technical and command-technical functions. The graduates of the Faculty of Military Health Sciences are prepared to perform professional and specialized functions in the field of health services and medical support.

The study is also intended for other applicants from the field of security and state administration. Education is implemented on the basis of professional study programs, and master's study programs are considered decisive study programs. The education is oriented towards the training of a commander-specialist, general military training and training in the field of the selected professional specialization. The training of a graduate is adapted to the development of the security environment, including the development of technologies (Strategy of Educational Activity, 2020).

The most up-to-date knowledge from practice is included in the studies in all types of study programs. In particular, experience acquired in military missions proves that soldiers need the skills necessary not only to perform the role of commander, but also the skills needed to resolve the conflicts of a political rather than a military nature. Attention is paid to the acquisition and development of multicultural knowledge and skills, which are important for solving problems in situations where soldiers have to make independent decisions in non-standard situations.

5. Conclusion

The University of Defence offers a wide range of study programs that are attractive for applicants motivated to join the armed forces. The prerequisite for successful meeting the required number of students is to reach the highest possible number of potential applicants within the framework of personnel marketing so that the recruitment target (target) is exceeded as many times as possible.

Within the next stages of the admission process, it is assumed that the total initial number of applicants will be reduced, both at the level of accepted and subsequently enrolled students in the 1st year of study. As part of the student's adaptation process at the University of Defence, maximum support is provided to students during their studies with the aim of maximal eliminating the number of students who terminate their studies prematurely for any reason (most often these are study reasons). Unfortunately, this is not always possible and the number of students leaving early is highly volatile and occurs most often in the first two years of study.

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Professional success as a modern referent of success in life

Tomasz Łączek

Abstract:

The aim of this article is to describe the contemporary phenomenon of equating professional success with life success and to define the key concepts used in the context of the subject in question (*professional success, life success, career success, professional development, referent*). Professional career is one of the most fundamental areas of our lives, which is why it is often investigated by researchers in the field of social sciences and humanities.

Key words:

career, human being, life success, professional success, success

Introduction

Being successful is an indispensable need of every human being. Obtaining positive results whenever we undertake an action brings us closer to intended goals and makes it possible to perform assigned tasks. It is a measure of our efficiency and ability to skilfully adapt to the surrounding environment. In order to implement our ideas within the scheduled timeframe, we need creativity, the ability to analyse and synthesise, perseverance, and a number of various factors, including favourable circumstances referred to by some as "being lucky in life". Success has now become common and available to everyone. The mass media keep covering successes achieved in business, social life, music, sports, travelling, dieting, fitness, politics, etc. Famous individuals and celebrities keep touting their achievements in so many domains that there is hardly a 'success-less' sphere anymore.

What can be observed in the social space, and particularly among professionally active people, is the glorification of one's own success at work, which derives from the fact that many people directly equate professional success with life success. To those highly committed to their work or excessively striving to climb the career ladder, work can be, and often is, the most important aspect of life. Neglecting personal life, family, or health is often the first step on a path towards workaholism. There is risk that what only matters in life for such an individual are work-related things and anything that leads to career development. Professional success then often becomes a "modern referent" for life success. It is "modern," because it seems to address the challenges of modern times; it seems to be progressive. In addition, the social perception of the term "modern" is exceptionally positive. The term triggers connotations associated with progress, avant-garde, and innovation. In reality, however, this modernity is often superficial.

Nevertheless, to many people, it is life success that truly matters in life. Achieving life success is increasingly expected or even desirable, not only in the mass media. As originally intended by its potential architects and executors, the "cult of success" is to testify to the strength and worth of a human being. However, is it really so? After all, the value of a man should be seen in *who* he is and how much *humanity* is in him, not in his subjectively presented achievements…

Definitions of key terms

In a society where the value of work is considered one of the most crucial in the hierarchy of values, professional success is often perceived as success in life in general. In fact, if this is the case, it is not a misconception. Professional success can be examined independently, but it is also a subordinate category of the term *life success*. In other words: every professional success can be a life success, but not every life success is a professional success.

People at working age, for instance, often associate life success with professional success. For the purpose of further analyses, however, it is worth clarifying the meaning of individual terms related to the topic in question.

The first term—*professional success*—can be understood as "a component of personal development that may or may not be extracted from a person's résumé (depending on the level of his/her professional activity). We acquire competences and skills in both personal and professional areas. The ones developed in the professional sphere can be used in private life and vice versa"[1] (Pujer, 2017, p. 10). For the purposes of further considerations, it can be assumed that professional success is an above-average work achievement that a person considers personally important or a different work result that has a positive impact on the individually experienced quality of life.

Therefore, professional success can be simultaneously or independently also a *life success*, which is defined as "a relatively constant, individually defined positive result of actions taken by a person to achieve a tangible or intangible goal, which is directly related to something that subjectively constitutes the person's most important life achievement so far or is anticipated as the ultimate goal to be achieved in life" (Łączek, 2019, p. 30).

The existing literature on the subject matter also mentions the term *career success*, which refers to the subjective and objective dimension of success, because "the construct of career success comprises a peculiar composition of subjective or objective elements, while placing an emphasis on the duality (subjective and objective dimension) of career success. While attempting to solve the dilemma of what the construct of *to succeed* means, references were made to the subjective (as a personal sense of success) or objective (as a component of the subject's self-knowledge system) understanding of it" (Cybal-Michalska, 2017, p. 59).

Regardless of the circumstances, it should be remembered that what matters is "how important these criteria are for individual professional groups, how they change over time along with the trajectory of professional development, and how they are impacted by socio-demographic" (Pilch, 2020, p. 209). This means that the evaluation of career success includes observable indicators that can be compared with other data, e.g. the amount of remuneration or the position held should be considered in the context of other factors.

The paper title contains the term *referent*, defined as "a thing, person, or phenomenon to which a given name refers" (Bańko, 2005, p. 267). This term, although mainly applied in linguistics and philosophy, is necessary in order to specify the said phenomenon of equating professional success with life success and to clarify that today professional success is too often presented as a category that overlaps with the category of life success.

The importance of work to the individual

People spend about one-third of their professionally active adult life at work. The subject of work was the focus of academic interest to such scholars in the field of social sciences and humanities as Henryk Bednarczyk, Waldemar Furmanek, Stanisław Kaczor, Tadeusz Tomaszewski, Zygmunt Wiatrowski, Florian Znaniecki, etc. Work is where we realise our goals and aspirations and grow as an individual. Work is both personal and common good. It satisfies a variety of human needs, including financial (earning a living), developmental (self-improvement; career growth), social (contact with colleagues; improving social skills), and psychological needs (validation of one's own agency; self-esteem boost) It also strengthens local economic potential of the society and provides measurable benefits for the entire country by increasing the Gross Domestic Product (GDP).

According to the principles of the Polish philosophical and humanistic theory of work, work:
- enables us to change the surrounding reality;
- enables us to discover our personal qualities;
- is a value impacting other values;
- is an activity through which we satisfy our life needs;
- contributes to building the resources of society;
- has a positive effect on personality development;
- is a factor of spiritual progress;
- is one of the salient domains of our life;

- has a personal and social creative dimension;
- is one of the conditions for the progress of humanity;
- is an important aspect when examining a man's worth;
- is the right of every human being;
- should be preceded by proper education ending with qualifications and professional competences so that it can be performed adequately;
- should bring at least the minimum means necessary to support oneself;
- should be performed continuously, i.e. without periods of involuntary unemployment;
- is a universal value (especially professional work);
- should have such features as usability, efficiency, and effectiveness;
- should be: well-rewarded, respected, performed in proper conditions, safe, adapted to individual capabilities and one's professional specialisation;
- should contribute to one's self-development, self-worth and a sense of dignity (2010, Wiatrowski, pp. 54-55).

According to data as of September 30, 2022, there were 801,700 registered unemployed people in Poland, and the registered unemployment rate was 5.1% (Author team, 2022, document xlsx.), as compared to 9,784,700 employed citizens (Kozłowski, L. et al., 2022, p. 10). Performing professional work makes it possible for an employee to earn a necessary living, which is typically paid out as a monthly salary. Work is one of the most sought-after values in Poland. As stated in the report published by the Polish Central Statistical Office (GUS) and summing up the research entitled *Values in times of plague*, work was perceived as the key value by 8% of respondents, right behind health (47%) and family (39%)[2] (Badora, 2020, s. 2).

The research results published in November 2022 suggest that the majority of people working for money (52%) considers the situation at their own workplace as positive, and only 14% of them—as negative. This proves that despite the global economic crisis, the ever-looming pandemic threat caused by SARS-CoV-2, high inflation triggered by the ongoing Russian war with Ukraine, etc., more than half of the professionally active Polish citizens is satisfied with the situation at their own place of work. In addition, the predictions in this regard for the next year are also optimistic—the majority (56%) of respondents stated that the situation is unlikely to change. Almost three quarters of the respondents (72%) declared feeling a sense of security when it comes to keeping their current job[3] (Badora, 2022, pp. 2-6).

In each work environment, there should be proper conditions conducive to employees fulfilling their personal potential and building proper interpersonal relationships. To this end, certain rules should apply, including but not limited to:
- "clear, transparent rules of conduct that ensure predictability and are the basis of mutual trust, sense of security, and work equity;
- duties should be assigned based on merit: competences, individual capabilities, and talents;
- loyalty and solidarity in relations between employees;
- providing proper physical and financial conditions;
- recognising and rewarding employee efforts;
- mutual assistance in difficult situations that require help;
- kindness towards others; the ability to cooperate with people" (Jakimiuk, 2016, p. 52).

It is commonly believed that the higher the salary and the position held, the greater the level of professional success. This may sometimes be the case, but is not a universal truth. Both the amount of remuneration and the position of one's job in the job hierarchy are relative. Naturally, there is such a thing as the average salary in the enterprise sector, commonly referred to as the national average, or the minimum gross salary, which both serve as benchmarks, but these are values that are subjectively unreliable. The same applies to the position one holds. There is a group of managerial positions, e.g. manager or CEO/president, but again, to someone, the difference

between the managerial function in a small company and the managerial function in an international consortium may be substantial subjectively, as it depends on one's personal aspirations or the need to obtain a particular level of social prestige.

Summary

Striving to achieve success is a natural process of human development and existence. Nowadays, the mass media keeps promoting the "cult of success." The vision of a "successful person" is associated with their achievements, and preferably with the entire gallery of achievements, the greatest of which, subjectively considered the most important, is defined as "life success." Accomplishments in this particular sphere are highly valued and desired by adult professionals, who strive to obtain the best work results in order to keep up with the demands of everyday life. They often and somehow 'automatically' treat career advancement, high salary, and promotion to the highest ranks of the company as their life success. In the meantime, professional success is not always success in life.

The professional dimension of one's life cannot and should not overshadow their individual needs and paths of development. Striving to achieve professional success, we cannot neglect other spheres of life such as family, health, friends, pursuing personal hobbies and passions, spiritual development, etc. Being modern does not consist in succumbing to the pressure of imposed visions of what is fashionable. An independent choice instead of veiled coercion should determine what professional and life success means to an individual. A reasonable approach to modernity, along with all its embedded trends, should enable making free choices, unconstrained by social pressure.

There is one additional aspect. In certain cases, it is very convenient to present one's professional success as being successful in life. Providing an example of one's significant accomplishment at work is generally acceptable and 'releases' from the pressure of achieving life success in other areas. Perhaps this is the reason why professional success has recently been irrationally presented as a modern referent of success in life.

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Wellbeing in direct actors of education in the Czech educational context

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Abstract:

This paper focuses on the topic of wellbeing in direct actors of education, i.e. teachers and pupils. In the introduction, it presents wellbeing from the perspective of several world authorities such as WHO, OECD and UNICEF. Then the specifics of wellbeing in the Czech educational environment are described from the perspective of educational policy makers and decision makers in the field. The concept of wellbeing of education actors at the national level is examined in particular in the context of the activities of the Partnership for Education 2030+ project and in the context of school climate.

Introduction

The present paper refers to approaches to wellbeing at personal, institutional and societal levels. Specifically, it focuses on the development of wellbeing in the context of education, with an emphasis on its promotion by the direct actors of education. The stated intention of wellbeing in the Czech school environment is also to contribute to improved educational outcomes and pupil development, and to enable a better understanding of the relationships between pupil outcomes, levels of mental wellbeing and the overall school climate.

Identifying key factors that encompass all aspects of wellbeing should not only help to positively influence the quality of teaching and learning outcomes, but also contribute to building desirable attitudes and values in schools and benefit society as a whole. In the study area, wellbeing is also described in relation to classroom and school climate. The definitions of wellbeing in the documents of international organizations and its current concept and proposed concept in the documents in the Czech Republic related to the strategy and implementation of educational policy were used as a basis for defining wellbeing.

Approaches to wellbeing and its concepts

Respected global organisations address the topic of wellbeing from many different perspectives and describe it in many different contexts, depending on where the organisation sees its purpose and the area it wishes to influence. Overall wellbeing and the development of human potential are nowadays seen as the highest values that can contribute to the overall prosperity and development of society as a whole. (Novotná, 2022) As this topic is very current, it is appropriate to start with an overview of several definitions of the term wellbeing to enable an understanding of its full breadth.

The OECD uses the term wellbeing to refer to the wellbeing and welfare of people. The OECD has contributed to the Commission's recommendations for measuring economic performance and social progress and has developed a framework for measuring wellbeing and progress. This framework covers three different areas. Current wellbeing, inequalities in wellbeing outcomes and resources for future wellbeing. Current wellbeing is characterised by several key dimensions such as income and assets, quality of work and employment, housing, health, knowledge and skills, environmental quality, subjective wellbeing, security, work-life balance, social connections, civic engagement. As part of the Better Life initiative, the OECD has made measuring wellbeing and progress a priority. Measuring wellbeing must become a priority

in future policy-making if it is to have the potential to make a real impact on people's lives. (OECD, 2022)

As an organization that promotes the fundamental rights of children worldwide (the right to health, to life, to adequate nutrition, to education, to protection from conflict, abuse and exploitation), UNICEF understands wellbeing as the wellbeing of children and their mental wellbeing. (UNICEF, 2022)

The World Health Organization (WHO) links wellbeing (in the sense of social wellbeing, welfare and prosperity) with health, where health is defined as *"a state of complete physical, mental and social well-being, not merely the absence of disease or defect"* (WHO, 2022).

Recent literature on wellbeing argues that a person's resilience and ability to adapt and cope with various shocks and stressors is related to all the dimensions that wellbeing encompasses. These are the material, relational and subjective domains of wellbeing. From a holistic perspective, the concepts of wellbeing and resilience are considered to be intrinsically linked. The wellbeing of an individual is dependent on both the individual's personal psychological resilience and the resilience of the social-ecological system in which the individual lives. The relationship between resilience and wellbeing shows a positive synergy. (Chaigneau et al., 2021)

Wellbeing in the Czech educational context

Wellbeing in the Czech educational context is given considerable attention and is included in strategic documents that influence Czech education policy, such as the Strategy 2030+, the Ministry of Education, Youth and Sports' project Partnership for Education 2030+ and is also the subject of analyses by the Czech School Inspectorate. The definition of wellbeing for the Czech educational environment was laid out in the Partnership for Education 2030+ project, which is part of the Strategy 2030+. Strategy 2030+ is a fundamental document aimed at the development and modernisation of the Czech Republic's education system in the period 2020-2030+. In defining wellbeing, the working group drew on the definitions of respected world authorities such as WHO, UNICEF, OECD and developed education systems, framework education programmes, school law and the definition of basic human needs. (Novotná, 2022)

"Wellbeing is a state in which we can fully develop our physical, cognitive, emotional, social and spiritual potential in a supportive and stimulating environment and live a full and happy life together with others." (Novotná, 2022, p. 6) As part of the Partnership for Education 2030+ project, a survey was carried out among headteachers of public primary schools on the attitudes of stakeholders towards the topic of wellbeing in education. The survey was conducted using online questionnaires. 393 representatives of primary schools participated in the survey. 27% of the respondents had an idea of what the term wellbeing meant. More often than not, these were schools from larger cities. Almost half of the principals and headmistresses involved said they had not heard of the term. A quarter of respondents had heard the term wellbeing but did not know exactly what it meant. As the above data shows, awareness of the term wellbeing is not very high.

The survey also shows that most headteachers try to implement the essence of wellbeing in schools (informal meetings between teachers, support for teachers to participate in further education, the school builds and maintains relationships with parents and other partners (educational organisations, founders), successes of individual pupils are shared, physical activities are included on school grounds, pupils' problems are consistently addressed. A clear majority of respondents agreed that wellbeing is crucial to pupils' good outcomes and that support is needed from both pupils and teachers. (SKAV, 2021) The findings of the research suggest that there is a need to support wellbeing in education in a systemic way and also to provide a methodology in the area of teacher wellbeing and pupil wellbeing. In order to promote wellbeing in schools, the school management believes it is important to provide the services of a school psychologist and a special educator, as well as to spread awareness of wellbeing among school founders and to include the topic of wellbeing in the pre-service training of teachers.

School representatives consider it important for the future development of wellbeing to create methodological support. In the case of teacher wellbeing, targeted support should focus on teacher education in the area of wellbeing, the provision of professional help, supervision and mentoring for teachers, personal growth, and help to identify teachers whose wellbeing is at risk. The form of methodological support for pupils' wellbeing should include strengthening the use of formative assessment, differentiated learning objectives, primary prevention programmes, mentoring programmes for pupils and building relaxation points for pupils. (SKAV, 2021)

In the Czech Republic, the Czech School Inspectorate also focuses on the topic of wellbeing in the context of the school environment. The Czech School Inspectorate has been analysing international surveys of pupil achievement in which the Czech Republic participates for many years. One of the most important surveys is the PISA survey, which every three years measures the level achieved by 15-year-old pupils in selected skills. According to a secondary analysis of PISA 2018 carried out by the Czech School Inspectorate in 2021, many factors influence pupils' achievement, which are divided into several areas.

The first area is wellbeing, i.e. the personal life satisfaction of the pupil, which has a significant impact on pupil performance. One way to enhance pupils' wellbeing is to seek to support pupils in the emotional area, through communication with pupils and their parents. In the context of communication, it is then possible to identify pupils' negative feelings and help them to resolve them, thereby contributing to their wellbeing. Other factors influencing pupil achievement include a motivated teacher and their enthusiasm for teaching, as well as pupils feeling supported by the teacher. The final factor that affects pupil achievement is the pupil's sense of belonging to the school. (Lebeda et al., 2021)

Wellbeing and climate of the classroom and school

As already stated, the Czech School Inspectorate always consistently analyses the results of international surveys and relates them to various factors and variables that affect education. In the secondary analysis of the PISA 2018 survey, the Czech School Inspectorate focused, among other things, on the relationship between pupils' achievement and wellbeing and classroom climate. (Lebeda et al., 2021) According to Rowe et. al (2010), classroom climate represents the climate of the classroom, and according to Kaplan Toren & Seginer (2015) the social-psychological environment for learning, comprising the perceptions, attitudes, behaviours and interactions of pupils and teachers in the classroom.

The classroom climate can be divided into three areas – pupil-teacher relationships, peer relationships and the learning atmosphere. (Rowe et al., 2010; Kaplan Toren, & Seginer, 2015). Ingemarson et. al. al considers one of the core tasks of the teacher as his/her active involvement in creating a positive classroom climate. (Ingamerson et al., 2019) According to Zedan, classroom climate is defined as the sum of all group processes that take place during teacher-pupil and pupil-pupil interactions. (Zedan, 2010) Classroom climate varies from classroom to classroom and is part of the overall school climate. Interpersonal relationships, teacher-created classroom rules, as well as the degree of control exerted by the teacher are all reflected in the classroom climate. (Thapa et al., 2013, Wang & Holcombe, 2010) A harmonious learning environment is critical for children's positive development in the future. (Ingemarson et al., 2019) The topic of wellbeing is also further contextualised in this paper in relation to school climate. In doing so, the intention is to take into account not only the wellbeing of the pupils, but also that of the teachers as other important actors in the educational process.

School climate is a complex concept that encompasses many interrelated categories, such as a stimulating environment, a sense of safety, a sense of belonging to the school and classmates, emotional support from parents and teachers, good relationships with classmates, classroom/school cleanliness, and other elements that affect educational achievement. (CSI, 2021, Nishimura et al., 2020, Forsberg et al., 2021) School climate has become one of the most frequently studied topics in recent years due to its positive and negative impact on pupil

achievement and has thus been the subject of a number of scholarly studies and research, e.g., Nishimura et al, (2020), Forsberg et al. (2021), Kim & Gentle-genitty, (2020), Ingemarson et al. (2019), Kaplan Toren & Seginer (2015), Zedan (2010), etc.

It is not without interest that Perry described school climate more than 100 years ago. However, his notion is still relevant today when he puts school climate in the context of how the quality of the school environment affects pupil achievement. (Perry, 1919) Cohen et al. (2009) consider school climate as a group phenomenon, referring to the quality and character of school life in which pupils, teachers, and pupils' families participate. Based on an analysis of other peer-reviewed studies, Cohen et al. identified four main components that make up a stimulating school climate - "safety, teaching and learning, relationships, and environmental-structural aspects." (Cohen et al., 2009) Feeling safe at school is an elementary need for all pupils. Schools must provide an environment that allows pupils to feel safe from bullying, harassment and other acts of hostility. (Nishimura et al., 2020) According to Thapa et al. (2013), school climate includes developmental processes in addition to safety, relationships, teaching and learning, and institutional environment. According to Demirtas-Zorbaz et al. (2021), school climate is a concept encompassing all persons associated with the school and all forms of relationships between these persons and the perceptions of the school structure by each person.

Friendly relationships between pupils and between pupils and teachers have a positive effect on the mental wellbeing of the pupil, as well as on good attendance and academic performance. Classroom cleanliness, class size, timetable, physical activities, etc. also influence pupils' behaviour. A positive school climate reduces the importance of the influence of the socio-economic background from which the pupil comes and helps in better academic performance. (Nishimura et al., 2020) The opportunity to involve pupils in extracurricular activities and the variety of extracurricular activities and clubs contributes to reducing pupil absenteeism and increasing their involvement in school. Equally important is family and community participation in children's extracurricular activities. (Kim & Gentle-genitty, 2020) Teacher praise and clear rules for school conduct also contribute to a positive, warm and supportive climate (Ingemarson et al., 2019), and a positive school climate is associated with better academic performance, fewer disruptive behaviours and fewer incidents of bullying. (Thapa et al., 2013; Wang & Holcombe, 2010)

The state of the school climate can strengthen or weaken pupils' wellbeing. In the Secondary Analysis of PISA 2018, the Czech School Inspectorate also focuses on disruptive classroom climate and its impact on pupils' performance. This study shows that frequent absenteeism, noise, disorder, inattention, poor discipline, bullying and other distractions have a demonstrably negative impact on pupils' achievement. Conversely, high classroom discipline contributes to better pupil achievement. (Lebeda et al., 2021, Nishimura et al., 2020, Forsberg et al., 2021) By analogy, these statements can be interpreted to mean that if the school climate is not stimulating and pupils are not motivated, it is impossible to implement an effective pedagogical process. The relationship between these categories has been described by many scholarly studies (e.g., Urbánek and Chvál, 2012; Lungu, 2019; Nishimura et al., 2020; Forsberg et al., 2021; Dehnad et al., 2021).

Further research should be directed towards the prevention of disruptive behaviour of pupils and its impact on the classroom climate, or the school climate, to help teachers manage this behaviour in the future. The causes of disruptive behaviour should therefore be viewed from the perspective of the pupils themselves and their interpretations of their perceptions of the school climate should be analysed. (Forsberg et al., 2021) Another possible cause of disruptive behaviour is seen by Ingemarson et al. (2019) in the disengagement of teacher-pupil relationships, especially in the upper grades, where pupils have a different teacher for each subject. This disengagement can have a negative impact on the classroom climate, and consequently the school climate. Close relationships and understanding between teacher and pupil are therefore essential for good teaching. It is crucial to address these aspects especially when pupils are in the upper grades. (Ingemarson et al., 2019)

Discussion and conclusion

Positive mental attitude of students and teachers plays a vital role in achieving educational outcomes. As already mentioned, the term wellbeing is also used in this sense to refer to different specifically defined overall wellbeing. Wellbeing encompasses a very broad area such as the subjective psychological wellbeing of the pupil, the mind-set towards meaningful action, the relationships between the pupil and other actors (parents, teachers, classmates, etc.). According to available research (CSI, Partnership for Education 2030+), pupils' wellbeing is also influenced by the socio-economic status of the pupil, as well as the environment and context of the school. (Lebeda et al., 2021).

Teachers' satisfaction with the working environment naturally has an impact on the school climate. The climate of the teaching staff is considered to be decisive in the context of the whole school, as it has a significant impact on the quality of the educational process. Again, the climate of the teaching staff encompasses a somewhat wide range of categories such as positive relationships within the staff, the level of teacher frustration, support from the school leadership, strength of the school leadership etc. If a teacher is motivated, has initiative, trusts the school leadership, is proud of his/her school, respects colleagues, feels a sense of belonging to the school and considers the vision of the school as his/her own, all these aspects influence student performance in a positive way (Urbánek & Chvál, 2012). In the above context, it is also possible to consider teacher wellbeing as an important category that supports both school climate and student wellbeing and achievement.

The topic of wellbeing of direct and other educational actors, not only in the context of school climate, needs to be addressed in the future, as the awareness of this concept is not very high in the Czech Republic, neither in general nor among school principals. Wellbeing in education needs to be systematically promoted also at the level of other forms and phases of education and to be inspired by other education systems and approaches to wellbeing in the international context, where it is possible to observe how wellbeing is promoted or embedded directly in strategic documents. The development of the individual's potential and prosperity is coming to the fore. The level of satisfaction of an individual in all areas (cognitive, emotional, social, spiritual, physical) contributes to the successful functioning of the individual in society and thus positively influences the quality of life in society and contributes to the development of the state and society in the economic, cultural and social levels.

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Virtual co-teaching and future teachers

Zuzana Svobodová, Martin Kursch, Jaroslav Veteška

Abstract:

The paper presents the results of a partial study on the possibilities of using a new method of virtual co-teaching in the preparation of future teachers. The study was carried out as part of a project supported by the Technology Agency of the Czech Republic with the number TL03000133. Methodologically, it is based on qualitative description and presents the possibilities of using virtual co-teaching as one of the foreign experiences in the course of studying and preparing future teachers. The possibilities are presented from the perspective of selected students from Germany and Poland and build on the project's results to date and the possibilities of applying virtual co-teaching in schools.

Key words:

co-teaching, foreign experience, novice teacher, studying, virtual co-teaching

Virtual co-teaching, its effectiveness and possibilities

The aim of our study was to identify and describe the benefits and barriers perceived by selected future teachers from Germany and Poland in using virtual co-teaching as part of their international teaching preparation and practice and, based on these findings, to propose recommendations for the implementation of international practices using virtual co-teaching. We built on the results of our ongoing project on virtual co-teaching (see below) and tried to describe its possible further effective use.

In schools, there has been a long-standing and standard model of one teacher dedicated to his/her subject and class. However, it is not so unusual for someone else to be involved in the classroom in addition to the teacher, i.e. another teacher, a teacher educator, an assistant, a special or social educator, a psychologist or a prospective teacher in training or on placement. Thus, there is more than one educator in the classroom, and this situation is then called either co-teaching, but also cooperative teaching, tandem teaching, observation in education or teaching assistance. It is observation in education that is typical of the initial preparation of future teachers and therefore the main focus of the present paper.

The first definition of co-teaching was provided by Bauwens, Hourcade & Friend in 1989 when they defined it as "*an educational approach in which two teachers collaborate and coordinate their work to teach academically and behaviorally heterogeneous groups of students together in an integrated setting*" (p. 18). The origins of co-teaching were focused on students with special educational needs, as described by Murawski (2003), for example, who states that co-teaching is an appropriate inclusive education method for teaching students with special educational needs in the same classroom with intact students in order to facilitate understanding of the curriculum and implement an individualized approach to education for all. After 2000, co-teaching began to expand beyond the field of special education, and as Murawski (2010, p. 2) states, "*co-teaching helps meet the individual learning needs of all students by providing students with one teacher who is highly skilled in differentiation and individualization in addition to one highly qualified classroom teacher.*"

As stated by Rexroat-Frazier and Chamberlin (2019), the key to successful co-teaching is clearly defining the purpose of co-teaching and selecting the right partners in the learning process. The effectiveness of pair teaching is further influenced by the teaching practices chosen, the use of effective teaching strategies, and most importantly, the balance of these strategies.

As we can see, there are many definitions of pair teaching, but every author emphasizes the word "together": there must be well-organized and constantly supported collaboration between teachers, and this means joint preparation for the lesson, joint implementation of the lesson, and

joint evaluation of the results of the lesson. In this case, pupils also become actively involved in working with teachers and the result is a more effective learning process.

Currently, the literature describes five to nine different types of co-teaching lessons, depending on the distribution of activities between the individual teachers, the distribution of roles and responsibilities of both educators – e.g. one teach-one observe, tandem teaching or other models mentioned, also Kursch, 2021; Svobodová, 2021). The basic types of co-teaching include the so-called tandem teaching, where both educators are equal, and the model where one teaches and the other supports. A specific form of co-teaching is the model where one teacher is essentially in charge of the lesson or using the opportunity given by the double occupancy of the lesson to divide students into groups that teach either in the same classroom or even in separate rooms (for details see Beninghof, 2012; Murawski, 2017; Dove et al., 2018; Veteška et al., 2020; Kursch, 2021).

The issue of educator collaboration is currently strongly emphasized (e.g. Novosák et al., 2021). The importance of sharing and involvement of different actors in the educational process is also a topical issue at the level of educational policy, both national Czech and European. As the text of Strategy 2030+ states, "*Sharing examples of good practice is proving to be one of the most effective methods of improving the quality of the education system, and it is imperative to apply it both across levels of educational management and among teachers themselves*." (Fryč et al., 2019 p. 62).

Given that our goal is to explore the possibilities of virtual co-teaching in the preparation of future teachers, a co-teaching model based on unequal role distribution is central to our research. That is, one teacher is in the lead role, makes decisions about the course of instruction, has the final say in planning, and leads the overall lesson. His/her activity is then complemented by a second educator, who may be, for example, a specialist, a parent or also a student teacher or a novice teacher. The teacher who is part of the regular teaching staff prepares the lesson comprehensively and the second teacher acts only in predefined parts (this is then a type of Lead and support). Beninghof (2012) considers the Speak and add type to be the simplest form of unequal co-teaching. This form allows the second teacher to participate in the teaching, to be in the classroom and to participate in the pedagogical process by providing support in defined parts to the lead teacher or to the students. It is a time-saving form to prepare, the second teacher does not need to plan intensively, the lesson is the responsibility of the lead educator and the co-teaching colleague can quickly integrate. This type is also suitable for incorporating novice and prospective teachers into the classroom.

Within the framework of the TAČR project No.TL03000133, we have implemented three areas of research activities between 2020 and 2022. The first phase was a scoping review where we investigated the topic of co-teaching effectiveness and the factors that influence it. Based on the 19 research studies analysed, we identified the core categories that influence the delivery of co-teaching sessions. For virtual co-teaching, the technical area was particularly pivotal. If there were problems in the technical area, it was not possible to implement the teaching lessons effectively regardless of other facts. Without a mastered and well-prepared technical support, it was not possible (regardless of the relationships and quality of the educators) to provide an effective virtual teaching unit (Veteška et al., 2020).

Chan et al. (2012) also stated that it was the well-managed technical aspect of the whole process that was crucial for virtual co-teaching, and therefore the next steps in the research and project had to be well technically prepared. The second phase of the project was to conduct a pedagogical experiment to investigate and describe the effectiveness of virtual co-teaching on the learning process of students. The experiment ran for two years between 2020 and 2022 and had the following parameters: 3 schools (2 primary, 1 secondary); randomized study (30 participants in groups); 6 times repeated experiment (history, German, mathematics); elimination of confounding variables, same content, same approach, same teachers, same spatial distribution; ex post test, always within 3 hours after the teaching; differentiation factor of the experimental group

– virtual teacher. The results of the experiment showed that the effect on learning is the same for virtual co-teaching as for traditional co-teaching. When comparing classical co-teaching and virtual co-teaching, the effect size was - d ~ 0.03.

The third phase was a qualitative investigation to find out the subjective contribution of virtual co-teaching to learning from the perspective of students and teachers. This part of the project relied on two basic designs – a case study and a qualitative description (Graneheim, Lindgren and Lundman, 2017; Dostálová et al., 2021), and we primarily used individual and group interviews with the experiment participants and co-teaching teachers to collect data. The results identified the subjectively perceived benefits of the method (novelty of the method, added value in teaching, collaboration, possibility to individualize, etc.) as well as the subjectively perceived barriers to its implementation, which are mainly time, technical requirements, difficulty of planning, etc. (see Svobodová, Veteška and Dvořáková, 2022 and Kursch et al. 2022 for details).

In light of the findings and the confirmed effectiveness of virtual co-teaching, in the last phase of the project we shifted our research to the area of teacher and future teacher development. Listening practice and observation in the class are a standard part of prospective teachers' preparation and they are required to complete it before their own teaching practice. The standard process is that the student physically comes to the school, sits in the back of the classroom and observes the teaching (Němečková and Pavlasová, 2019). It is therefore logical that the school for the practice to take place must be located at a distance that is feasible for the student and their physical presence. Virtual co-teaching, however, breaks down this very necessity of physical proximity and allows for the implementation of listening practice virtually anywhere that is willing to allow the student's virtual presence and has adequate technical equipment that does not disrupt the flow of teaching (see the necessary condition of effectiveness described above).

1. Methodology

In order to achieve our goal, our study relied on qualitative description procedures, which are particularly suitable for capturing the lived experience of an individual or group (Lambert and Lambert, 2012; Graneheim et al., 2017; Dostálová et al., 2021). This approach involves describing and interpreting experiences and allows for a focus on authentic responses to questions about what respondents have experienced and how they describe and perceive that particular experience. As a data collection method, a semi-structured individual or group interview is most appropriate within qualitative description, (Graneheim et al., 2017). The qualitative descriptive approach does not require a highly abstract rendering of the data compared to other qualitative designs (Lambert & Lambert, 2012), but of course some interpretation logically occurs (Sandelowski, 2000; Bradshaw et al., 2017).

As a collection method, we chose a group interview with prospective teachers who had the opportunity to participate in virtual listening sessions in German language classes in primary school. In total, one group interview of 60 minutes was conducted. A total of eight students participated in the study – five teaching students from Germany (two from the first year of the Bachelor's degree, two from the first year of the follow-up Master's degree and one from the final year of the follow-up Master's degree) and three students from the follow-up Master's degree from Poland. All respondents were asked the same initial question: What was your experience of attending a virtual class. This question was intended to introduce the topic and engage the participating individuals in a discussion. In order to understand their overall experience and to achieve the aim of the study, additional questions were also asked to discuss the topic in more depth and to uncover themes for further follow-up research in the field of virtual co-teaching and future teachers.

Overall, therefore, the following basic questions were posed to all: What do you think about virtual co-teaching as part of your practice? What did you like and dislike about the experience? Would you like virtual co-teaching to be part of your studies and why? What do you think would be needed to make virtual co-teaching beneficial to you as a student? Prior to the group interviews,

respondents gave informed consent to participate in the research. The interviews were anonymised and are stored on a password protected computer.

Data analysis was based on inductive and deductive content analysis (Mayring, 2000; Graneheim, Lindgren and Lundman, 2017). Content analysis is a systematic method of analyzing oral or written communication using a coding and categorization approach that is suitable for researching opinions, experiences, and attitudes (Mayring, 2000). During the analytical activity, we identified the main themes (categories) that the prospective teachers mentioned in relation to their lived experience of virtual co-teaching in a Czech primary school. The identified themes are described in more detail in the results section. Finally, recommendations for the implementation of pedagogical practices enriched with virtual co-teaching are summarized.

2. Results

In the results section we present the main mentioned benefits of virtual co-teaching as a part of pedagogical practice, mentioned barriers and suggestions from students to increase its benefits.

In general, students responded to the question about what they think about virtual co-teaching as a part of practice, that virtual co-teaching is a great way to learn new teaching methods and to see working with different types of learners. However, they also immediately cited their concerns, mentioning that it can sometimes be difficult because of the need to plan and coordinate with the other teacher and that it was probably difficult to find schools and teachers who would allow them to have this experience. In the follow-up interview, we tried to go more in-depth and explore, therefore, the anticipated benefits, barriers, concerns, and everything that students see in virtual co-teaching.

In the area of benefits, students reported the following:
- the opportunity to participate in any class at any time
- the safety of the home environment during the initial lessons
- the opportunity to get to know different teaching styles quickly and easily
- to observe lessons from the "student's point of view"
- to "travel" to schools they would never have got to

The opportunity to join the lessons at any time was great for two Erasmus students in particular, they joined from another country and were happy to be able to do their observation practice anyway, which would otherwise not have been possible and they would have had to extend their studies. They also found it very enjoyable and safe to see the school in this way without having to physically be there. They cited the feeling of the safety of the home environment for their first listening and engagement with the lesson, as they always had to be introduced by the teacher when they came into the classroom, then they sat somewhere at the back and watched the lesson. That way they just joined in the teaching. However, they perceived it as very beneficial in this respect that other pupils were also online, i.e. it was natural that they joined in as well. If they were the only ones online, it might have been strange from their point of view.

They stated that it would be very beneficial to join different teachers' classes in this way. For example, if they studied didactics, they could easily see its application in real practice and at the same time experience teaching more from the student's position, i.e. really feel how the style and methods used affect them. In the classroom they cannot experience this completely because they are more in the position of the teacher.

They all said that the main benefit was the opportunity to look into schools they would never otherwise get to. They could not imagine, for example, that a Czech school could have such good equipment for virtual learning that it is possible to see the pupils, the teachers and the materials they use at the same time and they were also surprised by the level of knowledge of the pupils. They would like to visit other schools in the world in this way.

In the area of barriers, students reported the following:

- Isolation from the group
- Complexity of planning
- Lack of experience with virtual learning

Considering that for each barrier we also discussed the possibility of removing it, we will now present the suggestions for removing them that the students have proposed together with the mentioned barriers.

Isolation from the group was described by them as a strange experience. They were suddenly in a strange classroom, with a strange teacher and strange students, and there they were on the screen. They reported that fortunately other pupils were online, if it had just been them virtually like this it would have made them feel even worse. They regretted that they had no continuity, hence this isolated feeling would remain with them. If the virtual sessions were part of a larger body of practice, it would have been better and more enjoyable for them.

If they were to teach virtually with a Czech teacher (or another foreign teacher), they were concerned about the complex planning and reported that they did not have enough experience with regular teaching and in the virtual one the whole process could then be even more challenging. They were concerned about technical difficulties on both sides and were not sure whether other schools were as well equipped technically. They stated that it would be very beneficial from their point of view if they could still be in contact with the teacher and pupils after the regular physical practice and thus see the continuity of the teaching, monitor the educational progress of the pupils and continue to be part of the school. Thus, they suggested as an ideal model that virtual co-teaching could be used as a follow-up element after the physical practice in the school. They would attend a regular class, get to know the teacher and the pupils and then be able to continue in the virtual space, keep in touch with the pupils and follow up the physical meeting.

3. Conclusion

It is evident that the student teachers were able to reflect on their experience and identify the benefits as well as the barriers and limitations of virtual co-teaching embedded in their teaching practice. Thus, the main benefits cited by the students were the ability to be involved in any teaching at any time, the safety of the home environment during initial lessons, the ability to experience different teaching styles quickly and easily, to observe lessons from the 'learner's position' and to 'travel' to schools they would never have accessed. They cited isolation, complexity of scheduling, lack of experience with virtual learning, and overall said it was strange to be online with a group of complete strangers as major barriers. As a suggestion for improvement, they suggested that virtual co-teaching would be a good addition as a follow-up practice after the physical practice in school. They would already know the students and the teacher and would be better able to plan and work.

Based on these findings, we propose to test the feasibility of virtual co-teaching in teaching practice abroad under the following conditions: 1) to allow the virtual observation practice at the school where the student will then practice, so that he/she can become familiar with the environment, classroom and teaching styles already from home and then reflect on this experience with other students and the supervisor of the practice 2) to implement a regular practice in which the student will plan and teach together with the teacher 3) to implement virtual co-teaching with the teacher with whom he/she has practiced and the classroom in which he/she taught.

In such a model, we take advantage of the benefits of both physical and virtual co-teaching, allowing the student to get acquainted with the school environment in the safety of his/her home (and without the need to travel) and after the subsequent foreign experience in physical form (which is a regular part of the study in the Czech Republic and abroad) to build on it with virtual co-teaching and thus maintain the continuity of practice, relationships and deepen the pedagogical experience and professional growth.

We are aware that the application of virtual co-teaching as proposed in this way brings with it additional obstacles and complications. Obviously, it would be necessary to select schools and universities that would be willing to collaborate in this way, however, based on our research we repeatedly confirm the potential of virtual co-teaching and see its potential not only in teaching but also in teacher preparation. We therefore consider this conclusion and direction as a relevant topic for further research and pilot studies in the cooperation between faculties of education and schools, for example also in the 4EU+ university alliance.

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Current trends in further professional education of the attorneys

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Abstract:

This paper is a description of the theoretical framework of further professional education of attorneys-at-law with a focus on the latest trends. The text presents the current strategies, principles, concepts and directions of the further professional education of attorneys in Europe. The perspective of further professional education is also evolving in the context of social changes (pandemics, digitalisation). Attention is also given to analysing further legal education in the Czech Republic and evaluating the established curriculum. Lifelong learning persists as a basic starting point.

Introduction

The aim of further professional education of attorneys, in accordance with current modern methods and forms of education, is to ensure an adequate level of professionalisation and to guarantee the professionalism of the legal profession. According to the statistics by the Czech Bar Association (2021), there were 12,267 active attorneys in the Czech Republic. The Czech Bar Association (the "Bar"), a self-governing professional organisation uniting all attorneys in the Czech Republic, defines one of the basic requirements for attorneys-at-law as "a commitment to the erudite and ethical practice of law with the hallmark of duly recognised professional honour", according to former Bar President Jirousek (2021).

A closer analysis of the above statement leads to the conclusion that under the meaning of erudite practice of law we can find a requirement for the education of trainee lawyers (graduates of law faculties preparing for independent practice of advocacy under the supervision of an attorney as a trainer) and for the lifelong education of attorneys. The main purpose of further legal education is to enhance professional knowledge, which is constantly changing and developing in relation to current legislation, case law and social changes. However, further professional education does not necessarily have to be aimed solely at increasing professional knowledge, but also at acquiring other skills and competences related to the challenges of the 21st century (digitalisation, advocacy as a form of business, forms and methods of finding clients, etc.).

The focus of this paper will be on the training of attorneys from an andragogical point of view in the light of current trends. These trends are set not only by the Bar, but also by a number of international bodies, in particular those that are integrated at the European level. These are in particular the European bodies, such as the European Commission, the Academy of European Law (ERA), the European Judicial Training Network (EJTN), or the Council of European Bar Associations (CCBE). In this article, I would like to describe, analyse and compare the state of further legal education in the Czech Republic, focusing on the contemporary knowledge in the field of further professional education resulting from the activities of the above-mentioned European institutions.

Theoretical foundations of further professional education of attorneys

The further professional education of attorneys is based on the concept of lifelong learning, which, according to Veteška (2016), can be defined as a targeted and institutionalised activity for the purpose of acquiring additional skills, abilities or competences. For the purposes of this paper, the key phase is further professional education i.e. learning in the period of an individual's life after entry into the labour market, specifically in the way of nonformal out-of-school learning.

This nonformal way of further education is provided by organisations outside the education system. It takes the form of courses, seminars, workshops organised by private educational institutions, professional chambers or other entities with the necessary expertise. The outcome of further professional education is the acquisition of skills, knowledge and competences which will improve the learner's position on the labour market and which they will apply in their working lives.

There are many forms of further education. A form of distance learning (physical separation of the tutor from the learner), which has developed mainly in the context of pandemic restrictions, can be used in addition to the classic face-to-face mode. Complementary forms of further education include e-learning activities (education using computer technology and interactive software, usually via the Internet), webinars (education using online communication channels that allow the transmission of sound and images) or the blended learning method (a combination of face-to-face education and learning with elements of e-learning).

In order to assess whether the education process is effective and properly set up, it is important to understand attorneys' motivations for further professional education. An important consideration in this respect is whether training is compulsory or voluntary. Individuals' motives change and evolve throughout their lives and careers. Therefore, they cannot be clearly categorised (Veteška, 2016). In this paper I would like to briefly comment on some of the motivations for further professional education of attorneys.

Current concepts of further legal education in Europe

At the outset, it is worth noting that the approach to further legal education in Europe (especially continental Europe) differs in many ways from that in countries with an Anglo-American legal culture. In the US, the term Continuing Legal Education (CLE) is used as a synonym for further professional education of attorneys. In a number of US states, continuing legal education is a requirement for maintaining the privilege of practicing law. To meet this requirement, attorneys must complete courses, lectures, or educational activities that focus on professional legal knowledge and legal ethics. Attorneys receive credits for the courses taken, which then serve as proof of having met the continuing education requirement.

In Europe, the approach to the further legal education is fragmented and varies from one country to another. It is not possible to state unequivocally that further legal education is the standard in Europe. However, a trend can be observed. It can be said that there are general requirements for attorneys in European countries in the sense that attorneys are obliged to maintain and improve their professional competence. Nevertheless, the conditions for attorneys' compliance with this obligation are not in place everywhere. For example, there is no formalised method of further legal education for attorneys in Austria and Germany. In France, Italy, Denmark and Romania, on the other hand, there is an obligation to undertake further legal education, usually in the form of attendance at seminars or lectures within a defined framework. In European countries where further professional education is compulsory, there is a system of credits (1 credit = 1 hour of learning) that an attorney must complete in a given period of time (e.g. Poland: 10 hours of learning in the first year after passing the bar exam, then 30 hours over the next 5 years). In the last 20 years or so, these rules have been introduced in the above-mentioned countries.

The European Union has played an important role in the development of further professional education of attorneys, as it is committed to increasing knowledge of EU law, which is shared by EU Member States. The European Commission has a long-standing commitment to the training of judicial staff under the programme 'Securing Justice in the EU'. The European Judicial Training Strategy 2021-2024 (2020) is currently in force. Attorneys are one of the components of the judicial staff covered by the strategy document. The strategy's current objectives include preparing for the introduction of digital justice and artificial intelligence, particularly regarding the use of digital tools and technologies in professional practice. It is also worth noting that judicial staff should develop their skills in non-legal areas such as psychology, economics, anthropology and

behavioural sciences, in addition to their professional skills in the field of law. The development of language skills for the consistent use of legal terminology is an indispensable element.

The European Judicial Training Network, an organisation that develops standards for judicial training, formulated principles for judicial education (2016). These principles include the need for multidisciplinary and practical training, or the use of high-quality and modern methods and forms of education. These principles are developed by the European Judicial Training Network in its handbooks (2016), where the recommended educational methods are based on the current knowledge of andragogy. The so-called participatory training model, which is an approach that is based on the active participation of the trainee, is an appropriate model for the training of adult professionals. In the participatory education method, the values, needs, experiences or reflections of the learner are taken into account, which should have as a result the development of their critical thinking. In contrast to participatory education is the concept of traditional education, which is based on the assumption that the trainer is the transmitter of knowledge to the trainee, who is only passively involved. Another handbook is dedicated to distance learning. For example, the European Judicial Training Network (2020) discusses the different tools and methods of distance learning. The Academy of European Law's research project (2020), which conducted a survey, involving the Bar as well, is also worth mentioning in relation to online further legal education. The survey involved over 10,000 respondents from various legal professions, including attorneys. With 71% of attorneys having participated in online education, the survey shows that attorneys are the most active legal profession in online education. Attorneys are very adaptable when it comes to online education. Up to 95% of attorneys surveyed are able to participate in online education from their workplace.

Another relevant international body is the Council of European Bar Associations, a professional association of national bar associations representing more than 1 million European lawyers and attorneys, where national experiences are compared and shared. For example, in its resolution, the Council (2013) recommends to its member organisations "to encourage the adoption of continuing training regimes and to confirm a culture of quality and training for lawyers, in the public interest". In the light of the current state of training in the various European countries, it can be said that this requirement is continuously being met.

Further legal education in the Czech Republic and its current trends

In the Czech Republic, the Bar plays a key role in the education process of attorneys, having formulated the first ideas in the Resolution of the Board of the Bar No. 1/1998, on the education of trainee lawyers and the further professional education of attorneys. In the first place, it should be mentioned that there is no obligation for attorneys-at-law to undergo further professional education after admission to the Bar in the Czech Republic. Further legal education is an optional activity for each individual. If an attorney does not have the intrinsic motivation to engage in further professional education, he or she is not obliged to engage in such thing.

The above-mentioned resolution of the Board states that the Bar provides continuing legal education mainly through the publication of a magazine (the monthly "Bulletin of Advocacy" with specialist articles, the online news portal "Advokátní deník"), specialised publications, the organisation of seminars, lectures and the establishment of a library. These forms and methods of further education are undoubtedly important. However, it can be said that the current methods and forms are different in nature.

The Bar latest initiative, launched in 2019, is "Further Legal Education" project. This is a three-year programme with an educational component. An attorney must obtain 36 credits for educational activities in law, legal or related fields, or other lawyering skills. Credits may also be awarded for professional language training. Credits from 1 to 5 are awarded by the Bar for:
- passive activities,
- especially for participation in educational seminars, conferences, workshops, symposiums;
- active activities,

- conducting a seminar or teaching, presenting at a professional conference, publishing (articles, monographs, professional publications, commentary literature).

These educational activities may be conducted in the form of face-to-face, electronic, webinar or e-learning and may take place in the Czech Republic or abroad. The attorney shall document to the Bar all educational activities. The mandatory requirement is to complete an educational activity of at least 4 credits related to advocacy law, professional ethics or legal services.

An attorney who becomes a graduate of the project will receive a certificate valid for 3 years, a name in the list of graduates on the Bar's website and currently a discount on educational events organized by the Bar.

Accordingly, the first opportunity to complete the requirements for the project of "Further Legal Education" was in the 2022 calendar year. To date, 188 attorneys, representing approximately 1.5% of all Czech attorneys, have met the requirements for the project, according to the Bar (2022). However, it is too early to assess the project's achievements and benefits at this stage. Only the first three-year cycle of the educational programme has been completed, and it has been constrained by the pandemic. The number of attorneys going through the programme is expected to increase in the future.
Apart from the initiative of the official educational programme of the Bar, the individual training activities of attorneys cannot be underestimated, but cannot be backed up by relevant data.

The motivations of attorneys for further education in general are obvious - to expand and maintain professional knowledge, to increase competitiveness on the market. I believe that an important factor that can lead attorneys to engage in an otherwise voluntary activity is the introduction of appropriate motivational elements. In my opinion, the motivations presented by the Bar for the completion of the project are not strong enough to attract attorneys who would not otherwise consider it. Nevertheless, it is positive that the further legal education programme has been introduced at all and that it leads to a deepening of the professional knowledge of attorneys in the Czech Republic, even though it is based on a voluntary basis.

Conclusion

To summarise the above, we can conclude that the further professional education of attorneys is a subject that is constantly evolving, taking into account the current state of andragogical knowledge. This development can be seen in the increase in the importance of distance learning, which is due to the current social situation (restrictions on travel and contact due to the pandemic) and technological situation (development of communication means, e-learning). A significant influence on the development and implementation of progressive methods in the further education of legal professionals comes from international organisations in Europe. These organisations have the opportunity to formulate standards for further professional education in a systematic and methodical way.

It is necessary to take into account the fact that the long-term trend in the further legal education in Europe is to follow the model of the obligatory development of knowledge. This trend is in the Czech Republic followed only partially. The Bar in 2019 introduced a voluntary further legal education programme for attorneys. This is a first step towards what could become a robust further legal education system.

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Social disadvantage in education from the perspective of teachers

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Abstract:

The paper is focused on the presentation of the results of a qualitative study thematically focused on the education of socially disadvantaged pupils in primary schools in the Ústí Region. The aim of our research was to analyze approaches to comprehensive support of pupils with social disadvantage. The results can contribute to the discussion about the possibilities of reducing social disadvantage in education in the coal regions of the EU.

Key words:

disadvantaged students, low socio-economic status, Roma students, segregation, social disadvantage, social exclusion, EU coal regions.

Introduction

In the framework of the PISA 2018 survey, students from the Czech Republic achieved average results within the OECD (Schleicher, 2019). However, the Czech Republic has long been among the countries with above average gap between the 10% most socio-economically advantaged and 10% most disadvantaged students (OECD, 2019). Similarly, the Czech education system manifests above-average differences between-schools. For example, in the Czech Republic, Bulgaria, Hungary and the Slovak Republic a typical disadvantaged student has only a one-in-eight chance of attending the same school as high achievers (those who score in the top quarter of reading performance in PISA). By contrast, in 14 countries, including the OECD countries Canada, Denmark, Estonia, Finland, Iceland, Ireland, Norway, Portugal and Sweden, disadvantaged students have at least a one-in-five chance of having high-achieving schoolmates (Schleicher, 2019).

The Ústí Region is, together with the Karlovy Vary Region, part of NUTS 2 – North-West, which belongs to the so-called EU coal regions (Alves Dias et al., 2018) sometimes also called post-mining regions (Wirth et al., 2012). Within the Czech Republic, it is among the regions with the highest rate of unemployment, the highest incidence of so-called socially excluded localities, as well as the highest rate of poverty and crime. These unfavorable characteristics are also reflected in the field of education. The Ústí (and Karlovy Vary) Regions show the highest shares of people with incomplete primary education or only primary education (in the scope of compulsory school attendance). These people make up almost 20% of the region's population. For a long time, both regions also show the lowest proportion of residents with university education. In the Ústí Region it is only 11.3% of the population. That is why we focused our research on the topic of supporting pupils with social disadvantages in education. We decided to analyze this topic from the perspective of teachers who work with socially disadvantaged pupils.

Theoretical background

A significant part of pupils, who in the Czech education system are referred to as pupils with a social disadvantage (Němec et al., 2021; Svoboda, 2022, Zíková et al., 2011), come from the environment of so-called socially excluded localities. The majority of the inhabitants of these localities are Roma (Hurrle et al., 2016; Svoboda & Morvayová, 2010; GAC, 2015, Kříž et al., 2021). These localities are also characterized by a high rate of unemployment, dependence on social benefits, a high rate of crime, as well as a low level of education and low social mobility of their inhabitants.

The inhabitants of these localities do not have sufficient social capital (education, qualifications, ability to participate in public life, etc.) and do not master the strategies by which they could improve their social and personal situation currently or at least with an

intergenerational perspective. They most often apply short-term life strategies, the main goal of which is to satisfy basic daily needs (Svoboda & Morvayová, 2010).

The existence of socially excluded localities in the Czech Republic is, among other things, a long-term manifestation of residential segregation. Children living in these locations often attend nearby segregated schools. Their parents also often choose these schools for their children. The ethnic composition of the school often plays a role in their choice (compare with Lund, 2015). Parents often attended these or similar schools themselves. Lund (2015) points out that pupils also prefer schools attended by pupils who come from the same environment, also for the reason of maintaining social ties with peers.

Research has convincingly demonstrated the influence of social exclusion and the existence of segregated schools (or attendance at them) not only on the educational results themselves (OECD, 2019), but also, for example, on the crime rate (Weiner et al., 2009), future incomes (Rivkin, 2000) or also on health (Kajanová, 2009; Shen, 2008).

The influence of living conditions in socially excluded locations manifests itself as a set of symptoms that can be considered a social disadvantage in education. The subject of our research was to analyze what procedures teachers at selected schools in the Ústí Region use when supporting pupils with social disadvantages.

Methods

The main research question of our investigation was: What strategies do teachers at selected schools in the Ústí Region use to support socially disadvantaged pupils? The aim of the research was to analyze:

- how teachers identify pupils with social disadvantage and what manifestations of social disadvantage they encounter in their pedagogical practice;
- where they see the causes of pupils' social disadvantage;
- what strategies and approaches teachers use when working with socially disadvantaged pupils.

Within our research, we conducted a total of 15 research interviews with teachers working at primary schools in the Ústí Region (specifically in the Teplice District). The selection of schools was limited to those that show a higher proportion of socially disadvantaged pupils and were selected through the Ministry of Education, Youth and Sports into the segment of schools with an above-average representation of socially disadvantaged pupils (Ministry of Education, Youth and Sports, 2022)

The sample of respondents included a total of 13 women and two men (which broadly corresponds to the gender distribution of teachers in the Ústí Region). In all cases, these were fully qualified teachers. In an attempt to take into account, the level of experience of teachers in supporting socially disadvantaged pupils, quota selection according to the length of teaching experience was partially applied when constructing the research sample. The research sample thus included 5 teachers with up to 10 years of teaching experience (group A), 5 teachers with 11-20 years of teaching experience (group B) and 5 teachers with more than 20 years of experience (group C).

The length of the interviews ranged from 51 to 112 minutes. The course of all semi-structured interviews was recorded on a recording device with the consent of the respondents and subsequently transcribed verbatim. The texts of the transcripts were subjected to a critical content analysis, using data coding and categorization procedures (Hsieh & Shannon, 2005).
The results are supplemented by direct quotations from the respondents, which are given in italics and marked with the respondent's number, gender (F/M) and indication of the group according to the length of teaching experience (A, B or C).

Results

The first part of the interview was focused on **what criteria teachers use to identify students with a social disadvantage**. We divided the indicators formulated by the respondents into four categories – family environment, risky local environment, socio-economic factors and socio-cultural factors.

In the case of the family environment, teachers drew attention to problematic relationships in divorced families, single-parent families, children in the care of grandparents.

"The parents just weren't interested in that child. They were parents who were divorced, and the father had another partner, and the mother had a new partner. Suddenly he had nothing from a complete and happy family, because his new mother did not like him at his father's place, and his new father did not like him at his mother's." (R3, F, C) In serious cases, respondents also reported experience with insufficient care for children or even proven child abuse.

From the point of view of the respondents, the risky environment was mainly associated with the residence of children in so-called socially excluded localities.

"Most of those pupils lived directly in (the name of the socially excluded locality is given), where they lived in the worst possible environment in which you can live. I personally had children who had no windows at home or had a roof that was leaking. They were coming dirty and there were even kids who went to school in warm socks because they didn't have shoes and the school was just across the street." (R7, F, C)

Socio-economic factors mainly included severe manifestations of poverty, family indebtedness, unemployment in the family and dependence on social benefits.

"The family had five children and the father was an alcoholic. They had no money, so they lived in some dilapidated apartment, where they also had bedbugs, they were there without electricity, without water, they went to bathe at some uncle's place. The boy had no gadgets, no clothes either. The boy was supposed to take medicine, but because they didn't have the money for it, he didn't take it." (R11, F, B)

Socio-cultural factors, from the point of view of the respondents, were essentially limited to different ethnic affiliation (most often Roma) and a different mother tongue.

Respondents also commented on **specific manifestations and consequences of social disadvantage in the school environment.**

According to respondents, the dominant manifestation of social disadvantage is limited communication and cooperation between school and family. Teachers often talk about *"uncooperative parents"* and their lack of interest in the child's education.

"Either the problem is the lack of interest in the family or there was no possibility of connecting with that family. This means that the child really gets stuck on the island that is the school many times, and is left there to worry about it alone, without the interest or potentialities of the family." (R4, F, A)

Manifestations of material poverty or the generally unfavorable social situation of the family and the consequences of low-quality housing were also often mentioned. Among them, the respondents listed in namely insufficient, "dirty" or "smelly" clothes or general manifestations of insufficient hygiene, the absence of school equipment, non-payment of fees for school lunches, selected school events. Also, for example, the absence of basic ICT equipment or internet connection in the home environment, which had a negative effect especially during the period of online teaching due to the pandemic of the coronavirus disease COVID-19.

In connection with manifestations of social disadvantage, respondents also mentioned more frequent absences, negative behavioral manifestations (non-compliance with norms), problematic relationships and conflicts with classmates and teachers, mistrust of teachers and often also low self-confidence of children.

"What gets me the most is when he looks at me and says: I'm stupid and I'm completely useless. You can't do anything about it. (...) I praise and encourage him, and he always starts laughing in disbelief and says: "You said about me that I'm smart and clever."" (R13, F, B)

Especially in the case of Roma pupils, the language barrier was also mentioned. In Roma families in socially excluded localities, the usual language code is the so-called Roma ethnolect (Svoboda & Morvayová, 2010; Kyuchukov, 2015; Kyuchukov et al., 2017).

Undoubtedly, the most frequently mentioned consequence of the above-mentioned factors is school failure, possibly early drop out and subsequent "poor applicability in life", primarily in the sense of problematic employment on the labor market.

The main part of the interviews concerned **the strategies and approaches that teachers use in the area of supporting pupils with social disadvantages**. According to the respondents, schools do not use standard entitlement support measures to support children with social disadvantages (unless it is linked to another type of disadvantage), although it would be possible.

Teachers often try to use support from counseling staff at school or contact counseling staff or other "experts" outside the school. However, they experience limited capacities of the system of support services (especially in the case of psychological support for children). *"We are trying to address experts, but there are few experts and many schools."*

Teachers also consider communication between pupil and teacher, teacher and parent, and between teachers to be an important strategy. A positive finding is that the teachers also added that it should be about positive communication, listening, individual approach, interest in the context of events at school and in the family, or interest in personal problems. All this both in communication with the child and his parent. Some respondents recommend that the student be treated fairly, that the relationship with the child be close and personal.

In the area of material support, the respondents mentioned the provision of free meals at school, financial contributions for school trips or the provision of the possibility of installments for fees. All teachers agreed that there is a need to provide enough gadgets in the classroom so that a student who does not have gadgets or does not bring them to school can work fully. One of the respondents stated that, in this context, teachers even accept non-compliance with the rules set by the school management.

"We already practice here that children simply don't bring the gadgets home at all. And I have also come across the fact that some older children here, who are more foreseeing, also keep their school bags at school. Secretly, because it's not allowed by the school rules, but they keep them here. We know they do it because they're afraid they'll never come to school with that schoolbag again." (R13, F, B)

One of the respondents also considered it important that the teacher does not comment on the missing equipment, is "discreet" and does not expose the child to a stressful situation. Some teachers also try to support other students so that they are willing and ready to provide help to their classmates. Respondents also recommended giving the child a certain "function" that would make him feel useful. Alternatively, they find something that such a child is good at and try to strengthen and highlight that. According to the respondents, the prevalence of positive feedback and appreciation of any small progress is important, which will motivate the child to continue working. Another respondent tried to use peer support and *"put a pupil who needs help with a skillful child if possible"* (R14, M, C).

However, most of the interviewed teachers agreed that at a relatively significant part of their colleagues they also register an approach that they do not consider appropriate and professional. This often consists primarily of ignoring the child's personal problems, lack of information about the home environment and lack of communication with the child's family.

"Some teachers have such accustomed patterns of behavior, and they follow them and don't see left and right. They do not see that the child is alone with his mother, that his mother came home this morning at seven o'clock, and that the child has already left for school by himself, and that's why he simply doesn't have backpacks or a pencil case. So, disinterest and what the context is. That is the worst thing we can do to a child." (R10, F, B)

We consider very serious the finding that the respondents also mentioned direct experience with teachers who inappropriately pointed out problems in a particular pupil's family in front of

the whole class, make a fool of the pupil with inappropriate remarks. They often shout at students or criticize them excessively. Some respondents also criticized the "exaggerated" demands made by some colleagues on equipment for pupils, which parents must buy. For example, some teachers require the purchase of stationery and notebooks from a specific manufacturer. Although they are of high quality, they are the most expensive on the market. They also require funding for workbooks for several different subjects, involve the class in financially expensive school activities or organize school trips for which some families do not have funds.

Situations where teachers give the worst possible grade (this is a grade of five) should be considered completely unprofessional, even if the student cannot work because he does not have basic equipment.

"*I know colleagues who, for many years, have said that if a child doesn't have tools, they have score five. So, unfortunately, even though the child could do it and could complete the task, it was thrown off the table and the child didn't get a chance. So, during the course of the education, it will probably affect self-confidence and the desire to learn at all.* "(R 7, F, C)

Overall, it can be stated that the respondents agree that the school's unified and coordinated strategy in relation to the support of socially disadvantaged pupils is only applied to a very limited segment of schools. More likely, the individual strategies of sporadic educators play a significant role. However, these can be very different and can include both very empathetic, professional, and deeply human approaches, as well as very unprofessional approaches.

Discussion

Although the teachers in the researched schools do not use a uniform procedure for identifying pupils with social disadvantage, in most cases they can formulate relevant indicators of social disadvantage and understand its causes and consequences. However, the strategy of supporting socially disadvantaged pupils differs quite significantly at individual schools.

A very important finding is that the interviewed respondents unequivocally agreed that pupils with social disadvantages are basically not granted the standard claim support measures according to Act No. 561/2004, the Education Act. The consequence is that student support depends more on the approach and activity of individual schools or teachers than on institutionally anchored support.

Respondents can also openly name the unprofessional behavior of some of their colleagues. At the same time, it should be added that in most cases they do not actively oppose it. Some teachers also persist in stereotypes and prejudices against pupils with social disadvantages and especially against the Roma (similarly Svoboda & Morvayová, 2010; Symeou et al., 2009; Lloyd & McCluskey, 2008; Luciak & Liegl, 2009). These can be transferred to a certain extent to the attitudes of some pupils (compare Svoboda & Zilcher, 2019; Svoboda, 2022).

Possibilities of how to support pupils with social disadvantages more effectively are seen by teachers primarily in more significant systemic support for schools where they work with this target group of pupils and in a more significant linking of educational and social intervention towards pupils and their families (compare Němec, 2021; Svoboda, 2022).

Conclusion

The elimination of educational inequalities based on the socio-economic status of families, similar to the elimination of the persistent segregation of some Roma pupils in education, is one of the most significant current challenges for the Czech education system. Positive changes in this area can only be expected if, among other things, it is possible to create and long-term ensure sufficiently massive systemic support for schools to cope with this challenge.

The basis for the creation of such systemic support is the currently implemented pilot verification of targeted support for schools with an above-average representation of socially disadvantaged pupils. As part of this pilot verification, the Ministry of Education, Youth and Sports will support at least 400 schools of this type in 2022-2025. A significant part of these

schools is located in the Ústí and Karlovy Vary Regions (NUTS 2 – Severozápad (Northwest)). Based on the evaluation of these results, from 2026, the above-standard support for schools that educate a higher number of socially disadvantaged pupils should be part of the standard school financing system in the Czech Republic. This process can be the basis for reducing educational inequalities and improving the position of Roma in the Czech educational system.

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Development of digital competences of principals in the context of strategic changes in education

Vlastimil Hubert

Abstract:

This study addresses the issue of digital competencies among school principals. The theoretical part describes legislative and conceptual changes in primary education and provides a general definition of digital competencies in the context of the professional development of educators and curricular changes. Increased efficiency and productivity in their work and the responsibility for education are motivational factors for further development in the area of digital competencies in relation to school management.

Keywords:

digital competencies, education, leadership, school principal

Introduction

In today's world, digital competences are becoming increasingly important not only for students but also for teachers. The development of teachers' digital competences is a key element in the implementation of new technologies in education and the achievement of the goals of the Educational Policy Strategy of the Czech Republic until 2030+ (Fryč et al., 2020).

School principals and other educational institutions face many challenges arising from the rapid development of digital technologies and their impact on society and the economy. Digital transformation requires not only a change in the content and methods of education but also a change in the roles and competences of principals, who must be able to lead their organizations in adapting to new conditions and needs.

Principals play a significant role in this process as they are responsible for the strategic management and innovation of schools, supporting pedagogical staff, and collaborating with founders and other partners. The development of their digital competences is therefore necessary to improve the quality of education and adapt to the current and future challenges of society (Gordashnikova, Fedorchuk & Kuznetsov, 2021).

Legislative and Conceptual Changes in Primary Education

The Educational Policy Strategy of the Czech Republic until 2030+ is a key document for the development of the educational system in the Czech Republic. Its goal is to modernize the education system in the areas of regional education, extracurricular and informal education, and lifelong learning. The strategy has five strategic lines, including Strategic Line 3: Support for Pedagogical Staff, and Strategic Line 1: Transformation of the Content, Methods, and Evaluation of Education, which includes Digital Education as one of its points (Fryč et al., 2020).

One of the current topics that require the school principal's orientation in the field of digital technologies and informatics is the change in the Framework Educational Programs for Primary Education (RVP ZV). This involves the introduction of digital competence and the educational field of informatics. Informatics primarily focuses on the development of computational thinking and understanding the basic principles of digital technologies. The digital competence of students in individual educational fields of the RVP ZV will develop based on how the development of digital technologies affects their content. The school's updated educational program is the fundamental document reflecting the specific approach of the school to these changes (MŠMT ČR & NPI ČR, 2022). Primary schools must adjust their educational programs and initiate teaching no later than September 1, 2023, for all grades of the first stage, and no later than September 1, 2024, for all grades of the second stage (MSMT, 2020, online). In connection with

this obligation, the principal must conceptually prepare not only for the formal organizational changes but also, above all, prepare the teaching staff for innovation in terms of teaching informatics and supporting computational thinking.

Therefore, the principal needs to develop not only their digital competences but also the competences of teachers through further education of pedagogical staff. According to Act No. 561/2004 Coll., on Preschool, Basic, Secondary, Higher Professional, and Other Education (School Act), the principal of the school has the following responsibilities in this matter: § 24 (1) Pedagogical staff must to further education during their pedagogical activities to renew, maintain, and supplement their qualifications. (3) The school principal organizes further education for teaching staff according to a plan for continuing education, which is determined after prior consultation with the relevant trade union body. When determining the plan for continuing education, it is necessary to take into account the study interests of the teaching staff, the needs of the school, and the budget. (MŠMT, 2022, online).

Given the constant development and increasing demands for changes in the work environment, teacher need to adapt, engage in lifelong learning, and acquire the necessary competences. (Carnevale & Smith, 2013; Cascio & Montealegre, 2016).

Digital competence

Explaining the concept of digital competence is quite complex. As Černý (2020, 48) suggests, this complexity can be attributed to its temporal variability, which influences the meaning of the term itself, or the lack of consistency in the professional literature. Theodorescu (2006) draws attention to the linguistic meaning of Competency models, which encompass a set of recommendations for behavior, skills, knowledge, or attitudes required for a specific social role, and Competence models, which describe the necessary process and work outcomes essential for achieving the goals of individual social roles. Veteška and Tureckiová (2008, 21-22) also address the semantic differences between these terms. They use the term "Competency" to denote a set of human qualities (including predispositions and learning outcomes) necessary for competent performance, while "competence" refers to the delivery of competent performance by an individual. It represents capability, competency, or informal qualification.

According to the DigComp Framework – EU Science Hub, digital competence encompasses "the confident, critical, and responsible use and engagement with digital technologies for learning, work, and participation in society. It is defined as a combination of knowledge, skills, and attitudes" (European Commission, 2019, online). Søby (2013, 135) also defined competence as a combination of knowledge, skills, and attitudes, and digital competence as the "confident and critical use of information society technologies for work, leisure, and communication."

The general aim of primary education, according to the Framework Educational Programme for Basic Education (Ministry of Education, Youth and Sports, 2021, 8), is to help students "shape and gradually develop key competences and provide a reliable foundation of general education focused primarily on situations close to life and practical action." Pedagogical staff must "assist students in navigating the digital environment and guide them towards the safe, confident, critical, and creative use of digital technologies for work, learning, leisure, as well as engagement in society and civic life" (Ministry of Education, Youth and Sports, 2021, p. 9). As part of this curricular change, digital competence is included among the existing competences.

Considering that teachers must teach in a way that enables them to support students and develop their digital competences, they must possess these competences, including school principals who manage and determine the direction of their further pedagogical development.
In the Czech Republic, there is the Framework of Digital Competences for Teachers (Ministry of Education, Youth and Sports, 2018, online), which defines six areas of digital competences: professional involvement, digital resources, teaching, digital assessment, student support, and support for students' digital competences. The framework is intended for all teachers regardless of the level and type of education. Its goal is to motivate teachers for self-reflection and further

professional development in the field of digital technologies, and it is based on the European Framework for Digital Competence of Educators.

However, there is currently no official framework for digital competences specifically tailored to school principals, reflecting their specific roles and responsibilities. School principals should not only apply the digital competences of teachers to their work but also lead the school toward achieving strategic goals in the field of educational digitization.

Currently, several projects are underway aiming to support the development of digital competences for school principals and teachers. For example, the Support for Schools in the Context of Digitalization project (National Pedagogical Institute of the Czech Republic, 2021, online) offers schools methodological support for strategic planning of meaningful use of digital technologies in education.

Methodology and Research Results

The survey aimed was to explore the motivations and barriers of selected primary school principals for further development in the field of digital competencies in relation to school management in the context of implementing changes in the Framework Education Program for Basic Education.

A total of 12 primary school principals who participated in an educational seminar titled "Implementing the New Framework Education Program for Basic Education in Schools," organized by the National Pedagogical Institute of the Czech Republic, were invited to participate in the survey. The program focused on integrating digital technologies into primary school education and developing digital and managerial competencies of school principals.

The principals were intentionally selected based on their experience of serving for more than one term, which is more than 6 years. They all managed full-grade schools and had either started or planned to start implementing the revised Framework Education Program in the first two years. They considered digital technologies important for the development of their schools and students. Out of the twelve principals approached, five agreed to participate in the qualitative survey. They represented the Pardubice, Ústí nad Labem, Moravian-Silesian, Hradec Králové, and Zlín regions. Semi-structured interviews were conducted with each of the respondents. To enhance the effectiveness of the interviews, general principles outlined by Hendl (2008) were applied. The collected data were anonymized, and content analysis was performed through open coding with the identification of key categories. The data were divided into indicators, coded, and categorized.

The survey aimed to explore the motivations of school principals for further development in the field of digital competencies, which are dependent on specific contexts and individual priorities. The principals mentioned the following reasons, which were categorized as follows: Enhancing efficiency and productivity in their work (schools): The respondents agreed that the administrative workload of school principals continues to increase, and they cannot imagine their work without digital technologies given their current workload. They consider enhancing their digital competencies highly important. They utilize educational courses, webinars, advice, and support from their employees. Digital technologies have significantly facilitated and expedited communication with parents, students, and other school partners. The period of school closures due to Covid-19, when online learning was necessary, compelled the principals to educate themselves in this area as they had to provide strategic direction to the entire school and serve as an example to their colleagues.

For example, Principal Jana stated: "Thanks to digital technologies, I can accomplish more. However, the development is incredibly fast, and one must learn a lot. Especially during COVID, it was hectic."

Responsibility for education: In implementing changes related to the revision of the Framework Education Program, the surveyed principals expressed their personal responsibility for the forthcoming changes in integrating digital competencies into education. They believe that it is essential for the school principal, who implements these changes, to understand this issue to,

directly and indirectly, enhance the quality of teaching. Some respondents mentioned that through their knowledge and ability to use new technologies, they can utilize new forms and resources to make the learning environment more attractive and increase the school's competitiveness. While digital technologies and the development of computational thinking are not the top priorities for some principals, they still consider them highly important in the modern world and aim to foster these skills among their students, preparing them for their future lives. Similarly, the obligation to teach using IT technologies is emphasized. The respondents perceive the change in the Framework Education Program regarding ICT as a step in the right direction.

Principal Karel stated: "The school reflects its principal. If we want to compete with other schools, I must educate myself as well. With the revisions, there are so many changes for which I am responsible, and I must teach using IT technologies even in my subjects, even though I am not an IT specialist."

In our conversations, we observed obstacles to the development of digital technologies among school principals. We divided them into the following categories:

Lack of time and administrative burden: Principals are heavily burdened with administrative tasks, limiting their indirect pedagogical activities. This is supported by the IDEA study (Federičová, 2019). They consider the lack of time for developing their digital competencies as crucial. They have to focus primarily on managerial, administrative, and often bureaucratic work, while pedagogical activities take a back seat.

Financial constraints: Although the lack of funds was mentioned by respondents, they did not consider it a priority in relation to self-development. All principals considered their schools adequately equipped, thanks to the support of the Ministry of Education, Youth and Sports in implementing new technology into school educational programs. However, they lack the finances for sharing best practices among schools.

Training and support: Respondents positively evaluated the offer of educational courses and the offerings of the National Pedagogical Institute of the Czech Republic, which were designed concerning to curriculum changes. However, they perceive a lack of personnel support directly in the school as an obstacle. They lack qualified individuals who could assist all employees in implementing digital technologies in education, maintain the equipment, and advise principals. The established position of an ICT coordinator is not sufficient for them in terms of their responsibilities in the school. Similarly, they lack qualified teachers who could assist their colleagues and help develop their skills. All respondents unanimously stated that their digital competencies are insufficient in relation to strategic and curricular changes.

Summary and Discussion

The study aimed to explore the motivations and barriers of school principals for further development in the area of digital competencies in relation to managing their schools. Principals cited increased efficiency and productivity in their work as a motivation, which directly impacts school management. Similar results were reported by Karakose, Polat & Papadakis (2021), where teachers perceived technology-based development in their schools as a means to create an effective learning environment. Principals recognize the need to enhance their digital competencies, particularly in terms of their responsibility for the attractiveness of the learning environment and increasing the school's competitiveness. Principals are key players in digital development in schools (Davies, 2010; Dexter et al., 2016). The speed and quality of implementing changes depend on leadership style, with transformational and transactional leadership styles being more effective (Ruloff & Petko, 2021).

Principals acknowledge the importance of self-development, especially during the implementation of ICT educational changes. However, several obstacles complicate this process. They face high administrative burdens and a lack of time. The insufficient support directly in the school was mentioned as a crucial barrier. The established position of an ICT coordinator (methodologist) was not considered sufficient for their needs. Lindqvist (2019) emphasizes the

need for systematic professional development that goes beyond the individual interest of the principal. Additionally, they lack the finances for sharing best practices and visiting other schools. Due to the structure and number of respondents, the findings of this study cannot be generalized to the entire group of principals.

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Comparison of selected adult education systems in European countrie

Jindřich Kolek

Abstract:

This analysis compares adult education systems in selected European countries. The key design elements in the present comparison include those that are prerequisites for ensuring their maximum functionality (legislation, financing, providers and target groups). It should be noted that society is constantly evolving, and its members are being subjected to ever greater demands, not only in terms of their flexibility and competitiveness on the labour market, but also in terms of the maximum level of education that is an essential part of it. A quality education thus enables everyone to learn to work not only with newly acquired knowledge and information, but also to be competitive in the current market conditions.

Keywords:

comparative andragogy, further education of the European population, adult education

Introduction

Nowadays, adult education is one of the most important prerequisites for an individual to remain in the labour market and to be continuously competitive. Education as a factor of production is becoming particularly important in a globalised economy. It becomes a human need, as knowledge and intelligence enable a person to find better ways of satisfying immediate needs and fulfilling the highest ones – self-realization (Lukianova, 2016, p. 223). The main reasons why people want to be educated in adulthood are various, including, in particular, better prospects of getting (or keeping an existing) job, personal or professional development, as well as acquiring transferable skills such as critical and creative thinking. Adult education also contributes to improving social cohesion, fostering active citizenship and increasing the competitiveness of businesses and economies in European countries (for more details see Veteška, 2016 & Veteška & Kursch, 2019).

Particularly in recent times, adult education has been determined by trends viewed from the perspective of supply and demand, and further developments in this area will be mainly directed towards the interconnection of theoretical and practical learning involving educators, companies as consumers, as well as the actual participants in further education. In order to find out how the different adult education systems in Europe differ from each other, what their gradual development has been, what advantages, disadvantages or differences exist between them, the method of comparison is used for this purpose and is currently being used in practice. This method is one of the oldest and most basic, and is used on a daily basis in a range of everyday activities, including social science research. The biggest and most common problem in comparative research is ensuring that data can be easily compared with each other, as different companies often use different definitions of key concepts.

Due to the organisational, time and financial requirements, secondary data is very often used in comparisons. This analysis presents a comparison of adult education systems in selected European countries: the Netherlands, Finland, Denmark, Estonia, Lithuania and Poland. Due to the constant development of society, more and more demands are being placed on its members, not only in terms of their flexibility and competitiveness on the labour market, but also in terms of the maximum level of education that is an essential part of it. Thus, quality education enables everyone to learn to work not only with newly acquired knowledge and information, but also to be competitive in the current market conditions.

1 Foundations of the theory of comparative pedagogy and andragogy

Education is a process that promotes and facilitates learning. However, in every country in the world, the forms of education vary in terms of the content of the functioning of education systems. The variation in these systems is due to many factors, mainly the historical development of the country, the specificities of national cultures, political, economic and demographic factors, etc. Comparative education is a very broad area within the huge range of topics and research approaches included in 'educational studies'. There cannot and is no single approach to comparative education that everyone agrees on or that is appropriate for most circumstances (Phillips, 2006, p. 316). The theory concerned with examining the characteristics and functioning of different educational systems in different countries, describing, comparing and evaluating them is called comparative pedagogy. Comparative pedagogy has been developed very long and intensively abroad, in contrast to the Czech situation, where it is still underdeveloped due to scientific and practical needs.

"Comparative andragogy identifies foreign trends and progressive concepts abroad as an inspiring source for improving the domestic system. It is intensively developed in the world and exists as a subject of study in universities" (Veteška, 2016, p. 44).

"The object and goal of comparative andragogy, as one of the youngest andragogical disciplines, is to acquire knowledge and experience from adult education abroad and to compare it with the knowledge of one's own country, while pointing out the possibilities of how this knowledge can be used" (Matulčík, 2004, p. 38). Its emergence and development was mainly influenced by the development of adult education and training as one of the basic phenomena of contemporary civilization, under the influence of the development of comparative research and the growing importance of the exchange of experiences as a prerequisite for making education more effective and better. The transformation of comparative adult pedagogy into comparative andragogy, which took place in the 1990s, is not only related to the reflection of qualitative changes in the field of comparative research in adult education and training in the recent period. The early works of a comparative nature were dominated mainly by works providing information on the experience of adult education abroad, the study of the adult education system and further development of education and training. "The comparison of theoretical perspectives on the problems of adult education and training is becoming an increasingly important need for the further development of andragogy as a science in all countries" (Matulcik, 2004, p. 38). At the same time, it represents the most challenging area of research in comparative andragogy (for more see Lattke & Jütte Wolfgang & Susanne, 2015, Jarvis, 2010 & Skoda, 1994).

According to Veteška (2016), comparative andragogy is concerned with describing, comparing and evaluating adult education systems and their functioning in different countries. In particular, it compares foreign institutional education systems with national systems and draws from this guidance and recommendations for change (ideally to set up tools leading to greater efficiency and optimization). From this perspective, it therefore has an important role to play in shaping educational strategies within national and European education policies.

"Comparison or benchmarking is one of the methodological approaches in scientific inquiry. It takes place either synchronously, i.e. "side by side" (e.g. monitoring adult education systems in the Czech Republic and in selected EU countries), or diachronically, when the aim is to comprehensively capture the development of a certain phenomenon" (Veteška, 2016, p. 43).

2 The purpose and applicability of comparative pedagogy and andragogy

Comparative pedagogy is an area of science that is needed not only for those working in pedagogy, but also for those working in other sciences, in human resource management, social policy and economics. "The purpose of comparative pedagogy is particularly important for practitioners in educational policy, planning, and management in the state" (Průcha, 2012, p. 21). In other words, it is important primarily for those who create strategic plans designed to develop the educational system as well as to make short-term decisions about its functioning, legislative

frameworks for the activities of educational institutions and entities, their financing, and control. If we talk about specific people, it would be state officials in the education sector and specifically:

- ➤ ministers of education,
- ➤ junior ministry officials,
- ➤ regional and local education officials,
- ➤ school inspection staff,
- ➤ staff of other education administration institutions.

It is now common for individual countries to adopt approaches in which decision-making in the sphere of education policy is also heavily dependent on the state of the relevant issues affecting other countries. At present, it is not easy to find education policies in developed countries that are not interested in how the products of education are created and implemented in other countries. Based on international experience, policy makers could then find optimal solutions in this area for their own education system. For these purposes, supranational institutions have created a powerful and organizational base.

As far as these institutions are concerned, they are primarily the OECD and the European Union, which produce numerous findings from the field of international comparisons of education systems, including, in particular, international education indicators covering also the education system of the Czech Republic. In this context, a large number of documents and research findings related to the comparison of education systems and the evaluation of their outcomes have been published (Průcha, 2012, p. 24). If the status of this issue were to be strengthened in the Czech Republic, there could also be recognition of the professional partnership of educational sciences in professional and political discussions about the direction of Czech education.

3   Further education for the European population

The European Union does not currently include further education in its common policies. Education policy has only the status of a complementary policy. As the field of education is not a common area, the European Union does not directly intervene in national education policies, but only tries to promote limited, systematic and extensive financial support from structural funds and lifelong learning programmes in the form of recommendations.

EUROSTAT offers available statistics concerning tertiary education not only in the countries of the European Union but also in selected European countries. Higher education plays a vital role in society, particularly as it enhances economic development, promotes innovation and is seen as a way of improving citizens' well-being. The presented Table 1 shows the number of tertiary education students per European Union Member State and selected European countries in 2016.

Table 1: Number of tertiary students by level of education and gender in 2016

	Tertiary total			Short-cycle tertiary			Bachelor's or equivalent			Master's or equivalent			Doctoral or equivalent		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
EU-28	19 590.0	9 009.7	10 580.3	1 421.9	688.3	733.6	12 004.5	5 604.5	6 400.0	5 408.7	2 322.6	3 086.1	754.9	394.3	360.6
Belgium	508.3	225.2	283.1	24.3	9.0	15.4	369.3	162.4	206.9	98.0	44.9	53.1	16.7	8.9	7.8
Bulgaria	266.7	122.9	143.8	–	–	–	178.4	85.5	92.9	81.6	34.2	47.4	6.8	3.3	3.5
Czech Republic	371.9	158.8	213.2	1.0	0.4	0.6	221.2	94.4	126.8	125.6	50.5	75.2	24.2	13.6	10.6
Denmark	314.8	137.4	177.5	34.7	18.4	16.3	195.7	81.5	114.2	74.6	32.7	42.0	9.8	4.8	5.0
Germany	3 043.1	1 574.8	1 468.3	0.4	0.1	0.2	1 832.5	990.8	841.7	1 013.3	474.2	539.1	197.0	109.7	87.3
Estonia	51.1	21.1	30.0	–	–	–	33.1	14.2	19.0	15.1	5.7	9.4	2.8	1.2	1.6
Ireland	218.4	106.0	112.4	16.5	7.8	8.7	164.3	81.4	82.9	29.2	12.7	16.5	8.4	4.1	4.3
Greece	709.5	365.3	344.2	–	–	–	618.5	322.8	295.8	57.5	24.3	33.2	33.5	18.3	15.2
Spain	1 968.7	920.1	1 048.6	368.6	191.5	177.1	1 207.3	554.6	652.6	337.2	145.9	191.3	55.6	28.0	27.6
France	2 480.2	1 130.6	1 349.5	496.7	253.5	243.2	1 025.4	428.8	596.7	890.4	412.5	477.9	67.7	35.9	31.8
Croatia	162.0	69.9	92.1	0.1	0.0	0.0	98.6	45.8	52.7	60.2	22.7	37.6	3.2	1.4	1.8
Italy	1 816.0	799.5	1 016.4	8.3	6.1	2.2	1 075.4	494.1	581.4	699.2	283.0	416.2	32.9	16.3	16.7
Cyprus	40.3	18.3	22.1	3.7	2.2	1.5	20.3	10.1	10.2	15.1	5.4	9.7	1.3	0.5	0.7
Latvia	84.3	34.5	49.8	15.2	6.1	9.1	49.4	21.4	28.0	17.4	6.0	11.4	2.3	0.9	1.4
Lithuania	133.8	57.7	76.1	–	–	–	102.4	46.4	56.0	28.6	10.2	18.4	2.7	1.1	1.6
Luxembourg	7.0	3.4	3.5	0.6	0.3	0.4	3.2	1.5	1.6	2.5	1.2	1.3	0.6	0.4	0.3
Hungary	295.3	134.8	160.5	12.0	4.5	7.5	200.0	94.3	105.7	76.1	32.4	43.7	7.3	3.6	3.7
Malta	13.8	6.3	7.5	2.1	0.9	1.2	7.9	3.6	4.3	3.6	1.7	1.9	0.1	0.1	0.1
Netherlands	836.9	402.3	434.6	20.4	8.9	11.5	635.9	307.8	328.1	165.6	78.0	87.6	15.1	7.6	7.4
Austria	431.1	202.4	228.7	77.4	36.1	41.3	192.5	91.0	101.5	137.8	62.7	75.1	23.5	12.6	10.9
Poland	1 600.2	655.5	944.7	0.3	0.1	0.3	1 058.9	463.1	595.9	497.7	172.8	324.9	43.2	19.6	23.6
Portugal	343.1	161.1	182.1	6.4	4.1	2.3	202.2	93.2	108.9	115.5	54.7	60.8	19.1	9.0	10.0
Romania	535.2	246.8	288.4	–	–	–	352.7	171.0	181.7	165.2	67.0	98.2	17.3	8.7	8.5
Slovenia	80.8	34.2	46.6	11.2	6.6	4.6	45.3	18.7	26.6	22.0	7.9	14.1	2.3	1.1	1.2
Slovakia	167.3	68.2	99.0	2.8	1.0	1.8	92.6	38.3	54.3	63.7	24.6	39.1	8.2	4.3	3.9
Finland	297.2	138.8	158.3	–	–	–	215.2	103.5	111.7	62.4	26.2	36.3	19.5	9.2	10.3
Sweden	426.2	173.1	253.1	24.5	12.6	11.9	243.0	89.4	153.6	138.0	60.2	77.7	20.7	10.9	9.8
United Kingdom	2 387.3	1 041.0	1 346.3	295.1	118.2	176.9	1 563.5	695.1	868.4	415.7	168.6	247.1	113.0	59.0	54.0
Iceland	18.6	6.7	11.9	0.5	0.2	0.3	13.1	5.0	8.1	4.6	1.4	3.2	0.5	0.2	0.3
Liechtenstein	0.8	0.5	0.3	–	–	–	0.4	0.2	0.1	0.3	0.2	0.1	0.1	0.1	0.0
Norway	277.4	116.1	161.4	9.0	7.5	1.5	196.1	76.8	119.3	64.6	28.0	36.5	7.8	3.8	4.0
Switzerland	295.1	148.8	146.4	4.4	1.7	2.8	199.6	101.3	98.4	66.7	32.7	34.0	24.4	13.1	11.3
The former Yugoslav Republic of Macedonia	63.3	28.5	34.7	–	–	–	59.9	27.0	32.8	3.0	1.3	1.7	0.4	0.2	0.2
Serbia	251.2	112.2	139.0	–	–	–	200.8	92.0	108.8	40.2	15.8	24.4	10.1	4.4	5.7
Turkey	6 689.2	3 621.5	3 067.7	2 285.4	1 198.3	1 087.1	3 790.3	2 067.7	1 722.6	527.4	305.1	222.3	86.1	50.4	35.7

Source: EUROSTAT (2016)

The table above shows that all EU Member States offer bachelor's, master's and doctoral levels of tertiary education. Tertiary education that is short-cycle, practical and job-oriented, as shown in the table, is not part of the education system in Bulgaria, Estonia, Greece, Lithuania, Romania and Finland, nor in Liechtenstein, the former Yugoslav Republic of Macedonia or Serbia. In addition to these countries, they are also not a common part of other countries such as the Czech Republic, Germany, Luxembourg, Croatia, Malta, Poland or Slovakia. According to the presented table, the latest one, updated in 2016, a total of 19.59 million students studied within the EU member states. Of that total, the following attended:

➢ short cycles of tertiary education accounted for 7, 26 % of the total number of students. Compared to 2015, there was an increase of 0.06%. This type of education was highest in 2016 in France, where more than 2.5 % of all students participated. This type of education is most widespread in Turkey, where more than 34.17 % of the total number of Turkish students participated. The share of between 17 % and 19 % of students was then reached in Austria, Latvia and Spain;

➢ bachelor's degree enrolment was 61.28 %. Compared to 2015, there was a decrease of 0.12%. Less than 50 % of all tertiary students enrolled in bachelor's degrees in the European Union were enrolled in Luxembourg, Austria and France. The European countries with the highest number of students enrolled in bachelor's programmes are Germany, Spain, the United Kingdom and Turkey. Greece has the highest percentage, at 87.17 %, of students enrolled in a bachelor's degree programme out of the total number of students in tertiary education;

> master's studies amounted to 27, 67 %. More than 30 % of all tertiary students were enrolled in a Master's degree in Bulgaria, the Czech Republic, Slovakia, Germany, France, Greece, Italy, Cyprus, Luxembourg, Austria, Sweden, Poland, Portugal, Poland and Romania;

> doctoral studies amounted to 3.85 %. Compared to 2015, there was an increase of 0.15%. The highest share of doctoral students was recorded in Luxembourg, at 8.57%, followed by Switzerland, at 8.27 %.

Another statistic used is a table showing the distribution of tertiary graduates in 2016 by field of study.

Table 2: Distribution of tertiary graduates by field of study, 2016 (%)

	Education	Arts and humanities	Social sciences, journalism and information; business, administration and law	Natural sciences, mathematics and statistics; information and communication technologies	Engineering, manufacturing and construction	Health and welfare	Services	Agriculture, forestry, fisheries and veterinary	Unknown
EU-28 (¹)	9.0	11.0	34.1	11.0	14.8	13.7	3.7	1.7	1.2
Belgium	8.6	10.0	31.4	5.5	11.6	26.5	1.6	2.0	2.9
Bulgaria	8.8	7.1	49.0	6.3	13.4	7.3	6.5	1.7	0.0
Czech Republic	9.8	8.0	30.9	9.1	14.9	10.8	6.9	3.2	6.4
Denmark	5.8	13.2	35.9	10.1	10.3	20.3	3.0	1.2	0.0
Germany (²)	9.9	11.7	30.4	14.0	22.0	7.3	2.6	1.8	0.2
Estonia	7.6	12.5	32.8	13.3	14.2	11.7	6.1	1.8	0.0
Ireland	5.7	13.8	31.3	15.0	10.3	17.1	5.1	1.6	0.2
Greece	7.4	12.9	33.4	11.6	16.6	12.2	3.5	2.3	0.0
Spain	16.5	9.1	25.7	9.0	14.8	16.0	7.4	1.2	0.2
France	4.0	9.4	40.8	10.7	14.9	15.4	3.3	1.5	0.0
Croatia	6.0	8.9	38.8	9.2	16.0	9.8	7.2	4.0	0.0
Italy	3.3	16.0	31.7	8.4	14.8	13.7	0.1	2.3	9.5
Cyprus	17.0	8.6	43.6	5.9	10.0	7.6	6.8	0.5	0.0
Latvia	7.4	7.8	40.3	8.0	12.6	14.3	7.9	1.9	0.0
Lithuania	6.5	8.6	42.1	6.3	17.5	14.2	2.4	2.2	0.0
Luxembourg	8.8	11.4	51.7	11.3	6.6	6.4	1.7	2.1	0.0
Hungary	16.6	9.7	33.2	8.5	14.3	8.3	4.8	3.2	1.3
Malta	18.0	11.5	35.8	11.1	8.4	12.8	1.9	0.6	0.0
Netherlands (²)	10.3	8.8	41.8	7.2	7.5	15.3	4.9	1.1	3.2
Austria	12.2	7.5	33.1	9.8	20.5	7.3	7.8	1.6	0.1
Poland	13.6	7.2	34.8	7.2	15.6	12.8	7.3	1.5	0.0
Portugal	5.3	9.4	30.4	7.8	21.3	18.2	5.8	1.9	0.0
Romania	4.2	9.8	37.5	10.6	18.1	10.3	5.5	4.0	0.0
Slovenia	11.2	10.5	34.7	8.1	17.0	8.4	7.4	2.8	0.0
Slovakia	13.1	7.5	32.2	8.7	12.4	17.8	6.0	2.3	0.0
Finland	6.4	12.3	25.5	11.8	17.7	19.7	4.3	2.2	0.0
Sweden	12.2	6.0	30.1	8.3	18.3	22.2	2.1	0.8	0.1
United Kingdom	9.3	15.4	33.9	17.2	9.1	13.4	0.1	1.0	0.6
Iceland	13.8	9.6	38.6	9.9	9.5	14.7	2.7	1.1	0.0
Liechtenstein	0.0	0.0	73.3	0.0	24.1	2.6	0.0	0.0	0.0
Norway	16.6	8.3	27.3	7.8	12.6	20.6	5.7	0.8	0.3
Switzerland	9.9	7.6	35.6	8.9	15.6	14.8	5.3	1.6	0.7
The former Yugoslav Republic of Macedonia	6.1	13.2	39.8	10.6	12.5	10.1	6.0	1.6	0.0
Serbia	8.6	10.1	35.7	9.6	16.3	9.7	7.7	2.4	0.0
Turkey	9.6	11.1	42.7	4.7	14.2	10.1	5.2	2.4	0.0

Source: EUROSTAT (2016)

The table above shows that in EU Member States and selected European countries there are several fields of study in which a large or small number of tertiary students have graduated. The proportion of graduates in social sciences, journalism, information, business, administration or law was relatively low in Finland and Spain. A much higher share was The share of graduates was relatively low in Luxembourg, the Netherlands, Malta and the United Kingdom. Relatively high shares were recorded in Austria (20.5 %), Portugal (21.3 %) and especially Germany (22.0 %). The share of graduates in natural sciences, mathematics, statistics and information and communication technology was relatively low in Belgium, Cyprus, Lithuania and Bulgaria, while it was particularly high in Germany (14.0 %), Ireland (15.0 %) and the United Kingdom (17.2 %). The proportion of graduates in health and social care was low in Luxembourg, Bulgaria, Germany,

Austria and Cyprus, while it was relatively high in Finland (19.7 %), Denmark (20.3 %), Sweden (22.2 %) and especially Belgium (26.5 %). In education, the share was low in Italy, France and Romania, while it was particularly high in Spain (16.5 %), Hungary (16.6 %), Cyprus (17.0 %) and Malta (18.0 %).

4   Comparison of adult education systems in selected European countries

For the international comparison of adult education systems in Europe, the following countries were selected: The Netherlands, Finland, Denmark, Lithuania, Latvia and Poland. For the subsequent comparison, the following main criteria were selected: legislation, funding, providers and target groups in adult education. Table 3 shows the comparisons and differences.

Table 3: Comparison of adult learning criteria

COUNTRY	Criteria			
	LEGISLATIVE	FINANCIAL FLOW	PROVIDERS	TARGET GROUPS
Netherlands	Adulst and Vocational Education Act	State – contributions and subsidies from the state budget, government grants, state loans	Public institutions through ROCs (Regional Occupational Training Centres) - various public courses and secondary vocational training	Students 18 years and above
		Trade union and sectoral training funds, which are filled by employers according to collective agreements (so-called private financial resources)	Private entrepreneurs (initial vocational courses)	
		Municipalities		
		Enterprises (employers) - own capital, resources acquired through own activities		
		The student himself according to his own interests		
Finland	The Liberal Adult Education Act	State – contributions and subsidies from the state budget, government grants and projects	Adult vocational training centres	Students from 25 years of age
	National Certificates of Language Proficiency Act	Municipalities	Specialised professional institutions operated by commercial companies	
	Others: Government resolution on the development and financing of adult vocational training	European Union – Funds	Polytechnics and higher education institutions run by local authorities, registered associations and foundations	
		Enterprises (employers) - own capital, resources acquired through own activities	State Universities	
	Development plan for education and research	The student himself according to his own interests		
			Liberal education: Folk high schools (short and long term courses) Adult education centres and summer universities Sports education centres	
Denmark	Law on education in the labour market	State – contributions and subsidies from the state budget, government grants, financial supplement to unemployment support	Public educational institutions	Primary education from 20 years of age
	Act on initial and further vocational training for adults	Countries	Private business entities	Vocational training for adults aged 25 and over
	Act on financial support for adult liberal education	Municipalities		

	Act on Vocational Education and Training Institutions	Enterprises (employers) - own capital, resources acquired through own activities		
		The student himself according to his own interests		
Estonia	Adult Education Act	State – contributions from the state budget, financial support for teachers and state employees	State and municipal institutions providing evening, distance and correspondence education	Young people aged 16-24
	Law on professions	Municipalities	State and private universities	Older workforce aged 50–74
		The student himself according to his own interests	Private business entities	
			Trade unions	
			Vocational training institutions	
Lithuania	Act on non-formal adult education	State – contributions from the state budget	Education centres providing formal and non-formal education for youth and adults	Teachers
	Law on Science and Studies of the Republic of Lithuania	Municipalities	Educational centres that include universities of the third age	Adults and youth
	Law on Education of the Republic of Lithuania	European Union – Funds	Adult education centres	People up to 21 years old - people with communication problems, learning problems...etc.
	Others: Order of the Ministry of Education and Science of the Republic of Lithuania approving the list of qualification improvement programmes for unemployed persons with higher education Measure "Provision of best quality formal and non-formal education services" Recommendations for the assessment and recognition of competences acquired in non-formal adult learning in higher education institutions		Gymnasium	
Poland	Act on the Education System	State – contributions and subsidies from the state budget	Public educational institutions – primary, secondary, post-secondary and higher education	Adults aged 20 to 65
	Employment and Unemployment Suppression Act	Enterprises (employers) - own capital, resources acquired through own activities	Public extra-curricular institutions – centres for further education and practical training	
	Others: Directive of the Minister for National Education and Sport and the Minister for Labour and Social Policy of 12 October 1993 Council of Ministers Directive on cooperation in the field of vocational training	The student himself according to his own interests	Non-public educational institutions – social and religious organisations, social associations, individual entrepreneurs Private business entities	

Source: own processing

In terms of legislation, adult education is most heavily regulated in Finland and Denmark. The possibility of financing without equity is only possible in Lithuania, where adult education is exclusively supported by the state and is therefore free of charge for all target groups. In the other countries, it always depends on the institution providing the training. In the comparison of adult

education providers, in all the European countries presented, the main providers are public and private institutions of various types. The target group for adult education is most often students over 20 years of age.

Conclusion

An essential prerequisite for a functional adult education system is a legislative framework that defines the key elements and ensures that they are firmly connected. In selected countries, the legal framework for adult education is provided, on the one hand, by a specific law relating only to adult education or, on the other hand, as part of the laws relating to the education system as a whole.

The financing of adult further education is considered to be a very important structural element of a functional adult further education system. In all the countries compared, with the exception of Lithuania, funding is based on a multi-source principle through which all stakeholders are involved in the reimbursement. Thus, not only public financial resources but also private ones are involved in financing. As already mentioned, only in Lithuania is education provided free of charge and thus financed only from public sources. This method, however, is not considered the most appropriate one, as it is the adult's own initiative to initiate and then implement the education.

On the supply side of the market in adult continuing education, the providers of this education are also included. Adults have the option of studying in initial training programmes or directly in special courses designed for them in public institutions. Further education providers also include special adult education institutions set up by subnational public authorities. In addition to public institutions, private providers are also available in all countries. Corporate training organised by employers, trade unions, non-profit, voluntary or interest organisations is also very widespread.

The focus group is the last element of adult further education presented. In all countries it is generally adults who have completed initial training. In some countries, such as Estonia, there are special programmes aimed at helping problematic groups.

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Further professional training of activation workers in the field of andragogy and gerontagogy

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Abstract:

The contribution addresses the necessity and importance of further education and development of the competences of activation workers in a home for the elderly in the context of adult education. The corresponding knowledge of these workers significantly contributes to the perception of the quality of life in homes for the elderly by their clients. Activation workers must also be prepared for the new requirements of care for the elderly, which is developing in the field of activation with significant support from pedagogy and andragogy, or gerontagogy.

Introduction

The current demographic development brings to reality increasing numbers of people in the post-productive age, i.e. in the senior age, who on the one hand demand and need increased social care and on the other hand become an important factor in consumption. Old age is becoming a social phenomenon with a wide reach and a reality that must be dealt with within the framework of social care. The extension of people's lives together with the extension of the active age in a comprehensive view also requires new approaches in the care of the elderly, whether medical or social, as well as in the offer of spending free time and its eventual animation.

New approaches to the activation of the elderly also require professional training of the staff who implement animation and activation activities in homes for the elderly. It is necessary that these workers are equipped not only with the appropriate knowledge, skills and habits, but also with the appropriate competences developed from the completed education. It must not be forgotten that they must of course have a personality, or personal competence for working with seniors and managing one's work function.

Today's seniors are people who have lived a full life with all its possibilities for professional and personal realization and are also much more active than previous generations and need more space for social contacts and self-realization (Klímová, 2013).

Quality of life, in our context the quality of life of seniors, is a very current and often emphasized topic. Quality of life is perceived as a measure of self-realization, mental harmony, as a measure of life satisfaction and dissatisfaction, the meaning of the perception of happiness (Ochaba and Racková, 2018 In Rivero, 2019).

Especially among older people, the subjective perception of old age and living conditions are significant factors of quality of life (Krajíček et al., 2000). According to Cabak (2020), daily rich and varied activities have a positive effect on the emotional functioning of older people. For the life satisfaction, well-being and health of the elderly, it is desirable to engage in a large number of activities.

The internalisation, processing and acceptance of old age is very important for the further life of the individual in this final phase of life. Aging is associated with the awareness that the process of gradual deterioration of one's physical and mental condition, various competencies and social status has begun, and that it is a process that is irreversible and irreversible (Venglářová, 2008).

In view of the above facts, it is important that educational institutions at all levels, where it is possible to educate activation workers, deal with the investigation of the reality in homes for the elderly and the professional, personality and competence profile of these workers.

1. Activation of the elderly in homes for the elderly in the context of maintaining their self-sufficiency

Depending on their physical and mental condition, seniors spend their time in their homes or in facilities for the residence and care of the elderly. Most often, if care is needed, they live in homes for the elderly, where their care is specialized according to their needs or illness.

The stay of seniors in homes for the elderly must meet certain qualitative parameters given not only by legal requirements, but also to a certain degree of the senior's personal individualized view of his perceived quality of life. The activation and animation of his stay, mediated by the offer of leisure and educational activities, is one of the parameters of the quality of life in a home for the elderly (Veteška, 2017).

In particular, conflation of the elderly as very heterogeneous older adults should be avoided. As stated by Vostrý, Veteška et al. (2021), a significant group of seniors consists of individuals whose interest is full participation, self-realization, not being differentiated from the rest of the adult population, etc. The second group is represented by seniors who are limitedly self-sufficient or not at all self-sufficient. They are mainly represented by very old individuals (i.e. often immobile, with dementia syndrome), they form a minority of the calendar senior population, whose need is institutional professional care, etc. (Vostrý, Veteška et al., 2021).

Workers who take care of the elderly are classified according to their professions into groups that ensure individual parts of care and processes. The competence of all workers must include professional elements that arise from the complexity of caring for the elderly.

In this context, it is important to examine the state of education of activation workers in homes for the elderly and to describe and subsequently determine the required competencies for the performance of their work function and to compile their competency model based on practical knowledge. The requirements for their professional and further education then depend on the established competence model.

2. Education and development of workers in social services

Nursing home workers are among the so-called helping professions. In the professional literature, this term refers to workers who move in areas of human activities that are related to helping others and working for them, whether in some crisis situations, but also in the field of pedagogic and educational activities. Matoušek (2003) describes these professions more specifically, stating that the helping professions include those that are based on medicine, psychology, pedagogy and also social work.

The importance of education and development of workers in social services lies in adaptation to continuous development and transfer of knowledge in the field of direct and health care for the elderly. Client care methods in social services are essentially an intersection of medical, direct and social care and therefore also an intersection of psychological, nursing and therapeutic methods, and their quality depends on the way they are implemented.

Caring for the elderly always goes hand in hand with regard to their personality, character and interests, as well as with regard to their health and psychological handicaps, or options. The further professional training of workers in homes for the elderly must also correspond to this. The further education of workers in homes for the elderly should not neglect the education of workers in the field of andragogy and gerontagogy (Veteška, 2016). Two educational disciplines are devoted to senior issues with regard to obvious specifics in the psychosocial, economic and cultural fields. Andragogy mainly examines the processes of how seniors can learn and also what different forms of learning are suitable, beneficial and effective for them in their style (Veteška, 2016, 2017 and 2018; Vostrý, Veteška et al., 2021).

The development of workers in the form of vocational training in homes for the elderly is an equally important part of personnel work, and the means for this is corporate training. It is specific to homes for the elderly that this is often done in the form of a learning organization and partly in an informal way of exchanging information and knowledge in everyday practice. It is therefore

quite significant that the key discipline used by experts in the development of human resources (personnelists and corporate andragogues) is the education of adults, or its component referred to as professional education (Veteška and Tureckiová, 2020).

3. Development of activation workers in homes for the elderly in the field of andragogy and gerontagogy

Activating the elderly is a very important part of their care in homes for the elderly. "It serves to stimulate the potential (internal prerequisites) of seniors, while contributing to their physical as well as psychological health and overall quality of life. Appropriately chosen educational activities are a possibility for a senior to return to an active life. Activation programs are aimed at intervention in the area of maintaining skills, knowledge, abilities or at preventing disorders of memory, concentration and thinking of seniors." (Průcha and Veteška, 2014, p. 27).

The options for seniors' homes in the area of using free time and activities for seniors are almost unlimited. In the case of activities for the elderly, they always include supporting the self-sufficiency of the elderly, maintaining their mental freshness and overcoming the handicaps they may suffer from. An integral part of the activation of seniors is always pedagogical, andragogical and gerontagogical elements, together with a certain degree of didactics and consistency, which enable the support of seniors and the animation of their stay in homes for the elderly (Veteška, 2017).

Matoušek et al. (2020) states that in order to perform the profession of an activation service worker for the elderly, it is necessary for the worker to have a number of prerequisites. Among the most important, he mentions the formal qualification obtained by studying at a university or higher vocational school in the field of social work; the necessary knowledge about the given social service, the issues of the target group, about their specific needs and ways of compensating for any handicaps, knowledge of the Act on Social Services and other legislation related to the provision of social services and orientation in the network of social services. It is also very important for the worker to have communication skills, self-reflection, flexibility, openness, know how to cooperate, be a team player, independent and patient, be able to plan, organize and think in a structured way. Attitudes and value orientation are also desirable. Here, Matoušek et al. (2020) ranks respect for the mission, values and code of ethics, respect, discretion, trust, confidentiality, tolerance and partnership with clients.

The activities provided by it have a very wide range and range from handicrafts to artistic, mental and physical activities. Higher requirements are placed on the activation worker in homes for the elderly to perform his work function, but nevertheless the qualification requirements for him are exactly the same as for an ordinary worker in social services. In a certain sense, this has its own logic, because the activation worker also has to manage the care of clients, because he works in normal operation with other workers in a multidisciplinary team and clients need to be cared for comprehensively, including leisure activities. However, from the point of view of experience from everyday practice in homes for the elderly, when the activities of these workers have a pedagogical character in many respects, it is necessary for these workers to have a higher qualification that includes other elements from pedagogy, andragogy and gerontagogy (Veteška, 2017), or andragogic counseling (Pavlov, 2021).

The complexity of the role of nursing home workers in the organization significantly exceeds the requirements for their job classification, or work function. Nursing home managements cannot assume that nursing home workers automatically meet the expected qualification requirements. For this reason, they should obtain, through research in cooperation with educational institutions, guidance on how to professionally educate their activation workers and what professional and human profile they should have.

Care for the elderly in homes for the elderly is on the border between medical and social (direct) care for persons with physical, mental and often social handicaps due to their age. It is therefore not easy to solve all the personal problems of these people. In this regard, for the

performance of the profession, or in the care of the elderly, the competence of workers, based on their formal education, and their personal motivation for performing the profession, based on the perception of this profession as a profession, or mission (cf. Malíková, 2011).

4. Research on the issue of competence of activation workers and their further education

The topic of the research is the examination of the competences of activation workers of homes for the elderly. The goal of the research is the creation of a competence model of an activation worker, identification of educational needs and a proposal for further professional education of an activation worker.

The issue of the competence of activation workers in homes for the elderly has not been solved in a long-term or systematic way. Their practical functioning depends on the individual requirements for these workers, and their professional competence corresponds to this, the competence set for them by the management of the home, but also further professional development, or continuing education requirements.

In practice, it is usually the case that activation workers do not have a generally defined professional education, nor additional ones, and their professional competence depends significantly on their individual interests and motivation to further develop professionally, whether it is deepening or increasing their qualifications. Formally, the only requirement for the qualification of an activation worker is completed basic education and completion of a nursing course. The actual course is both theoretically and practically focused on direct service care for clients in homes for the elderly and only marginally on the activation of the elderly.

The purely practical aim of our research is, based on this research in homes for the elderly, to establish a competence model of an activation worker created from the knowledge obtained during the examination of opinions and perspectives on the performance of the work function of an activation worker from the point of view of the activation workers themselves, but also the heads of homes for the elderly and their observations, but also from the requirements of everyday practice.

The research itself is qualitative and its design is based on an approach known as grounded strategy (Grounded Theory). Grounded theory represents a set of inductive procedures for conducting qualitative research, based on the systematic collection of data on the phenomenon it represents and the analysis of these phenomena. A qualitative approach is suitable for situations where little is known about the subject to be analyzed, as it is in our case.

The research method in this case is a structured interview, because it enables more structured data collection, or their coding. The goal of the interview should then be to verify the correctness of the examination of the selected concepts and topics and also to verify the comprehensibility of the selected concepts and topics among the interviewed persons.

For the collection of data from the implementation of structured interviews as part of the research and their subsequent comparison and evaluation, the method of professionography was also used, which is relatively commonly used when processing descriptions of job functions or competency models in organizations that focus on the job function in a more user-oriented and practical way.

Methodologically, professionography refers mainly to psychology and is close to qualitative research methods. Within its methods, professional surveys can examine those features of the personality of a person – a worker, which can influence the operation of the organization as a whole and the performance of the profession of a specific worker. It is commonly used in personnel work in organizations and when describing the requirements for the performance of a job function. The resulting occupational profile also has the character of a document with a qualitatively determined description of the requirements for a specific worker (Vronský, 2012).

4.1 Aim and used methodology (methodology) of the research

As already indicated, the aim of the research itself was to answer the issue of the competence of activation workers in homes for the elderly and the associated other consequences associated with the performance of their work function, i.e.:

- creation of a competence model of an activation worker,
- identification of educational needs
- roposal for further professional education of the activation worker.

The research questions basically copy the needs of organizations to have an adequately anchored description of the function of an activation worker, i.e. in the form of a competency model and determining his educational profile and the requirements for his professional training and they are:

1. What competences should an activation worker of a home for the elderly have in terms of performing his/her function?
2. What competencies should he have as a personality?
3. In what areas should the activation worker be continuously educated?

The result of the research should be a practically comprehensible list of requirements for the AP and its professional and human profile. The established research paradigm of the research is the description and interpretation of the answers to the appropriate setting of the competence of the activation worker:

1. It is necessary to look at the professional qualifications of activation workers from two points of view. From the point of view of the employer and what he expects from this type of worker in terms of organizational classification in terms of job function and from the point of view of the worker's professional qualifications, i.e. what he should master in order to perform his job function, what should be his knowledge, skills and work habits.
2. To optimally perform the work function of an activation worker in accordance with the interests of the relevant organization (in our case, a home for the elderly), it is necessary to deal with three problem areas in connection with the required qualification of activation workers, in the form of research in practice in the following basic areas:
   a) Basic description of the job function of the activation worker.
   b) By setting the general competence model of the activation worker.
   c) The educational profile of the activation worker.

The framework of the conducted research also corresponds to this, it will develop precisely from this moment, when it is necessary to clearly summarize the requirements for an activation worker in practice, i.e. his formal, professional and professional (superstructure) structure of competences, or the research framework is focused on examining the spectrum of requirements for the competence of activation workers and their qualifications in practice.

The data collection should then serve and the findings should be used in three areas:

- Examining the competencies of activation workers of homes for the elderly.
- Creation of a competence model of an activation worker of a home for the elderly.
- Subsequent creation of a qualification program for activation workers of homes for the elderly with elements of pedagogy and didactics, gerontagogy and the specifics of education for the elderly.

Given that the requirements for the education and qualification of activation workers are not formally established even by the job catalog, and therefore the requirements for the performance of this job function are always set independently by the organization in which the worker is to work, and also given the fact that many leaders of organizations do not have pedagogical, or andragogic education, so they are not aware of the need for formal training of activation workers in the didactics and methodology of activation work. Activation work always has a pedagogical and andragogical character in a number of respects.

Homes for the elderly should, through this research, receive a tool for more precisely determining the description of the job function of an activation worker, the requirements for selecting these workers and also partly for their, to a limited extent, remuneration.

In this research, the solution to the issue of setting competencies and the competency model will be based on findings from three areas of practice, i.e.:

- From the findings from the job descriptions of activation workers of homes for the elderly,
- from interviews with individual activation workers in homes for the elderly
- from interviews with managers and directors of homes for the elderly and a summary of their requirements for the performance of the work function of an activation worker.

In the interviews, we asked about these main researched areas, from which the further analysis and summarization of the found data is based. These areas are:

1. Area – Professional competence (education, professional competence, work experience)
2. Area – Performance capability (adaptability to increased performance, workload, stress and changes in working conditions)
3. Area – Social competence (ability to cooperate, communicate, influence, manage)
4. Area – Personal competence (ability to motivate, morally free qualities, individuality)

4.2 Surveyed set of respondents

The research group in the case of this dissertation is the staff of homes for the elderly, who either perform the work function of an activation worker, or set a job description for them, i.e. managers or directors of homes for the elderly. In addition to this, the mentioned workers should work in homes for the elderly, where the work performance of the activation workers, due to the number of clients and the number of employees, has a more sophisticated framework and takes place in cooperation with other workers of the home for the elderly. Their selection is stratified, because in order to investigate the problem, it is necessary that these two investigated groups of workers meet the following criteria:

1. The home for the elderly would have more than 100 clients.
2. The home for the elderly should have more than 2 activation workers.
3. Interviewed directors should have more than 3 years of experience.
4. Interviewed activation workers should have more than 3 years of experience.

4.3 Timing of the research

Data collection took place between August and September 2022 in ten homes for the elderly. 10 directors of homes and 24 activation workers were interviewed. 25 homes for the elderly in the Ústí Region were approached, only 10 homes for the elderly allowed their own research.

5. Overview of own results

The results of the conducted research based on the answers of the respondents brought the following findings in the form of answers to the mentioned research questions. These are:

1. What competences should an activation worker of a home for the elderly have in terms of performing his/her function?
2. What competencies should he have as a personality?
3. In what areas should the activation worker be continuously educated?

In order to answer the first research question, i.e. what competences should an activation worker of a home for the elderly have in terms of performing his/her function, it is necessary to think about what the work of an activation worker basically entails. It is not just a guide to seniors' free time in a nursing home. His function is much more comprehensive, because he not only has to devise and implement all activities for seniors, he also has to secure and fulfill their support and

activation framework for seniors, both in group and individual form. It should therefore have the following competence structure:

a) Knowledge of the issue of seniors
b) Knowledge and skills from communication with seniors and conducting activities with them
c) Knowledge of social work and care for the elderly
d) Knowledge for working in a home for the elderly and in a team of home workers.

The answer to the second research question can be characterized as pivotal for describing the personality of the activation worker as such and for building his ability to work with the elderly. It is necessary to divide it into several parts:

a) On social competence, i.e. for the ability to perceive, care for, respect and seniors as personalities and clients at the same time.
b) On personal competences, i.e. respect, empathy, sensitivity, willingness, kindness and understanding
c) On the competence of creativity, i.e. imagination, temperament and active listening to the needs of seniors.

In order to answer the third research question, it is necessary to summarize the answers from the questions to individual activation workers and heads of organizations:

a) The education of activation workers should be comprehensive, logically structured and should include the complexity of the work and activation of seniors.
b) The education should take the form of an accredited study and should be completed by a final graded exam and should be at least secondary school.
c) In terms of content, the education should include the areas of social work, methods of care for the elderly, methods and techniques of activating the elderly, but also the acquisition of presentation and communication techniques. It should include knowledge from psychology, andragogy and gerontagogy and special pedagogy.

To compile the competence model, we are based on the findings that the activation worker should be personality-oriented:

- to work with seniors,
- then socially to help and support this group
- should be able to create, organize, manage the activation of seniors.
- should be educated in the social field and work with the elderly
- should be educated in andragogy and gerontagogy, as it follows from the knowledge gained.

The resulting knowledge about the competences of the activation worker is divided into areas that correspond to the examined areas of competence, i.e. professional, performance, social and personality and are summarized in the table below.

The structure of competences for building the competence model of an activation worker

Professional	Professional (field)	Social	Personal	Managerial
Knowledge of social work	Knowledge of activation techniques for seniors	Ability to empathize	Kindness	Organizational skills
Knowledge of issiue of seniors	Knowledge of communication techniques with seniors	Ability to care	Optimism	Stress resistance
Knowledge of elderly care	Knowledge of presentation techniques	Ability to support	Friendliness	Be able to plan

Knowledge of the issue of psychopathic disorders in the elderly (dementia, AD)	Knowledge of motivational methods for seniors	Ability to help	Willingness	Be able to complete tasks
Knowledge of health and safety when working with seniors	Knowledge of occupational therapy	Ability to be accommodating	Patience	Be able to set priorities
Knowledge of palliative care	Knowledge of the basics of pedagogy, andragogy, gerontagogy and pedagogical leadership	Ability to appreciate	Diligence	Knowledge of teamwork
Knowledge of working in a home for the elderly	Knowledge of the basics of psychology	Be able to be discreet	Imaginativeness	Restraint
Knowledge of client approach to seniors	Knowledge of the basics of psychiatry	Be able to listen	Flexibility	Responsibility
Be able to resolve conflicts	Knowledge of PC skills	Be able to negotiate	Creativity	
		Be able to respect	Independence	
			Orderliness	
			Determination	
			Reliability	

Similar to the proposal of the structure of the competency model of the activation worker, the results of the survey provide enough information to build the structure of the training program for activation workers. Structure of the activation worker's professional education program:

• Accredited studies, at least high school, completed by a certified state exam, four years, or superstructure.

• Comprehensive study covering the areas of:
- Social work
- Elderly care – Psychiatry
- Psychology
- Health science and palliative care
- Techniques for activating seniors
- Pedagogy, andragogy, gerontagogy
- Special education
- Communication techniques
- Presentation techniques
- PC knowledge

Research has shown how important their competencies are in the work of workers in helping professions in social services. We perceive the competence acquired by a worker as his professionalism, the ability to manage his profession, his role in the organization with all its professional and ethical contexts. Social dexterity and social intelligence are very important in social relationships in caring professions.

Social dexterity ("social glass" - M. Argyle, 1968) is used in interpersonal interactions, i.e. the ability to lead and develop a certain meaningful interaction, which is analogous to motor skills during some work or sports activity (Nakonečný, 1997). It is also important in the sense that there is a significant aging of the population and this senior population also has its own educational needs, but it is also important to educate the younger generations about working with the elderly, their needs, coexistence between generations and not forgetting that intergenerational coexistence and cooperation it has its irreplaceable place in society. In this regard, the place of gerontagogy is also irreplaceable.

It is equally important to educate the professional public in the field of gerontagogy and transfer knowledge from this field into practice. I also perceive the importance of the transfer of this discipline in the fact that education in its basic functions, i.e. preventive, anticipatory,

rehabilitative and strengthening, precisely in the last two mentioned functions, education is a very important element of activating seniors and supporting their psychological condition and helps to maintain their interests, social contacts and an active mind, which significantly affects the quality of life in this period of life.

Educational activities in the senior age are important, therefore it is very good education, or putting the activation of seniors into practice on the basis of gerontagogy. However, the implementation of activities according to clear didactic, or of methodological procedures is not the most important, but in this respect it is essential that the activation workers know these methods in general. That is why it is important that activation workers master it in some way, at least in the form of didactic principles, even though they are not pedagogues by their original profession and do not have a comprehensive command of didactics and methodology.

The activation of seniors includes pedagogical elements, and if it is also implemented with the use of didactics, it is of significantly higher quality and with a greater impact on the participants of the activation (Krystoň, 2011). Therefore, it is important that activation workers, as part of their professional or further education, are educated in the fields of pedagogy and especially andragogy and gerotagogy.

"In summary, it is possible to state that andragogy and gerontagogy work closely together, they functionally use a large part of the knowledge base (similar to the knowledge of other sciences or scientific disciplines), they can effectively apply it to the specific conditions of the education of seniors, and all this with extensive and systematic development scientific production" (Krysoň and Selecký, 2021, p. 38).

Conclusion

Activation of the elderly has many elements in common with education in general. Therefore, the content of activation activities in social services is to support such processes that lead to less dependence on the service and greater independence of the client. The range of activities and the participation of seniors in them is aimed at satisfying personal interests, social motives, fulfilling free time and also has a significant character of voluntarism, personal motives of seniors and the influence of professional orientation of seniors.

Aging is an inevitable process and every society must create conditions for its seniors to live with dignity in old age and, if possible, their greatest independence. Each person is responsible for the quality of his life, but it is not always within his power to maintain it independently at the end of his life. Active and dignified old age are phenomena that everyone knows and takes for granted, but this is not always the case. Quality of life has two dimensions, as stated by Ondroušová (2011), namely objective and subjective. Subjective quality of life is related to psychological well-being and general satisfaction with life. Objective quality of life means the fulfillment of requirements that relate to social and material conditions of life and physical health.

The consequences of an aging population in society affect all areas of its life. It has economic, social and practical implications for it, and therefore every company must take care of its seniors in an appropriate way. However, society must also support intergenerational solidarity, emphasizing that care for the elderly is an important part of society's life and also brings opportunities for the socio-economic development of society in the form of new job opportunities for younger generations, and that seniors are also important consumers in society in the field of services.

Long-term experience of gerontologists shows that education of seniors is important as prevention of many health problems in this age group. Therefore, for many years, the need to improve medical and geriatric care, which should include the offer of activation and educational services for this age group, has also been part of the debates (Ribeiro, 2019).

The importance of the activation of seniors is also a reason for activation workers to be adequately educated and further educated, so that their professional, performance, social and personal competences are at an adequate and appropriate professional level.

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