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EDITORIAL

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A manuscript goes through the peer review process. Authors submit manuscripts to Editorial office via the online system. The acknowledgement letter should be sent to the author to confirm the receipt of the manuscript. The Chief Editor first reviews manuscripts. Chief Editor is assisted by Section Editors (could also be Co- or Associated Editors). The Editor assigns a Section Editor to see the manuscript through the complete review process and return it with a recommendation or decision. The manuscript is checked to see if it meets the scope of the Journal and its formal requirements. If it is incorrect or unsuitable, the author should be informed and the manuscript filed (or returned if requested) – direct rejection. Manuscripts that are not suitable for publication in the Journal are rejected. A Rejection letter is sent to the author stating the reason for rejection. If the manuscript conforms to the aims and scope of the Journal, and formally abides by the Instructions to Authors it is sent out for review. Depending on the type of paper, it could be accepted immediately for publication (invited Editorial, Book review etc) by the Chief Editor.

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Based on the reviewers' comments the Chief Editor makes a decision to:

- Accept the manuscript without further revision
- Accept after revision
- Ask authors to resubmit
- Reject

An acceptance letter is sent to the author and the final manuscript is forwarded to production. Sometimes, the authors are requested to revise in accordance with reviewers' comments and submit the updated version or their manuscript to the Chief Editor. The time for review can be set to 2-6 weeks depending on the discipline and type of additional data, information or argument required. The authors are requested to make substantial revisions to their manuscripts and resubmit for a new evaluation. A rejection letter is sent to the author and the manuscript is archived. Reviewers might be informed about the decision.

After review a manuscript goes to the Copy Editor who will correct the manuscript concerning the correct referencing system, confirmation with the journal style and layout. When Copy Editor finishes his/her work they send manuscripts to the Layout editor.

Layout Editor is responsible for structuring the original manuscript, including figures and tables, into an article, activating necessary links and preparing the manuscript in the various formats, in our case PDF and HTML format. When Layout Editor finishes his/her job they send manuscripts to Proof Editor.

Proof Editor confirms that the manuscript has gone through all the stages and can be published.

This issue has 11 articles (8 Original researches, 2 Review articles and 1 Case study). Our future plan is to increase the number of quality research papers from all fields of science, engineering and education. The editors seek to publish articles from a wide variety of academic disciplines and substantive fields; they are looking forward to substantial improvement of educational processes and outcomes.

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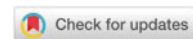
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Parental Involvement in Education and Collaboration with School

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Abstract: This paper presents the results of the research which was aimed to examine the connection between the collaboration between family and school, and parental involvement in education. The sample included 198 parents of senior primary school students in South-Eastern Serbia. For the purposes of the research, a Questionnaire was designed which consisted of 30 items, grouped into two parts: the first part deals with forms of family and school cooperation, and the second focuses on parents' perception of educational techniques. Chi-square test shows that the most common form of parental cooperation with school is parent meeting, and that mothers are more engaged than fathers when it comes to parent meetings and lectures for parents. Based on parents' assessments of education techniques, understanding and support is the education technique that dominates parental involvement in children's education, while high level of control had a lower score. There were differences observed in parents' assessments of education techniques analysed by t-test, where more withdrawal from children, as well as less control in are shown more by fathers than by mothers. Examination of the predictive properties of independent variables was tested using linear regression. The obtained research results on the impact of certain forms of cooperation with school on parental involvement in education have shown that lectures for parents and conversations at the initiative of the class teacher are predictors in creating desirable patterns of parental behaviour by granting children the right to their opinion. Gaining empirical insight into the mentioned relations benefits future research and practice of education efforts of the family and school.

Keywords: parents' education techniques, forms of cooperation between family and school, parent, child.

Introduction

Family, as the main biosocial community, and school, the environment of cognitive, social and affective context, represent the field where parents and teachers work on the development and formation of the child's personality. Family is a living and social environment and is considered a reference framework in which the child acquires the first experiences that form the starting point for the overall development of an individual. In addition to family, school as an educational environment is also a sphere of influence that seeks to achieve defined outcomes of development and academic achievement of students. School is where education takes place and family is not excluded from it. The cooperation established between the family and the school can benefit both sides, in different ways, to meet their roles by improving the general school climate, providing support for family development and parenting skills by improving teachers' work (Epstein, 2018; Milak, 2020).

Parents' education styles imply the application of various education techniques that shape parents' behaviour towards children. Most authors highlight two main types of parental education techniques: parental warmth and parental supervision/control (Piorkowska-Petrović, 1990; Baumrind and Thompson, 2002; Obradović and Čudina-Obradović, 2003; Tokić, 2008; Keresteš et al., 2012; Zuković, Ninković and Krstić, 2015; Pavićević and Stojjković, 2016; Bogavac and Milosavljević Đukić, 2017; Milosavljević Đukić and Bogavac, 2017; Matejević and Đorđević, 2019; Rothenberg et al., 2020). The combination of these dimensions of parenting allows to distinguish four parenting styles: authoritative parenting style (support and respect, but also setting clear boundaries of behavior), authoritarian parenting style (high level of supervision and control), compliant parenting style (high level of warmth and love, but supervision is very low) and indifferent parenting style (parents do not show interest in the child, marked by a low level of

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love and supervision) (Maccoby and Martin, 1983; Baumrind, 1966; 1991). Within the above-mentioned education styles, by choosing certain education techniques, parents establish patterns of behaviour by which they try to achieve interaction among family members. In order to better understand the parent-child relationship within a particular parenting style, some researchers use three bipolar dimensions: warmth and rejection; structure and chaos; support for autonomy and coercion (Addo, Åslund and Nilsson, 2017). In order to achieve education goals, parents choose education techniques within different styles of parenting- emotions and control. Parental behaviour within the emotion dimension moves in the direction of the bipolar concept of parental acceptance - rejection, which means that on the one hand there is parental acceptance (warmth and emotionality), and on the other parental rejection (absence of warmth and emotionality). The dimension of control refers to the actions that parents use to influence and modify the child's behaviour. This dimension is also bipolar, because at one end there are parents whose control over the child's behaviour is firm, and at the other end there are those parents who have poor control over the child's behaviour (Macuka, 2007). Parents' education techniques gradually change with the change of the child's developmental needs, while the emotional relationship remains constant.

Branching from the concept of parental acceptance, which is the basis for successful education, parenting styles are formed by parents applying education techniques with the aim of understanding and supporting the children's right to have their own opinion. Parental education styles that rely on parental rejection may over time have negative implications on the child's personality development. In this case, school should raise parents' awareness and guide them to relinquish excessive and insufficient control, excessive child protection, distrust of the child, disinterest and withdrawal from the child (Dedaj, 2020). The result of school activities in which the emphasis is on parental involvement and cooperation is the development of pedagogical competence of parents in choosing those education techniques through which they can achieve emotional exchange with the child, authoritative attitude, monitoring and adequate supervision of child activities and quality communication, creating a general emotional climate for constructive parenting. Pedagogical competence of parents is understood as the experience of an individual, an adult, who has control over parenthood and feels good in the role of parent (Malčić, Marić-Jurišin and Klemenović, 2021). Modern strategies of cooperation between family and school include the creation of education techniques used by parents and the improvement of parents' skills, because the education techniques used by parents and strategies used by teachers in the classroom are often not in synergy. It is important that both parties understand differences of opinion and support each other in achieving a common goal - the education of children (Graham-Clay, 2005).

Parents' education techniques gain greater strength and power in education in the context of cooperation between family and school, and are related to the establishment and sustainment of communication, which is much more than a simple exchange of information (Jelić and Stojković, 2021). Cooperation between family and school implies the participation of parents in school activities through various forms of individual and group cooperation. The goal of cooperation between family and school is to align the opinions, activities and measures that teachers and parents take towards the child in order to improve academic success, or addressing cognitive or education-related issues (Andjelković, Stanisavljević Petrović and Vračar, 2015). Epstein's views cooperation between family and school (Epstein, 1996) through the approach of "school-family partnership", which emphasizes the importance of greater involvement and participation of parents in school activities with emphasis on their partnership role in the education process (Epstein, 1992; 2016; Farrell and Jones, 2000). Starting from the theory of overlapping spheres of influence, Epstein (Epstein, 1996) puts special emphasis on the operationalization of six types of parental involvement: 1. Parenthood; 2. Communication; 3. Parents volunteering at school; 4. Learning at home; 5. Decision making; 6. Cooperation with the community, as a basis for effective partnership (Epstein, 1996; Polovina, 2018). These aspects of family involvement are possible through mutual communication and involvement of parents in school activities. Acquired parental competencies through school activities contribute to the development of parenting abilities and skills and involvement in child's education. Previous research on parental involvement in school activities with the aim of building a partnership system is focused mainly on analysing forms of cooperation between family and school through parent meetings, monitoring children's progress by teachers informing parents, helping them progress and achieve in school, lectures for parents, written communication, parents' visits to school, open days, doing certain tasks at school, etc. (Stevenson and Baker, 1987; Pianta and Steinberg, 1992; Steinberg et al., 1992; Epstein et al., 2002; Matejević and Jovanović, 2017; Tóblková, Ferková and Poliaková, 2020; Veljković, 2021). The results of the research indicate that the cooperation between family and school is traditional because it is mainly related to parent-teacher meetings and informative conversations, which are forms of cooperation that do not involve parents in decision-making in schools (Omerdić and Ridić, 2017).

Not all parents feel equally confident in their ability to engage in different forms of involvement (Park and Holloway, 2018). In order to establish effective cooperation between parents and school, it is important to trust parents and provide support in guiding children in the education process, so that they themselves can develop trust in school (Popović and Zuković, 2014). Forms of school practice that enable active involvement of parents are related to providing assistance to parents in developing parenting skills and creating a family environment to encourage effective forms of communication and support to parents in making decisions regarding the choice of education techniques, and respecting their opinion at the same time (Zuković, 2013; Park and Holloway, 2018).

Furthermore, the modern approach to the integrated model of family and school partnership, Inakov views through motivation, communication, cognitive and reflective model (Inakov, 2021). This author highlights the directions of integration of family and school cooperation, the criteria and indicators for assessing the effectiveness of pedagogical support for family-school integration, as well as the development of social competence in students through cooperation. In addition to material, components of family-school partnership, criteria and indicators for assessing the effectiveness of pedagogical support, it is necessary that teachers develop an individual concept of which includes cooperative competencies on top of their professional competencies, in order to ensure pedagogical support to family-school integration (Grofcikova, Mendelova and Zelena, 2019). The success of family and school cooperation is reflected in the awareness of both parties that the quality of cooperation will depend on mutual interest, engagement and efforts to achieve reciprocity (sharing knowledge, responsibilities and power) (Polovina, 2018). In that sense, the school should provide support to the family in raising children through activities to improve parenting skills, which increases the importance of the educational role of teachers in working with parents.

While there seem to be various theoretical and empirical studies on the importance of family-school cooperation, few studies speak of the interdependence of family-school cooperation and parents' education practices. Overcoming the shortcomings of previous theoretical and empirical approaches is possible with research based on the analysed issues, because by becoming aware of their actions and self-assessment of their pedagogical competence, parents change their attitudes, behaviours and values, and they start viewing their involvement in children's education and upbringing as a challenge. Starting from theoretical analysis of the parents' experience of their competencies in the light of changes that characterize modern society and challenging tasks set before parents, an important issue is the cooperation between school and parents and how it affects the creation of parents' education-oriented practices (Marić, 2020). For this reason, there is a need to map and examine the level of parental competencies, which could then be translated into education programs, with the aim of motivating parents to perform parental roles and be happy with it (Malčić, Jurišin and Klemenović, 2021).

Materials and Methods

The main goal of this research was to examine the connection between collaboration between family and school, and parental involvement in education. The operationalization of this goal was done through the following tasks:

1. Examine the extent to which parents are involved in various forms of cooperation with school;
2. Examine the difference between mothers and fathers in regards to the use of certain education-focused actions taken by parents by measuring eight aspects of it (understanding and support, high levels of control, disinterested parents, excessive protection, the child has the right to his opinion, distrust of the child, withdrawal from the child and low level of control); and
3. Examine the effects of certain forms of collaboration between parents and school on parental involvement in education, where certain differences were observed in particular scores, and the effects were tested separately for the sample of mothers and separately for the sample of fathers.

In this research, the main hypothesis was set as follows: There is a statistically significant connection between certain forms of cooperation between family and school and parental involvement in education.

The following auxiliary hypotheses were set:

h1: The most common forms of collaboration between parents and school are Parent-teacher meetings and conversations at the initiative of the class teacher;

h2: There is a statistically significant difference between mothers and fathers in their opinion of what constitutes parental involvement in education, primarily understanding and support, as well as high levels of control (measured through eight aspects) in favour of mothers;

h3: Forms of cooperation with school: parent-teacher meetings, lectures for parents and individual conversations at the initiative of the class teacher are predictors of parental involvement in education of

their children, more precisely, understanding and support, and the child has the right to his opinion.

The research was conducted in a sample of parents of senior primary school students in the southeast Serbia. The sample is completely balanced when it comes to gender. A total of 198 participants took part in the research (mothers, N = 99 and fathers, N = 99). Parents' level of involvement in education was examined with a questionnaire designed for the purposes of this research. The questionnaire consists of 30 items, which are grouped into two sections, where the participants were asked to specify their level of agreement on the five-point Likert-type scale (1 = completely agree, 2 = agree, 3 = undecided, 4 = disagree, 5 = completely disagree). The first part contains the items that refer to forms of cooperation between family and school: parent-teacher meetings, lectures for parents, scheduled individual interviews, scheduled one-on-one conversations at parents' initiative, one-on-one conversations at the initiative of the class teacher, conversation with the school pedagogue, talking to a school psychologist, getting involved in the Parents' Council, taking part in certain school activities, exchanging written notes with the class teacher. The second part focuses on parents' perception of education techniques and practices, where items were actually the 8 subscales of the questionnaire: understanding and support, high levels of control, disinterested parents, high levels of protection, the child has the right to his opinion, distrust of the children, withdrawal from the child and low level of control, whose scores also range from 1 to 5. The reliability of the questionnaire was tested with Cronbach's alpha coefficient. The questionnaire shows excellent reliability (Cronbach's alpha = 0.875).

In this research, statistical analysis of data was done in the statistical package SPSS ver. 24 (Statistical Package for the Social Sciences) for Windows, with the following statistical measures and procedures: to describe the important parameters depending on their nature, frequencies and percentages, and arithmetic mean with the corresponding standard deviation were used. The Chi-Square test and the t - test for large independent samples were used to test for differences. Analysis of predictive properties of independent variables was tested using linear regression. Independent variables are coded as dummy variables (1 = yes, 0 = no). The probability level was set at $p \leq 0.05$.

Results

The first research task was to examine the extent to which parents are involved in various forms of cooperation with school. The differences were analysed by the Chi-Square test. The involvement of parents in various forms of cooperation with school is shown in Table 1. The results of the research show that parents mostly see parent-teacher meetings as a form of cooperation with school (93.4%), while lectures for parents are seen as a type of collaboration in a much smaller percentage (34.3%). The following forms of cooperation have an unjustifiably low score: scheduled one-on-one conversations at parents' initiative (33.8%); conversation with the school pedagogue (26.3%); scheduled individual interviews (24.2%); and one-on-one conversations at the initiative of the class teacher (23.7%). A small percentage of parents are ready to: talk to a school psychologist (19.7%); get involved in the Parents' Council (12.1%); as well as to exchange written notes with the class teacher (8.6%). Parents' involvement in school by taking part in certain school activities in order to cooperate with the school is the least acceptable form of cooperation (7.1%).

Variables that showed a statistically significant difference between fathers and mothers in their level of participation in various forms of cooperation with school are parent-teacher meetings and lectures for parents. The participation of mothers in parent-teacher meetings is high (99.0%) compared to fathers (87.9%) ($p=0.01$). Twice as many mothers (45.5%) attend lectures for parents compared to fathers (23.2%) ($p=0.01$).

The results of this research show that parent-teacher meetings are the most frequent forms of cooperation between family and school. Identified forms of cooperation which mothers and fathers view differently are parent-teacher meetings and lectures for parents. Moreover, the results show that mothers are more engaged than fathers when it comes to parent-teacher meetings and lectures for parents.

Table 1
Parents' participation (fathers and mothers) in various forms of cooperation with school

		PARENTS						p
		(mothers and fathers)		mothers		fathers		
		N	%	N	%	N	%	
Parent-teacher meetings	NO	13	6.6%	1	1.0%	12	12.1%	0.010
	YES	185	93.4%	98	99.0%	87	87.9%	
Lectures for parents	NO	130	65.7%	54	54.5%	76	76.8%	0.010
	YES	68	34.3%	45	45.5%	23	23.2%	
Scheduled one-on-one conversations	NO	150	75.8%	71	71.7%	79	79.8%	0.185
	YES	48	24.2%	28	28.3%	20	20.2%	
Scheduled one-on-one conversations at parents' initiative	NO	131	66.2%	60	60.6%	71	71.7%	0.099
	YES	67	33.8%	39	39.4%	28	28.3%	
One-on-one conversations at the initiative of the class teacher	NO	151	76.3%	72	72.7%	79	79.8%	0.242
	YES	47	23.7%	27	27.3%	20	20.2%	
Conversation with the school pedagogue	NO	146	73.7%	68	68.7%	78	78.8%	0.106
	YES	52	26.3%	31	31.3%	21	21.2%	
Conversation with the school psychologist	NO	159	80.3%	76	76.8%	83	83.8%	0.211
	YES	39	19.7%	23	23.2%	16	16.2%	
Involvement in the Parents' Council	NO	174	87.9%	83	83.8%	91	91.9%	0.082
	YES	24	12.1%	16	16.2%	8	8.1%	
Taking part in certain school activities	NO	184	92.9%	91	91.9%	93	93.9%	0.579
	YES	14	7.1%	8	8.1%	6	6.1%	
Exchange written notes with the class teacher	NO	181	91.4%	91	91.9%	90	90.9%	0.800
	YES	17	8.6%	8	8.1%	9	9.1%	

Abbreviations: N=number of participants, % = percentage; The Chi-Square Test was conducted.

The second research task was to examine the differences between mothers and fathers in their use of certain education techniques and practices. Parental involvement in education was measured through eight aspects: understanding and support, high levels of control, disinterested parents, high levels of protection, the child has the right to his opinion, distrust of the child, withdrawal from the child and low level of control, and are shown in Table 2. Understanding and support are the most frequent education-oriented activities that parents turn to (1.46 ± 0.42). Parents highlighted that they are often distrustful of children (2.17 ± 0.66), but they also advocate the view that the child has the right to his/her opinion (2.26 ± 0.82). High levels of protection (2.90 ± 0.78), high levels of control (3.48 ± 0.67) and low level of control (3.58 ± 0.86) are seen as types of parents' characteristics which distinguish these parents from those who care too much, those who like to control children and those who are not interested in working with children. The obtained research results indicate the presence of lack of interest (3.73 ± 0.74) and withdrawal from the child (3.91 ± 0.59) as actions which parents turn to in certain situations.

Differences between mothers and fathers in regards to the use of certain education-focused actions taken were examined. Variables that have proven to be statistically significant in the analysis of the perception of parents' education-focused actions are withdrawal from the child and low level of control. Fathers tend to give up on working with children more often (3.82 ± 0.60) than mothers (4.01 ± 0.56), $p = 0.05$. Fathers also show lower levels of control (3.45 ± 0.88) when learning with children compared to mothers (3.71 ± 0.84), $p = 0.05$.

The research results show that parents' assessments of education practices indicate that within the affective dimension, understanding and support is the education technique that parents mostly use when working with children. Regarding the dimension of control, the results show that excessive control had a lower score, with parents' assessments that they are often distrustful of children, but also the view that the child has the right to his opinion. Greater withdrawal from children, as well as lower level of control is more frequent in fathers than mothers.

Table 2
The aspects of parents' education-focused actions

	PARENTS			p
	(mothers and fathers)	Mothers	Fathers	
Understanding and support	1.46±0.42	1.43±0.41	1.51±0.43	0.213
High levels of control	3.48±0.67	3.52±0.66	3.44±0.67	0.395
Disinterested parents	3.73±0.74	3.76±0.74	3.71±0.75	0.600
High levels of protection	2.90±0.78	2.94±0.79	2.86±0.78	0.512
The child has the right to his opinion	2.26±0.82	2.24±0.77	2.29±0.88	0.713
Distrust of children	2.17±0.66	2.20±0.67	2.15±0.65	0.551
Withdrawal from the child	3.91±0.59	4.01±0.56	3.82±0.60	0.050
Low level of control	3.58±0.86	3.71±0.84	3.45±0.88	0.050

Mean ± standard deviation is shown; Differences were tested with the t-test for large independent samples.

Within the third research task, the effects of certain forms of cooperation between parents and school on parental involvement in education were examined. For the purposes better visibility of differences in individual scores, the effect was tested separately in the sample of mothers and the sample of fathers. Some forms of family cooperation with the school are coded as dummy variables (1 = cooperated, 0 = did not cooperate).

The results of this research that aimed to investigate the impact of forms of cooperation with school on mothers' involvement in education of their children are shown in Table 3. The research findings show that the identified forms of cooperation between mothers and the school: one-on-one conversations on personal initiative, conversations with the school pedagogue and attendance at lectures for parents are predictors of the observed aspects of mothers' involvement in education such as: high levels of control, the child has the right to his opinion, and withdrawal from the child. Mothers' involvement in education that is characterized by high levels of control is the result of one-on-one conversations on personal initiative ($\beta=0.295$, 95% CI: 0.084-0.711), $p=0.014$) and conversations with the school pedagogue ($\beta=0.294$, 95% CI: (0.042-0.794), $p=0.030$) as a form of cooperation with school. Mothers who have one-on-one conversations on their own initiative and who accept conversations with the school pedagogue have higher scores for high levels of control. The obtained statistical result implies that mothers under the influence of these predictors abandon excessive control and become more ready to raise a child with greater flexibility and lower level of control. Mothers' involvement in education characterized by allowing the child to have the right to his opinion is influenced by lectures for parents as the form of cooperation with school ($\beta=-0.263$, 95% CI: (-0.773--0.038), $p=0.031$). Namely, mothers who attend lectures for parents have lower scores on the dimension that refers to the right of the child to have his/her opinion. Mothers believe that this form of cooperation is important because it provides help in informing and raising the awareness of parents about the need to exercise the child's right to their own opinion. Mothers' withdrawal from the child is influenced by one-on-one conversations on personal initiative ($\beta= -0.329$, 95% CI: (0.104-0.652), $p=0.007$). Mothers who have one-on-one conversations on their own initiative have lower scores for the withdrawal from the child. Withdrawal from the child can occur in situations when the parent fails to provide structure and guidance in education. Under the influence of a separate predictor, mothers show a willingness to recognize mistakes they made and to structure the environment for raising a child, respecting his opinion.

Results of the research showed that mothers embrace a democratic education style (the child has the right to his opinion), but there are also education techniques that indicate excessive care (high level of control), and even disinterest in the child (withdrawal from the child). Organized lectures for parents, conversation at parents' initiative and conversation with the school pedagogue proved to be predictor variables in creating desirable patterns of behaviour necessary for developing mothers' awareness of the importance of parenting.

Table 3
Prediction of the type of mothers' involvement in child's education based on their cooperation with school

Involvement in education		
Cooperation with school:	Understanding and support	High levels of control
Parent-teacher meetings	0.08(-0.55-1.18), p=0.470	-0.01(-1.34-1.20), p=0.911
Lectures for parents	-0.03(-0.23-0.18), p=0.810	0.11(-0.14-0.45), p=0.303
scheduled one-on-one conversations	0.08(-0.15-0.30), p=0.500	-0.05(-0.40-0.24), p=0.641
scheduled one-on-one conversations at parents' initiative	-0.10(-0.30-0.13), p=0.440	0.29(0.08-0.71), p=0.014
one-on-one conversations at the initiative of the class teacher	-0.09(-0.30-0.14), p=0.460	0.01(-0.31-0.32), p=0.973
conversation with the school pedagogue	-0.16(-0.40-0.12), p=0.280	0.29(0.04-0.79), p=0.030
conversation with the school psychologist	0.11(-0.17-0.39), p=0.440	0.01(-0.40-0.41), p=0.973
involvement in the Parents' Council	0.01(-0.25-0.26), p=0.960	-0.07(-0.51-0.24), p=0.472
taking part in certain school activities	-0.03(-0.43-0.33), p=0.790	-0.03(-0.63-0.48), p=0.792
exchanging written notes with the class teacher	-0.05(-0.43-0.28), p=0.680	-0.04(-0.63-0.40), p=0.659
Involvement in education		
Cooperation with school:	Lack of interest	High levels of protection
Parent-teacher meetings	-0.01(-1.60-1.34), p=0.862	-0.01(-1.66-1.50), p=0.925
Lectures for parents	0.10(-0.19-0.49), p=0.384	0.15(-0.13-0.62), p=0.205
scheduled one-on-one conversations	-0.15(-0.62-0.12), p=0.190	0.14(-0.16-0.66), p=0.232
scheduled one-on-one conversations at parents' initiative	0.19(-0.07-0.65), p=0.116	-0.01(-0.40-0.37), p=0.944
one-on-one conversations at the initiative of the class teacher	-0.17(-0.66-0.08), p=0.123	-0.06(-0.51-0.27), p=0.553
conversation with the school pedagogue	0.24(-0.05-0.82), p=0.082	0.21(-0.10-0.83), p=0.130
conversation with the school psychologist	-0.11(-0.68-0.27), p=0.397	-0.03(-0.58-0.44), p=0.797
involvement in the Parents' Council	-0.01(-0.47-0.40), p=0.873	0.01(-0.43-0.50), p=0.878
taking part in certain school activities	-0.15(-1.05-0.24), p=0.216	0.12(-0.34-1.05), p=0.315
exchanging written notes with the class teacher	-0.11(-0.91-0.29), p=0.305	-0.08(-0.88-0.41), p=0.472
Involvement in education		
Cooperation with school:	Child has the right to his/her own opinion	Distrust of children
Parent-teacher meetings	-0.06(-2.03-1.09), p=0.555	0.08(-0.78-1.91), p=0.407
Lectures for parents	-0.26(-0.77-0.03), p=0.031	0.22(-0.03-0.61), p=0.074
scheduled one-on-one conversations	-0.12(-0.61-0.18), p=0.292	-0.10(-0.51-0.19), p=0.367
scheduled one-on-one conversations at parents' initiative	-0.05(-0.46-0.30), p=0.669	0.02(-0.29-0.37), p=0.821
one-on-one conversations at the initiative of the class teacher	-0.05(-0.49-0.29), p=0.611	0.06(-0.23-0.44), p=0.550
conversation with the school pedagogue	-0.01(-0.48-0.44), p=0.931	0.21(-0.08-0.71), p=0.126
conversation with the school psychologist	0.22(-0.10-0.90), p=0.119	-0.02(-0.47-0.39), p=0.855
involvement in the Parents' Council	0.05(-0.35-0.58), p=0.626	-0.05(-0.49-0.30), p=0.632
taking part in certain school activities	0.03(-0.60-0.77), p=0.806	-0.08(-0.79-0.39), p=0.500
exchanging written notes with the class teacher	-0.03(-0.74-0.53), p=0.747	-0.01(-0.59-0.51), p=0.877
Involvement in education		
Cooperation with school:	Withdrawal from the child	Low levels of control
Parent-teacher meetings	-0.09(-1.64-0.58), p=0.346	0.02(-1.48-1.87), p=0.817
Lectures for parents	0.09(-0.15-0.36), p=0.420	0.14(-0.15-0.63), p=0.223
scheduled one-on-one conversations	-0.19(-0.52-0.04), p=0.094	-0.20(-0.80-0.04), p=0.082
scheduled one-on-one conversations at parents' initiative	-0.32(0.10-0.65), p=0.007	0.11(-0.21-0.61), p=0.341
one-on-one conversations at the initiative of the class teacher	-0.20(-0.53-0.02), p=0.075	0.13(-0.16-0.68), p=0.227
conversation with the school pedagogue	0.11(-0.19-0.46), p=0.407	0.19(-0.14-0.84), p=0.168
conversation with the school psychologist	-0.01(-0.37-0.33), p=0.911	-0.09(-0.73-0.35), p=0.482
involvement in the Parents' Council	0.19(-0.02-0.63), p=0.072	0.12(-0.22-0.77), p=0.281
taking part in certain school activities	-0.01(-0.51-0.46), p=0.922	-0.08(-0.98-0.49), p=0.512
exchanging written notes with the class teacher	-0.06(-0.58-0.32), p=0.581	0.08(-0.43-0.94), p=0.468

Parameters shown: Beta (95% CI: Lower Bound - Upper Bound)

Results of the research that aimed to investigate the impact of forms of cooperation with school on fathers' involvement in education of their children are shown in Table 4. The research findings show that the identified forms of cooperation between fathers and the school - participation in parent-teacher meetings, one-on-one conversations at the initiative of the class teacher and participation in the Parents' Council are the predictors of the observed aspects of fathers' involvement in education - disinterest and the child has the right to his opinion. Disinterest as a type of fathers' involvement in education is influenced by participation in parent-teacher meetings ($\beta=0.221$, 95% CI: (0.042-0.966), $p=0.033$) and involvement in the Parents' Council ($\beta=0.357$, 95% CI: 0.309-1.641), $p=0.005$). Fathers who participate in parent-teacher meetings and in the Parents' Council have higher scores for the lack of interest variable. The reflection of the influence of certain predictors on the lack of interest variable is reflected in fathers' readiness for involvement and greater interest in providing a supportive environment for the child's education. Fathers' involvement in education characterized by allowing the child to have the right to his opinion is influenced by one-on-one conversations at the initiative of the class teacher ($\beta=-0.307$, 95% CI: (-1.178--0.15), $p=0.012$). Fathers who attend one-on-one interviews initiated by the class teacher are more likely to believe that the child has the right to his or her own opinion. Under the influence of this predictor, fathers' parenting skills are strengthened in the direction of providing greater support and encouragement of the child to have his own opinion, respecting his individuality.

The obtained findings show that the perception of fathers' education practices ranges from the lack of interest in the child, to the concept that the child has the right to his own opinion. Participation in parent-teacher meetings, one-on-one conversations at the initiative of the class teacher and participation in the Parents' Council proved to be predictor variables by which the school informs parents, helps them to be more successful and more involved in solving school problems, at the same time helping create different education techniques with the help of which parents can establish better relationship with the child in achieving education goals.

Table 4

Prediction of the type of fathers' involvement in child's education based on their cooperation with school

Cooperation with school:	Involvement in education	
	Understanding and support	High levels of control
Parent-teacher meetings	0.03(-0.23-0.32), $p=0.765$	-0.19(-0.83-0.02), $p=0.067$
Lectures for parents	-0.01(-0.24-0.21), $p=0.905$	0.14(-0.12-0.58), $p=0.200$
scheduled one-on-one conversations	-0.03(-0.30-0.23), $p=0.796$	-0.06(-0.52-0.31), $p=0.628$
scheduled one-on-one conversations at parents' initiative	-0.09(-0.29-0.12), $p=0.413$	0.01(-0.29-0.34), $p=0.880$
one-on-one conversations at the initiative of the class teacher	-0.05(-0.31-0.20), $p=0.679$	0.14(-0.16-0.64), $p=0.236$
conversation with the school pedagogue	-0.22(-0.65-0.19), $p=0.289$	0.12(-0.45-0.86), $p=0.539$
conversation with the school psychologist	0.07(-0.41-0.58), $p=0.732$	-0.10(-0.96-0.58), $p=0.629$
involvement in the Parents' Council	-0.14(-0.63-0.17), $p=0.268$	0.12(-0.31-0.93), $p=0.331$
taking part in certain school activities	0.13(-0.27-0.73), $p=0.360$	0.04(-0.66-0.89), $p=0.771$
exchanging written notes with the class teacher	0.01(-0.31-0.34), $p=0.936$	-0.09(-0.73-0.27), $p=0.373$
Cooperation with school:	Involvement in education	
	Lack of interest	High levels of protection
Parent-teacher meetings	0.22(0.04-0.96), $p=0.033$	0.01(-0.51-0.51), $p=0.998$
Lectures for parents	0.02(-0.33-0.41), $p=0.827$	0.07(-0.29-0.54), $p=0.545$
scheduled one-on-one conversations	-0.14(-0.72-0.17), $p=0.228$	0.01(-0.49-0.51), $p=0.962$
scheduled one-on-one conversations at parents' initiative	0.10(-0.16-0.51), $p=0.313$	0.12(-0.15-0.60), $p=0.249$
one-on-one conversations at the initiative of the class teacher	-0.11(-0.63-0.22), $p=0.336$	-0.02(-0.53-0.42), $p=0.826$
conversation with the school pedagogue	0.19(-0.35-1.05), $p=0.326$	0.23(-0.33-1.23), $p=0.253$
conversation with the school psychologist	-0.20(-1.24-0.40), $p=0.310$	-0.24(-1.44-0.39), $p=0.263$
involvement in the Parents' Council	0.35(0.30-1.64), $p=0.005$	-0.04(-0.85-0.62), $p=0.758$
taking part in certain school activities	-0.12(-1.23-0.42), $p=0.336$	0.09(-0.60-1.24), $p=0.492$
exchanging written notes with the class teacher	-0.02(-0.61-0.46), $p=0.780$	0.01(-0.58-0.62), $p=0.946$

Involvement in education		
Cooperation with school:	Child has the right to his/her	
	own opinion	Distrust of children
Parent-teacher meetings	-0.03(-0.63-0.47), p=0.774	-0.15(-0.71-0.10), p=0.147
Lectures for parents	-0.08(-0.64-0.27), p=0.425	0.02(-0.29-0.37), p=0.827
scheduled one-on-one conversations	0.03(-0.46-0.61), p=0.787	-0.11(-0.58-0.22), p=0.386
scheduled one-on-one conversations at parents' initiative	0.12(-0.16-0.64), p=0.246	0.12(-0.12-0.48), p=0.236
one-on-one conversations at the initiative of the class teacher	-0.30(-1.17--0.15), p= 0.012	0.03(-0.33-0.45), p=0.755
conversation with the school pedagogue	-0.17(-1.21-0.46), p=0.376	-0.15(-0.86-0.38), p=0.440
conversation with the school psychologist	0.22(-0.45-1.51), p=0.284	-0.09(-0.88-0.57), p=0.669
involvement in the Parents' Council	-0.21(-1.48-0.10), p=0.088	0.11(-0.37-0.93), p=0.398
taking part in certain school activities	0.06(-0.74-1.24), p=0.620	0.18(-0.29-1.29), p=0.212
exchanging written notes with the class teacher	0.16(-0.15-1.13), p=0.136	-0.16(-0.85-0.11), p=0.136
Involvement in education		
Cooperation with school:	Withdrawal from the child	Low levels of control
Parent-teacher meetings	0.16(-0.08-0.69), p=0.121	0.11(-0.27-0.86), p=0.307
Lectures for parents	0.01(-0.29-0.33), p=0.892	0.04(-0.36-0.56), p=0.672
scheduled one-on-one conversations	-0.04(-0.44-0.31), p=0.726	0.01(-0.54-0.56), p=0.965
scheduled one-on-one conversations at parents' initiative	-0.01(-0.29-0.28), p=0.972	0.09(-0.24-0.59), p=0.412
one-on-one conversations at the initiative of the class teacher	0.07(-0.25-0.47), p=0.543	-0.02(-0.59-0.46), p=0.817
conversation with the school pedagogue	0.02(-0.55-0.63), p=0.894	0.24(-0.34-1.39), p=0.236
conversation with the school psychologist	-0.19(-1.01-0.37), p=0.365	-0.07(-1.20-0.83), p=0.716
involvement in the Parents' Council	0.12(-0.29-0.82), p=0.351	0.11(-0.45-1.18), p=0.382
taking part in certain school activities	0.08(-0.48-0.91), p=0.539	-0.17(-1.65-0.39), p=0.225
exchanging written notes with the class teacher	0.03(-0.37-0.53), p=0.743	-0.04(-0.81-0.52), p=0.667

Parameters shown are: Beta (95% CI: Lower Bound - Upper Bound)

Discussions

The research conducted in this paper aimed to examine the connection between the family-school cooperation and parental involvement in education. The obtained research results indicate that different forms of parental participation school activities provide them with more information and ensure the professional knowledge about positive education practices that parents should use. The obtained statistical findings related to the examination of parental involvement in various forms of family-school cooperation show that the most common form of parent-school cooperation is parent-teacher meeting (93.4%), while one-on-one conversation at the initiative of the class teacher (23.7%) was given a lower score by parents. Variables that showed a statistically significant difference between fathers and mothers in their participation in various forms of cooperation with school are parent-teacher meetings and lectures for parents. Differences in perception regarding participation in various forms of cooperation with school, tested by the Chi-square test were in favour of mothers. The obtained findings show that attendance at parent meetings and lectures for parents is twice as common among mothers than among fathers. The results show that mothers are more interested in establishing cooperative relations with school, which in this context would imply greater need of mothers to develop parental competencies by achieving a balance in parental education practices.

The educational value of the relationship between family and school is contained in two dimensions: affective and control. The affective dimension is reflected in the acceptance, understanding, support, affection for the child, which is indicated by the results of this research that understanding and support is an education practice that is primarily used by parents (1.46 ± 0.42). As for the control dimension, restrictive upbringing, as one of its extremes, is characterized by the tendency of parents to impose numerous rules of conduct, and to insist on consistent adherence to them, which causes a low level of mental and physical freedom of the child. The results obtained in this research, within the stated dimension of control, indicate that parents are often distrustful of children (2.17 ± 0.66), but also advocate the view that the child has the right to his opinion (2.26 ± 0.82). The research also observed excessive protection, high control and

low control as aspects of parents' education techniques. Excessive control as an extreme of the control dimension to which a large number of educational rules are attached that inhibit the child's autonomy is not the dominant practice used by parents (3.48 ± 0.67), which shows us that parents clearly view this dimension of education as important in actualizing the child's potential. Permissive parental behaviour, as opposed to excessive control, is reflected in low control and flexibility in defining rules of conduct (3.58 ± 0.86). Lack of influence, lack of interest and withdrawal from the child can lead to more serious consequences for the child's development. The obtained results of the research indicate that lack of interest and withdrawal from the child are education practices which parents choose in certain situations. However, there is a statistically significant difference between mothers and fathers in the perception of education practices. Variables that have proven to be statistically significant in the analysis of the perception of parents' education practices are withdrawal from the child and low level of control. More frequent withdrawal from the child (3.82 ± 0.60) and low level of control (3.45 ± 0.88) are shown by fathers than by mothers.

The results of examining the influence of certain forms of family-school cooperation on the education practices of parents showed that there are differences in the perception of these education practices by fathers and mothers. Namely, the research findings show that following forms of cooperation between mothers and school have been identified: one-on-one conversations on personal initiative, conversations with school pedagogues and attending lectures for parents, are all predictors of observed aspects of mothers' education practices such as: excessive control, the child has the right to his opinion and withdrawal. Mothers' perception of the aspect of excessive control is influenced by one-on-one conversations on personal initiative ($\beta=0.295$, 95% CI: (0.084-0.711), $p=0.014$) and conversations with the school pedagogue ($\beta=0.294$, 95% CI: (0.042-0.794), $p=0.030$). The findings of the research indicate that mothers are aware of the need for cooperation in the form of one-on-one conversations on personal initiative and conversations with the school pedagogue. Namely, participation in forms of cooperation with school related to one-on-one conversations on personal initiative and conversations with the school pedagogue influences the creation of education practices in mothers from the aspect of parental high level of control, which can be understood as parental control growing into parental supervision, and those are not identical education practices. Parental supervision is associated with parents' active inquiry about the child's activities, so parental control associated with setting and communicating rules of conduct is encouraged after individual interviews with teachers and interviews with school pedagogues. Education-focused activities of mothers expressed through the aspect that the child has the right to his opinion are influenced by the form of cooperation with school lectures for parents ($\beta=-0.263$, 95% CI: (-0.773-0.038), $p=0.031$). Quality communication between parent and child allows the child to voluntarily tell the parent about their activities, feelings, etc., and that the child has the right to his opinion. The influence of the presence of mothers in lectures for parents, as a form of cooperation with school, is reflected in the perception of mothers that it is important for mothers to interact with the child, and in that way, the child takes greater responsibility for their own behaviour. Mother's withdrawal from the child is influenced by one-on-one conversations on personal initiative ($\beta=-0.329$, 95% CI: (0.104-0.652), $p=0.007$). Giving freedom to the child weakens the power of the mother's authority, which further implies withdrawal from the child. The form of cooperation with the school that implies individual conversations on personal initiative has an impact on shaping mother's involvement in education and their understanding that they are important emotional support in creating relationships with the child in the context of family functionality. School's involvement in the form of conversations at the personal initiative of parents, conversations with the school pedagogue and lectures for parents are forms of cooperation between family and school necessary for developing mothers' awareness of the importance of parenting.

Observed aspects of the father's education practices are lack of interest and the child has the right to his own opinion. Identified forms of cooperation between fathers and the school: participation in parent-teacher meetings, individual conversations at the initiative of the class teacher and participation in the Parents' Council, are predictors of observed aspects of fathers' education practices. Father's disinterest in the child is influenced by participation in parent-teacher meetings ($\beta=0.221$, 95% CI: (0.042-0.966) and participation in the Parents' Council ($\beta=0.357$, 95% CI: (0.309-1.641), $p=0.005$). Fathers' involvement in various aspects of school activities through participation in parent-teacher meetings and in the Parents' Council is an important component of the education process, which implies their interest in cooperative relationships and ways of involvement in the decision-making process. The participation of fathers in parent-teacher meetings and in the Parents' Council increases their interest in areas that are of immediate importance for the education of their children. Fathers' education practices that imply children's right to have their own opinion, are influenced by one-on-one conversations at the initiative of the class teacher ($\beta=-0.307$, 95% CI: (-1.178--0.15), $p=0.012$). The class teacher provides the parents with relevant information about the child and in that way tries to help parents in finding more adequate education techniques

when working with their children.

Namely, the research found that mothers and fathers both perceive the desirable pattern of behaviour in the parental role which is the view that the child has the right to his own opinion. Negative aspects of mothers' education practices are high levels of control and withdrawal from the child, while fathers mostly show lack of interest in the child. Identified forms of cooperation between family and school, based on parents' assessments, show that lectures for parents, conversation at the initiative of the class teacher, conversation on the personal initiative of parents and conversation with the school pedagogue, participation in parent-teacher meetings and participation in the Parents' Council, are forms of cooperation that need to be improved in order to raise the awareness of mothers and fathers about the importance of parenting.

Conclusion

The essence of the paper is the empirical approach used in the research, which aimed to examine the connection between family-school cooperation and parents' involvement in education. The results of the research show that parents mostly choose parent-teacher meetings as a form of family-school cooperation, and that mothers are more engaged than fathers when it comes to parent-teacher meetings and lectures for parents. The established form of cooperation between parents and school is the parent-teacher meeting, while the frequency of conversations at the initiative of the class teacher and the parents noticeably decreases as children get older. This finding partially confirms the initial hypothesis in the research that the most common forms of cooperation between parents and the school are parent-teacher meetings and conversations at the initiative of the class teacher.

Parents choose education techniques that will help them achieve their education objectives, taking care not to disturb the emotional relationship with the child. Education practices which parents use to establish interaction with the child, viewed through the affective dimension and the dimension of control, range from the basic feeling of acceptance and love, or rejection and conditional love, all the way to the process of guidance reflected in strict requirements, expecting obedience and showing power. Namely, parents' assessments of education techniques show that understanding and support is the education practice that is most frequently used by parents, while excessive control had a lower score. Differences in parents' assessments of education techniques tested by the t-test indicate that excessive withdrawal from children, as well as lower control are shown by fathers more than mothers. These findings confirm the assumption that there is a statistically significant difference between mothers and fathers in their perception of the education techniques understanding and support and excessive control (measured through eight aspects) in favour of mothers.

Examination of the predictive properties of independent variables was tested using linear regression. The obtained research results on the impact of certain forms of cooperation with school on parental involvement in education have shown that lectures for parents and conversations at the initiative of the class teacher are predictors in creating desirable patterns of parental behaviour by granting children the right to their opinion. Under the influence of the selected predictor variables: one-on-one conversation at parents' initiative, conversation with the school pedagogue, participation in parent-teacher meetings and participation in the Parents' Council on parents' education practices such as: high control, withdrawal from the child and disinterest in the child, parents' behaviour is altered in favour of modelling family relationships and providing optimal conditions for child development. Parent-teacher meetings are not a predictor of parents' education techniques, although this form of cooperation was most frequently chosen by parents. Moreover, understanding and support as an education technique that dominates parents' education practices with children in this case was not observed as the education technique. The hypothesis related to the predictors of parents' education practices has been partially confirmed: forms of cooperation with the school – parent-teacher meetings, lectures for parents and one-on-one conversations at the initiative of the class teacher are predictors of parents' education practices - understanding and support, and child has the right to his/her own opinion.

The results of the research presented in this paper are the evident indicator of the interdependence between the family-school cooperation and parental involvement in education. The research findings show the willingness of parents to gradually change their education techniques and requirements under the influence of various forms of parental participation in school activities, which provide them with more information and ensure the necessary professional knowledge for parents. The existing empirical results and theoretical definition of complex concepts of parenting provide an opportunity to interpret the findings and confirm the main hypothesis of the research: There is a statistically significant correlation between

certain forms of family-school cooperation and parental involvement in education. The obtained research findings indicate that the forms of cooperation between parents and school are reflected in the education techniques used by parents and that they are predictors of observed aspects of education practices of parents. Parents recognized the importance of cooperation with school, which can help them become more competent in the parental role, and to better understand the child's developmental needs and establish better communication with the child.

The results of this research shed light on certain aspects of parenting and the position of the child in the education process and are important for raising awareness of the parental role in education as well as for pointing out possible changes that need to occur to forms of cooperation between family and school. The diversity of parents' education techniques which they use to shape the family climate in terms of directing and guiding the child is more important from the aspect of general parental involvement in education, than a specific education style. Gaining empirical insight into the mentioned relations benefits further research and practice of education-focused activities of parents and school.

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Conflict of interests

The authors declare no conflict of interest.

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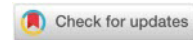
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Decline The Quality of Higher Education in Russia: Negative Consequences of Moving to Online Education

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Abstract: This article analyzes the possibility of online education to ensure the quality of higher education. A review of scientific literature led to the conclusion that in the Russian scientific discourse, the potential of online education to ensure the quality of higher education through the resource potential has not been studied. The goal is formulated as follows: to determine the sufficiency of online learning resources to ensure the expected quality of education in a social institution of higher education in Russia. The neo-institutional approach is the methodological basis. Before the empirical research, the basic concepts were operationalized: the quality of higher education, online education, quality resources of higher education. The operationalization resulted in the identification of two empirical indicators: 1) resources of students for obtaining quality education in the context of online education; 2) resources of professors to ensure the quality of education in environment of online education. They formed the basis for structuring the questionnaire. The same indicators are used to analyze the data obtained. The study found that the overwhelming majority of professors indicated a sharp decline in the effectiveness of their educational activities on the Teams or Zoom platforms. This includes a decrease in professional motivation and interest in the end result of work, mental detachment from students and indifference to them, increased anxiety due to fears of deteriorating health, indifference to professional development, loss of visual and non-verbal control over students, etc. The opinion of professors on the main positions is correlated with the point of view of students. However, there is a stable group of about 25% among learners that is focused on online education and demonstrates the belief that in the context of e-learning, resources for obtaining quality of education are increasing. We have formulated a proposal according to which this group of students should study in special online (digital) schools according to an abbreviated program, where accelerated vocational training is a priority.

Keywords: online education, quality of education, quality resources, institutional balance, transaction costs.

Introduction

Online education is gradually becoming an integral part of the educational process being implemented in the Russian Federation. The catalyst for this was the unfavorable epidemiological situation in the country. As of January 6, 2022, Russia ranks sixth in the world in terms of the number of infected citizens. Such statistics create objective conditions for changing public opinion in favor of the benefits of online education. First of all, because it is safer to study online, since the risks of contracting a dangerous infection are reduced. But, as you know, safety and quality are not identical concepts. For a long time, from its appearance in the 21st century and up to 2020, online education was viewed in public and scientific discourse as a low-status educational format, focused mainly on the poor, who lack financial resources to receive quality education. However, in connection with the transition of leading Russian universities to online education, it became necessary to check whether this form of education is really incapable of providing a high educational level. For two years now, the Russian educational

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system has been working in a mixed mode, combining classroom learning with learning activities on Teams or Zoom platforms. Professors and students have gained personal experience of working in the new environment. Now there is a unique opportunity to evaluate this experience. Its uniqueness is due to the fact that almost all Russian students and professors have acquired skills in both online and offline education. If the epidemic goes down, students and professors will return to the classroom and cease to be the sources of information needed to simultaneously evaluate both forms of higher education. As for modern generation of students and professors, they have such resources, using the opportunity to make comparisons and speak in a qualified manner about their attitude to online education, comparing it with their personal experience of education received in classical universities. This provision can be considered an exceptional research situation, which must be used in order to obtain the most objective data on the quality of education in online and offline.

In Russian sociology, both concepts - the quality of education and online education - have been studied in detail. Actual interest in the first of them was formed back in the 1990s, when there were many complaints and complaints about the work of higher education from the public. Hence, a large number of works, among which the dominant topic was the analysis of the content of concept of quality of education. In defining this concept, there are three main approaches: consensual, managerial and subject-oriented. In the first, quality is understood as an educational standard, jointly developed by the subjects of the educational space (Bondarevskaya, 2003; Gerasimov, 2013; Korneenkov, 2011; Selezneva, 2009). From the standpoint of a managerial approach, quality is considered as a positive result of the implementation of control and supervisory functions for compliance with the educational standard prescribed by the state in educational activities (Alieva, 2019; Galimov, 2011; Golovanova, 2019; Danyushenkov, 2017; Masalova, 2018). From the point of view of a subject-oriented approach, quality is equated with satisfaction (most often among students) with the results of the educational process (Zemlyanukhina, 2019; Sokolova, 2009; Tikhonov, 2013).

Despite the enormous scale of the existing discourse on the study of the quality of higher education, its sociological component contains a number of gaps and blank spots, among which the most urgent should be the lack of developed methodological foundations and the unclear criteria for assessing the quality of higher education in the unity of interests of its main actors. It seems to us that the main problem of sociological research in the field of quality assessment, regardless of whether we are talking about education as a process or a result, is to ignore the methodological possibilities of the neo-institutional approach. This paradigm is ideal for integrating the positions of the actors of the social institution of higher education. Integration of interests in this context is considered as an essential condition for ensuring the quality of educational activities. This can also become a cognitive tool in the study of the quality of education in the context of online education.

The number of publications on online education in the Russian scientific discourse is estimated at several thousand. But there are few works that touch upon the quality of higher education. On this aspect, three main approaches can be distinguished. Within the framework of the first of them, researchers believe that an acceptable quality of higher education using online education can be provided now (Grechushkina, 2021; Gul, 2014; Kryaklina and Rettikh, 2018; Smirnova, 2019). From the point of view of the second approach, the position is determined according to which quality can be ensured in the future when solving a number of problematic issues that have arisen in the process of implementing online learning (Gulaya, 2014; Ibodova, 2020; Kuznetsov, 2020; Olshannikova, 2020). Representatives of the third approach claim that the quality of online learning in the foreseeable future will be inferior to the classical one, because has limited capabilities (Ivanova and Morugova, 2020).

The analysis allows us to conclude that despite the vastness of the existing discourse both on the quality of education and on online education, there is one important subject aspect that has not been practically studied by specialists. The question is whether online learning resources have the appropriate potential to provide students with the expected quality of knowledge, skills and abilities when abandoning classical education. As a rule, all comparisons of both forms of educational activity are carried out formally, without taking into account the resource potential of both forms of education. Thanks to this, the controversy between supporters and opponents of online education is held as a competition of the power of belief in one's righteousness. As a result, the overwhelming majority of works replicate the same arguments "for" and "against", but there is no real increase in knowledge. We see the solution to this problem in the application of the neo-institutional approach to study the sufficiency of online education resources in ensuring the quality of education.

Therefore, the purpose of the research in this article is to determine the sufficiency of online learning resources to ensure the expected quality of education in a social institution of higher education in Russia. In other words, we are faced with the task of finding out whether online education does not lead

to a decrease in the generally accepted quality standard of higher education, and if it does, then in which quality components it is manifested.

Materials and Methods

The study is based on the neo-institutional approach (North, 1990). Its application will allow us to combine several concepts that form the theoretical framework of the subject field of research into a single consistent concept. First of all, we are talking about "Quality of education" and "Online education". Both concepts are embedded in the system of elections implemented by social actors of higher schools in Russia, the rationality of which is tested through the sufficiency of online learning resources to ensure the achievement of individual goals declared by the participants in the educational process. In Russia, higher education is traditionally focused on three goals, which are reflected in one form or another on the official websites of universities: training, scientific innovation, and socialization of students. An important role in the construction of the author's concept and the formulation of empirical conclusions is played by the category of institutional balance, detection (or absence) of which acts as a methodological indicator of the ability of the institute of higher education in Russia to ensure the quality of education. At the stage of analyzing the results of empirical research, the leading role belongs to the concept of transaction costs, through which the willingness of professors and students to spend individual resources on receiving either classical education or online education is assessed. It can be assumed that obtaining classical education is associated with the cost of more personal resources than online education.

The quality resource of higher education is a potential opportunity to provide the expected result of the educational process from the society and institutional actors. All existing resources are divided into several groups: social, material and technical, informational. The first group in terms of relevance includes professors, students and management personnel of the university. Potential opportunity in the indicated perspective consists of five components: intellectual, knowledge, methodological, motivational and communicative. The second group of resources is material and technical. These are premises suitable for educational and scientific studies, means of inclusion of people with disabilities, inventory, scientific equipment, technical means of creating, processing and transmitting information. Information resources are all potential channels of information transmission. In the context of the needs of online education, it should be especially noted that there are information programs, software simulators, information and communication technologies.

In order for respondents to assess the quality of education, each allocated resource was differentiated using the corresponding questions included in the questionnaire. The survey involved professors and students from eleven universities in a representative all-Russian sample. The sample population in the group of students was 2794 respondents, in the group of professors - 305 respondents. The sample type is improbable with the division of respondents into quotas. Selection criteria for respondents in the group "students": The level of educational background (bachelor's, master's, postgraduate studies), the direction of educational training (pedagogy and psychology; social sciences; engineering specialties; mathematics and computer science; economics and management; natural science; jurisprudence; physical culture; medicine; architecture and art), place study (name of the university). Selection criteria for respondents in the group "professors": Age (24-30 years old; 31-39 years old; 40-54 years old; 55 and older), area of knowledge (meets the criteria laid down in the group "students"), Scientific degree (doctor of sciences; candidate of sciences; without a scientific degree), place of work (name of the university). These criteria were used to form quotas and assign assignments between performers. The quantitative characteristics of quotas were determined on the basis of the proportional correspondence principle. The necessary statistics were taken from the website Unipage.net in section "Universities in Russia" (<https://www.unipage.net/ru/universities/best/russia>). The survey was conducted in the form of face-to-face interview. Data processing was carried out in the SPSS-22 program. Period of survey: September-November 2021.

Results and Discussions

As a result of the operationalization of basic concepts - the quality of higher education, online learning, quality resources of higher education, two empirical indicators were formulated: 1) students' resources for obtaining quality education in the context of online learning; 2) resources of professors to ensure the quality of education in an online learning environment. They formed the basis for structuring the questionnaire. The same indicators are used to analyze the data obtained.

All questions on the first and second indicators are defined as follows. First, the respondents are

asked to assess the resources of students (the first indicator) for obtaining a quality education in an online learning environment. The latter do it in a self-assessment format, and professors - from the perspective of experts. The following are questions aimed at identifying appropriate resources among professors (second indicator). When answering them, the teaching corps carries out self-diagnostics, and the students become experts. This technique was chosen in order to increase the representativeness of the survey. But, first of all, its use is justified by the chosen neo-institutional methodology. We need to confirm the existence of institutional balance, since it acts as a condition for ensuring the quality of education, regardless of educational technologies. The mismatch in value and target orientations will inevitably lead to a loss of students' trust in professors regarding their (professors) ability to provide the usefulness of the transmitted knowledge and skills (skills). We will assess the quality of education through such attributes as reference, consistency, trustworthiness, and usefulness.

The first type of resource is motivational. Realizing that the question of motivation is one of the most important for making a decision to switch to distance technologies, we asked a question in which we asked our respondents to give a direct answer about the state of motivation in online learning.

Table 1
The state of motivation to study online in comparison with the classroom, in %

Evaluation parameters	Results	
	Professors	Students
Changes for the better, tk. it's easier to tune in to study at home	6.3	22.4
Does not change; those who study in the classroom will also study intensively at home	26.7	43.5
It changes for the worse, because in the classroom, the motivation for learning is higher due to the supervision of the professor and the availability of a suitable learning environment	67.0	34.1

By category "motivation" online learning has a resource that improves the quality of education for 22.4% of the surveyed students. This indicator can hardly be called significant, since the group unites less than a quarter of the total number of respondents. Even the number of those who directly indicated a decrease in motivation outside the classroom is noticeably higher (34.1%). As for the largest group in terms of the composition of the respondents, its members can potentially be both supporters and opponents of distance learning. However, for us it is much more important that the transition to online is not considered by them as a factor that increases the quality resources of education. Whether it is true or not, this group declares a willingness to study in different educational formats with equal interest.

The expert assessment of professors, due to personal experience of interacting with students online, shows a sharp decrease in the motivational resource of students. 67% of all respondents insist on this. Only 6.3% saw an increase in motivation on online platforms and 26.7% noted that it does not change in comparison with the educational process in university classrooms.

The next type of resources is communicative. In a direct form, it is associated with the importance of social ties, which are traditionally formed in the system of classical education, and indirectly, with the influence of social communication on motivation for learning. When formulating the question, we opposed two extreme positions. One is based on the fact that classical education not only creates an appropriate intellectual environment for development, but also enhances the motivation for learning activities. The other is built on the idea that modern students are more effective when learning is carried out through individual educational technologies. If the second position is fair, then the role of the communicative resource will be insignificant.

Table 2
The ratio of the importance of training in a student group and on an individual educational trajectory, in %

Evaluation parameters	Results	
	Professors	Students
It is imperative to study in a group, because this gives additional motivation, spurs up competition and allows you to compare your achievements with the success of classmates	64.7	52.6
It is important to study in a group because in the future, this may provide the necessary social connections and meaningful acquaintances	56.0	50.0
There is enough intrinsic motivation to learn effectively on your own	14.0	22.9
It is more comfortable to study according to an individual educational trajectory	10.7	15.6

It is symptomatic that the majority of students (52.6%) chose the traditional model, which assumes that the key to high-quality education is the need for communication in the student group, referring to the growth of motivational resources, competition, and comparison of each other's achievements. Exactly half (50%) indicated that the role of student communication is manifested in the acquisition of social connections and acquaintances, believing that the usefulness of the education received will be higher if there are people who want to get a job in the profession they have acquired. Within the specified values, there was a significant decrease in the number of students who believe that intrinsic motivation is sufficient for effective learning (22.9%). Obviously, this decrease is caused by a more complete understanding of the internal motivational resource in connection with the hypothetical loss of the usual conditions for the educational process. And the choice of the opportunity to study according to an individual educational trajectory turned out to be completely insignificant (15.6%). From this perspective, it becomes clear that, in the opinion of students, in the conditions of individual learning (online learning), a communicative resource that is significant for them is leveled, and because of this, the rejection of online learning is actualized, as it is unable to provide the expected level of usefulness of the knowledge acquired.

The expert assessment of professors in all positions, adjusted for an even greater rejection of online learning resources, turned out to be comparable to the student's one.

In conclusion, let us turn to those resources that were previously touched upon superficially (intellectual) or were not considered at all (methodical, material and technical, informational). To solve this problem, the respondents were offered an integrated question focused on assessing the willingness of students to refuse to help the professor in mastering practical skills.

Table 3
Mastering the skills of practical activity in the context of online education, in %

Evaluation parameters	Results	
	Professors	Students
Modern technologies make it easy to teach any professional skills online	4.6	27.7
Certain types of educational activities (laboratory experiments, working out skills in work with clients, assessing current changes in society, etc.) cannot be mastered in a high-quality online mode	40.7	40.8
Practical work should always be assessed by the professor in the classroom	54.7	31.5

A significant part of students (40.8%) are focused on practical classes in a hybrid format, about a third (31.5%) - exclusively on classical education and a little more than a quarter (27.7%) - on online education. The range of opinions turned out to be very striking, with some bias in favor of the classical educational model. In any case, there were fewer categorical supporters of online learning than in the other two groups. This allows us to conclude that, in the opinion of the majority of students, they do not have enough intellectual, methodological and material and technical resources to ensure the quality of education in an online learning environment.

The expert assessment of the professors coincided with the student's only in one position - in the

group of supporters of hybrid learning. There are few specialists convinced of the possibility of ensuring the quality of education in the course of practical educational activities on electronic platforms (4.6%). There are many more opponents of online education (54.7%) who are convinced that this form of education does not have the resource potential to achieve the quality of education that meets the established benchmark standards of higher education.

Next, we move on to presenting the results for the second empirical indicator. In this aspect, the roles change: the teaching corps carries out self-diagnostics, and students become experts.

Traditionally, the most important resource of a professor is the ability to highlight the individual characteristics of students' perception of knowledge, skills and abilities, as well as promptly, that is, right in the classroom, to make appropriate adjustments to the educational process in order to provide an opportunity for all students, regardless of their personal abilities, to receive a quality education. A complex set of pedagogical resources is intertwined here, which includes the intelligence of professors, teaching methods, and types of interaction with students. Variable of the Table 4 is oriented on this.

Table 4

Possibilities of taking into account the difference in perception and different levels of students' abilities in the context of online education, in %

Evaluation parameters	Results	
	Professors	Students
Professor, deprived of the possibility of non-verbal control over the audience, is not able to check the depth of mastery of information	68.0	33.3
Professor should not control anyone, education is everyone's private matter	13.7	32.4
It is enough to conduct control testing to take into account the difference in perception and different levels of students' abilities.	18.2	34.3

The resources of professors, traditionally involved in classroom work, cannot fully manifest themselves in the context of online learning due to the loss of visual control and non-verbal communication. This outcome is obvious to everyone. However, it is quite reasonable to raise the question of the advisability of such resources. It is believed that in modern conditions this is an excessive luxury that can be replaced by simple testing. There is also a point of view according to which only those who really want it should receive education, which implies the refusal of motivational efforts on the part of the professor ("Professor should not control anyone, education is everyone's private matter" (13.7% / 32.4%)). The position of the majority of professors on this aspect remains orthodox. A professor is an active participant in the educational process, directly helping students to acquire knowledge, skills, and abilities (68%). The other two positions did not find a great response when choosing the answer options. Particularly noteworthy is such an option as distrust of testing. This is very important because the loss of the ability to visual control largely makes the question-answer model of interaction between professor and student meaningless. Explanations, I think, are superfluous. The student can easily find the answer on the Internet in order to inflate his real knowledge in a dishonest way. Taking tests is no exception. Our personal experience of testing students on online platforms shows that, as a rule, they have the same, close to ideal, level of mastery of information. It is permissible to assume, based on the results of survey of professors, that online education resources do not provide an opportunity to adequately assess the quality of the education received, and therefore take into account the difference in perception and different levels of students' abilities.

The expert position of the students revealed the proportionality in the range of opinions. The proposed answer options divided the student body into three groups of the same size. The choice of the second set point is clear to us. Apparently, many respondents were irritated by the wording with the word "control". Not everyone is ready to admit that they need control. As for the choice of the third answer option (34.3%), it can be assumed that education is not so valuable for everyone as to voluntarily place oneself under the tutelage of a professor when there is an opportunity to get education with less effort. It is more difficult to study in a real classroom, and the complication of educational activities should have a meaning equivalent to the increasing resource costs. Therefore, a conscious choice to reduce the resource potential in the context of online learning among some of the students may reflect a low level of educational needs.

The latter hypothesis led us to the need to ask an additional question about the problem of “dishonest testing”, which will allow us to evaluate the information resource of online learning.

Table 5

Evaluating possibility of proctoring to solve the problem of “dishonest testing”, in %

Evaluation parameters	Results	
	Professors	Students
It can always made a way to bypass control in online mode	68.8	37.7
Developers of proctoring and other tools will cash in on development "anti-proctoring"	25.2	18.1
Technological progress provides reliable technologies for monitoring students	20.5	52.1

The majority of professors explain the ineffectiveness of testing by the inventiveness of students in coming up with ways to bypass technical control (68.8%) and the help of IT specialists in developing appropriate programs (25.2%). Among the students, a proportional division was again revealed: one half believes in the possibility of solving the problem of assessing the qualitative assimilation of information with the help of tests, the other - at any level of development of information resources, doubts the reliability of the results. Of course, this does not mean that the first half is in favor of online learning. The reason for such a loyal attitude towards testing, apparently, is the desire to get out of the control of the professor at the stage of knowledge testing in the form of exams. The test is desirable for students who are not motivated to learn.

As well as in relation to students, the professor’s motivational resource plays an important role in ensuring the quality of higher education.

Table 6

Will formalization of the educational process online prevent the professor from working with high quality and enthusiasm, in %

Evaluation parameters	Results	
	Professors	Students
Yes , face-to-face contact format is an educational environment where a student and a professor mutually develop in a dialogue mode	75.0	59.9
Yes , professor outside of work in the classroom will lose motivation to work and improve his professionalism	39.9	23.3
No , professor should not entice and motivate anyone, his role is to convey information and check its high-quality assimilation	12.2	22.2
No , professor is a provider of educational services who, in all conditions, works formally	6.4	18.0
Professor is able to work efficiently and with enthusiasm even in online conditions	2,3	17.8

The wording of the question, transferred without adaptation to the title of Table 6, reflects our hypothesis, according to which online learning is a technocratic model of the educational process. In this model, the role of the professor is transformed from dialogue interaction to supervising the study group. In this status, the professor’s functions are implemented through the broadcast of information content, which potentially leads to the formalization of the educational process. As a result, one can expect a decrease in the motivational resource of professors, as well as a loss of the ability to satisfy the students’ need for intellectual and spiritual development. We have proposed to assess the likelihood and significance of this risk.

Three quarters of the instructors responded by stressing the need for real-world learning. Failure to do so is actually equivalent to the loss of the basic types of educational resources necessary for personal development. In addition to this, 39.9% indicated a decrease in motivation for professional activity due to work outside the classroom. The percentage of those respondents who did not update the risk stated in the title to the Table 6 is insignificant.

The expert assessment of students, in general, confirms the layouts obtained by the professors, but

with a lesser degree of expressiveness of positive values.

The study showed that there is a stable group of about 25% among students, which is focused on online learning. The same number of convinced opponents. About half are aimed at hybrid education, in which e-learning elements perform complementary functions, playing the role of an additional resource that improves the quality of higher education. An analysis of student and faculty attitudes towards online learning was done through quality resources of higher education. He found that the overwhelming majority of professors and most of the students choose education based on classical principles as a priority. At the same time, it is very important that the positions of students and professors on the main points of assessment coincide. This testifies to the presence of institutional balance in the system of higher education in Russia. The goals of its two main actors and the means of achieving them in the main positions coincide.

At the same time, there is a group of students and professors focused on online learning. It can be hypothesized that this group is heterogeneous in its target orientations. Some of the actors may be true supporters of online education, convinced that this format of education will not lead to a decrease in its quality. But it is assumed that it additionally included students and professors for whom education, and therefore its quality, has no significant value. Let us check this assumption in two parameters: the size of the educational group (Table 7) and the attitude to the quality of online education among its supporters and opponents (Table 8).

Table 7

Matching the size of the study group that is optimal in terms of the number of students in the estimates of supporters and opponents of online education, in %

Evaluation parameters	Results		
	Supporters of online education	Opponents of online education	Expert group of professors
Less than 5 students	3.5	10.2	12.1
5-10 students	13.7	23.7	24.0
11-15 students	25.4	26.2	27.4
16-20 students	32.8	25.8	21.1
More than 20 students	24.6	14.1	15.4

A few words in support of the first parameter. Every professor knows what is easiest and most effective to work with a small group. You can interview the same students every day, involve the whole group in a discussion of a problem, keep everyone in the focus of their own attention, not allow students to divide practical classes into those where they should participate in the work and where it is not necessary, because agreements between the students will be made by other students. In small groups, the student is forced to prepare for all the seminars and for each question of the homework. Meanwhile, in Russian universities, the composition of groups for practical classes, as a rule, forms 20-25 students. This is much more than is required for the high-quality organization of the educational process. In order to somehow reduce the negative effect of large groups, professors in the course of the lesson often divide them into several smaller ones. In the online format, where the mechanisms of visual and non-verbal interaction practically do not work, all of the above problems become even more urgent. Moreover, the professor is forced to work with each student separately, since he cannot see what other students are doing at that moment. In this regard, the demand for reducing the size of the study group is growing even more. This leads to a direct correlation between the student's interest in quality education and the size of the group: the smaller the group size, the potentially higher the interest. All of these problems are becoming even more urgent. Moreover, the professor is forced to work with each student separately, since he cannot see what other students are doing at that moment. In this regard, the demand for reducing the size of the study group is growing even more. This leads to a direct correlation between the student's interest in quality education and the size of the group: the smaller the group size, the potentially higher the interest.

In this context, the results obtained in Table 7 are of particular importance. They are presented in three columns. In the first two, the positions of supporters and opponents of online education are recorded. The third section gives an idea of the optimal size of the study group of those professors who spoke in favor of the transition to online education. It is indicative that the positions of students who are opponents of online education and supporters of online education among professors coincided almost identically. We do not question the attitude of the teaching staff to ensure the quality of education. Consequently, their position is perceived as close to the standard. In the data obtained, it is easy to see

that small and medium group sizes are chosen as preferred by students opposed to distance learning, and by professors, focused on online learning. This paradox can only be explained by the fact that in the group of online education supporters there is a higher percentage of students for whom the quality of education is of no significant value.

The second parameter is about the attitude towards the quality of education. Applies to students only.

Table 8

Attitude to the quality of online education in the assessments of its supporters and opponents, in %

Evaluation parameters	Results	
	Supporters of online education	Opponents of online education
People tend to make things easier for themselves to make it easier to solve.	25.8	69.6
Reducing the role of the professor as a guarantor of quality and the abolition of classical education will lead to the elimination of the concept "quality standard "	22.5	61.2
The role of the professor is not essential to ensure the quality of education	33.1	6,7
The quality of education is a subjective concept, it can be easily assessed by any student independently	60.3	4.0

The pairing of results in both groups actually revealed a rift between students on the question of the possibilities to ensure the quality of education in environment of online education. The data show the incompatibility of ideas about quality and, probably, the need to separate such students into educational institutions of different types. But, returning to the search for negative goals in online education on the part of a certain part of the actors, it is easy to see that at least a quarter of students admit the likelihood of a decrease in the quality of the education they receive due to the transition to distance educational technologies. It is significant that they understand and realize that the level of education will decline, but at the same time support the transition to online education. This conclusion is confirmed by the conjugation of attitudes towards the goals of education and the quality of education. We have identified fictitious learning as one of the goals of education. Since in Russia state funding of universities is carried out according to the number of students studying, the administrations of educational institutions secretly prohibit the expulsion of those who study not well enough. Because of this, a large stratum of formally enrolled students has formed in state universities. They study imitatively, with the intention of obtaining a diploma with a minimum investment of time and intellectual resources. In their view, it is this type of behavior that is considered as the most rational. This education goal was chosen by 24.4% of those who would like to transfer all education in their university to the Teams or Zoom platforms. Among the opponents of distance learning, only 5.3% made this choice. As it can be seen, the difference in values turned out to be significant, which confirms the hypothesis that among the supporters of online education, a greater number of students are set to minimize the resources spent (transaction costs) and, accordingly, to the result with the worst quality of education.

Conclusion on two parameters. In the student group of supporters of online education, the percentage of students focused on reducing educational activity is higher than in the student group of opponents of online education. Distance learning for such students is a convenient opportunity to hide their indifference to the acquisition of knowledge and professional skills, which ultimately leads to a decrease in the quality of education.

Conclusions

Among the students, three groups, uneven in size, were formed. The first (as minimum - 20-25%) includes active supporters of online education. It is characterized by the belief in the possession of intrinsic motivation for independent and placed outside the professor's control of learning, and low requirements for the quality of education, which can be traced through the acceptance of the limited set of resources that online education has. There is a willingness in this group to learn not only on Teams or Zoom, but also to move completely to e-learning standards. The second group (25-30%) are supporters of classical

education. In their opinion, online education does not have the necessary amount of resources to ensure the required quality of education. The third group (45-50%) can be attributed to the category of undecided, or, most likely, focused on the search for some kind of hybrid model, in which online learning resources should be applied complementary. This is an additional resource that needs to be somehow built into the classic format in order to improve the quality of education.

As for the professors, the general conclusions can be transferred to these actors of the social institution of higher education. However, the size of the groups identified on the example of students will sharply shift towards opponents of online education, since, in their opinion, it has a scarce set of resources to ensure the quality of higher education.

In conclusion, we will formulate specific proposals on how to optimize the use of online learning resources. The proposals formulated below are consistent with the goal stated in the Introduction: to determine the sufficiency of online learning resources to ensure the quality of education in different segments of the educational process of higher education. If we take into account the results of empirical research, then it is quite acceptable to say that online education does not have sufficient resources.

The overwhelming majority of professors indicated a sharp decline in efficiency in their educational activities on the Teams or Zoom platforms. This includes a decrease in professional motivation and interest in the end result of work, mental detachment from trainees and an increase in indifference towards them, increased anxiety due to fears of deteriorating health, indifference to professional development, loss of visual and non-verbal control over students, etc. In general, professional degradation of professors in the environment of online education can be expected. Already on the platforms, MOOCs are used to organize the verification work of former students. Obviously, this is the further way of transforming the resource base of professors - falling to the level of an ordinary consumer of information services, equated to a certified specialist in the MOOCs environment. The activities of the Ministry of Science and Higher Education of Russian Federation, which literally stands for "online-transformation" of higher education, in this context should be considered extremely negatively.

Assessment of student resources cannot be so linear. The survey showed the presence of at least three groups in which different characteristics are given to both their own resources and the resources of professors. A frequency analysis was carried out, and all the necessary pairings were made for groups of supporters and opponents of online education. The views of those who deny that online education resources are sufficient to provide the required standard of quality in education is almost identical to that of the teaching staff. And the number of such students, depending on the type of the estimated resource, fluctuates in the range of 55-85%. However, the position of supporters of online education in the student environment is diametrically opposite in almost all respects. And it is precisely this circumstance that presupposes the necessity of reforming higher education in Russia.

Here we will restrict ourselves to a few recommendations. The depth of reforms should not be excessive. The large-scale introduction of online education can only harm the social institution of higher education. We have seen that in most aspects related to the quality of education and online education resources, the positions of social actors (professors and students) do not contradict each other. If we exclude from the comparison those students who advocate the transfer of all education to the online format, then it is permissible to say that educational activity in higher education is based on a stable institutional balance. This does not mean that there are no problems or there are no mutual claims. There are many of them. But the institutional framework of the classical school, which developed through the interaction of professors and students, does not need global transformations.

First proposition. The growth of the number of supporters of online education in modern society is due not only to its convenience, but also to the decline in the quality of education in classical universities. This is largely due to the pressure of managerialism, work on indicators that are not supported by real quality. Its provision depends on difficult conditions and difficult, intensive activities, which the administration of Russian universities is not interested in. As a result, the indicators break away from the content and begin to form an imitation reality, and the category of quality is replaced by quantity. In these conditions, educational work with students is carried out according to the residual principle. What happens in classrooms doesn't have a big impact on reporting metrics. In this regard, the main resources are spent on activities that are insignificant for the implementation of the educational function. Students have the feeling that no one is seriously interested in their teaching, and this reduces their faith in the professor's ability to teach students socially and professionally significant skills. To ensure that the credit of trust in universities on the part of students is not completely spent, it is necessary to abandon the work on quantitative indicators.

Second proposition. It has a more specific character. About half of the students surveyed expressed a desire to switch to a hybrid education model. It may include trainings by renowned practitioners

connected to a real audience on the Teams (Zoom) platform, the possibility of synchronous broadcasting of classes for disabled or temporarily disabled students, participation in various forms of extracurricular work (conferences, independent work of students, consultations). It would be wrong to ignore the wishes of students. Moreover, the implementation of the idea of hybrid education in the presented form is quite capable of bringing the quality of higher education to a higher level. To achieve this goal, all classrooms should be equipped with interactive whiteboards or at least projectors. We need appropriate video cameras and other equipment to organize synchronous online broadcasting to the student audience. This will allow this idea to be put into practice. Undoubtedly, this innovation requires financial investments, but if the management of universities, not in words, but in fact, is ready to contribute to the improvement of the highest quality and satisfaction of students, then these investments are justified. At the moment, the introduction of remote technologies is going in a different way, through the choice "course-sacrifice", which is not a pity to translate online. Most often, those academic disciplines are chosen that professors could not protect from transformation into an online format. The origins of this situation stem from the obligations of the administration of universities to transfer at least one training course to an electronic resource so that the target obligations of the federal Program for the Development of Education for 2018-2025 are fulfilled. to involve 11 million students in online courses by 2025. These figures themselves are not supported by scientific research, but are given as a target imperative. Fulfilling them objectively will lead to a decrease in the quality of education. Therefore, the training course is chosen that is considered less important. As a rule, the victims are history, philosophy, a foreign language or physical culture.

We propose to abandon the removal of certain disciplines from the curriculum in order to translate them into an online format, and to integrate online education itself into classroom education by creating appropriate technical conditions that will provide synchronous connection to classrooms for students with disabilities, temporarily disabled students, well-known specialists practitioners, and will also significantly expand the possibilities of out-of-class interaction for consultations, conferences, methodological seminars, department meetings.

Third proposition. The main takeaway from all of the research we have come to is that online education resources do not have sufficient capacity to ensure the quality of higher education. First, this is indicated by a sharp decline in the volume of social resources for professors and the majority of students on Teams, Zoom platforms. Secondly, due to the lack of the required amount of other types of resources: logistical and informational. This is manifested in the insufficient power of the Internet, a small number of classrooms equipped with suitable technical resources, the absence of training simulacrum programs, and more. Also, one cannot ignore the fact that the provision of the listed resources is impossible without large financial investments in universities. The transition to online education will lead to a massive reduction in professors and reduce the burden of government spending on the payroll, but at the same time, it will actualize the risks of not achieving quality. Traditionally, all education is based on the transfer of culturally significant experience from person to person, and there was no other practice of organizing it. It is possible to destroy a working model and not get anything of equal value in return.

Historically established classical education is the most optimal for ensuring the quality of higher education, which was confirmed by the opinions of the main social actors. However, one cannot but take into account the aspect that about a quarter of the total number of students support online education. Therefore, they must be given such an opportunity.

Making conjugations for different variables, we found that the group of online learning supporters falls into two categories of students. The first consists of highly motivated learners focused on an individual educational trajectory, with the desired perspective of professional interaction in networked communities. The quality of education is of value to them, but only in the context of acquiring professional skills. The second group consists of students who view any education as a useless and, accordingly, costly luxury. It has significance only as a condition for obtaining a diploma of exclusively symbolic value. Consequently, this category of students is aimed at minimizing all spent resources.

We consider that, albeit for different reasons, both of these groups would be justified to move to e-learning. This does not mean Teams or some similar resource, but electronic in the form of online learning, which at this stage can only be obtained on MOOCs platforms. As we consider, both of these groups are ballast for the social institution of higher education in its modern form. Supporters of online education are aimed at a sharp reduction in learning time and activation of the internal motivational resource, which will give them the opportunity to quickly get a profession and go into "adult life"; opponents of online education are guided by long-term learning activities, gradual mastery of a profession with the possibility of subsequent retraining or leaving for science, orientation towards an external standard of quality of education and expectations of mobilization of motivational potential from the teacher. It is clear that maintaining institutional balance requires such students to study in different types of educational

institutions. Online for the first of them is the most optimal option. But the teaching of this group of students should categorically not be carried out in the institutional space of classical education. In this regard, we propose to create appropriate digital schools, which would be given the right, subject to the necessary conditions, to issue state diplomas of higher education. Such schools should be provided with all the necessary material, technical and information resources. Education in them must be paid, because any form of online education requires a large amount of financial investment. The most costly of them is the development of simulation programs that could recreate the intellectual and methodological resource of professor in electronic space. Currently, these programs are practically not used. Consequently, the formulated proposal is forward-looking, and now it would be rational to abandon the forcible transfer of state universities to online education and return to the proposed reform at an appropriate level of information technology development.

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Conflict of interests

The authors declare no conflict of interest.

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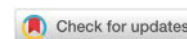
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Partnership of Parents of Children who Need Additional Support in Learning and Preschool Teachers in Preschool Institutions from the Perspective of the Integrated Approach to Learning

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Abstract: This research focuses on the collaboration between preschool teachers and parents of children who need additional support in learning in kindergarten through the prism of the integrated approach to learning. The research was based on a general assumption that the success of the cooperation between preschool teachers and parents of children who need additional support in learning is inconsistent and with varying efficacy. The research was conducted in the 2019/2020 school year, on a sample group of 52 preschool teachers. The data collected by the Scaler Family involvement questionnaire ($\alpha = .086$) were analysed using descriptive statistics that showed that there are significant differences in preschool teachers' assessment of mutual information sharing and activities of parents within the family, while there are none regarding parents' participation in kindergarten activities. The results of the research are presented in the form of the conclusion, with pedagogical implications provided alongside.

Keywords: kindergarten activities, music, educational activities, interdisciplinary team, pedagogical competencies of parents.

Introduction

The integrated approach to learning is the functional connection and coordination of educational fields and programs that are similar or that complement each other in the realization of planned objectives. That means that being knowledgeable in one area of educational work contributes to and helps with the better acquisition of content of the other educational area ([Pravilnik o osnovama programa predškolskog vaspitanja i obrazovanja „Godine uzleta“ iz 2018](#); [Pravilnik o bližim uputstvima za utvrđivanje prava na individualni obrazovni plan, njegovu primenu i vrednovanje iz 2018](#)). Based on these facts, a preschool teacher should be "...a participant in an innovative educational process, with the aim of tracking and achieving professional and scientific goals in order to improve his/her practice." ([Jeremić, 2012a, p. 99](#)). They are expected to be an innovator in this process and a coordinator in an interdisciplinary team that works to improve the educational profession and preschool education in general. They should not be a marginal person but a professional who "...uses an integrated and interdisciplinary approach to implement, research, and improve the education process." ([Jeremić, 2012a, p. 101](#)). This learning model strives to achieve a "...stronger connection of different education areas without a clearly recognizable boundary in the realization of planned goals and objectives, whereas the knowledge that is adopted and applied in different situations becomes more permanent and easier to apply" ([Mićanović and Novović, 2018, p. 630](#)). The integrated approach to learning emphasizes the intellectual, social, emotional, and aesthetic development, supports the overall development of the child and does not focus solely on individual and mainly cognitive aspects.

The principles of collaboration between the preschool institution and the preschool teacher with the

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family and children' parents are based on honesty, trust, gradualness and bidirectionality and diversity. (Pavlović Breneselić and Krnjaja, 2017). Under the conditions in which the child has a chance to express their idea, interest, etc., children who need additional support in learning will receive support from their peers or another solution that will branch the topic into additional directions, which will encourage preschool children to think, cooperate, and participate in other kindergarten activities. Just as the parents need to be familiar with their child's stay in the kindergarten and their participation in activities, communication with other children, their psychophysical progress, so too the preschool teacher needs to be familiar with the circumstances in the child's family, with the aim of the child's overall wellbeing. As a multidimensional process, this cooperation requires additional time and patience by all participants and a partnership between the preschool teacher and parents, including the competencies of the preschool teacher to cooperate with the parents (Milenović and Jeftović, 2012a), but also the pedagogical competencies of parents to cooperate with preschool teachers (Milenović and Jeftović, 2012b). The collaboration between parents and preschool teachers using the integrated approach to learning finds its application in music activities as well. Children develop functional abilities by performing music through singing and playing instruments. Musical activities are also important because music can point out certain developmental disabilities of preschool children (Jeremić and Markov, 2015). This is indicated by the results of some studies that prove that music can be used to identify certain indicators that hint at possibilities of different developmental disabilities (Ilić, 2010). That way, music can be a tool to identify symptoms in children with Down's syndrome (Pienaar, 2012), autism, ADHD (McFerran, 2009), and other disorders in children's development and obstacles in education and learning.

Jeremić and Markov (2015, p.796) ask the question: how can we adjust the education process to children who need additional support in learning so that they feel pleasant and accepted? The answers are precisely in music, which affects people, especially preschool children, through emotions (Vickhoff, 2008). Music also triggers communication in which messages are transmitted with singing and/or playing, and communication happens through emotions (Jeremić, 2012b). The messages transmitted by music should be adjusted to the needs and cognitive abilities of children that need additional support in learning, whereby it is important to consider the social aspect of project activities that are realized in preschool institutions (socialising, group work), as well as the feeling of altruism and empathy in these children (helping, self-respect, a sense of personal worth) as important factors of their motivation. This is confirmed by additional more recently published studies on this topic (Jeremić and Milenović, 2020; Milenović and Minić, 2021).

Materials and Methods

The research aims to determine whether there are differences in the beliefs of preschool teachers about the quality of their collaboration with parents of children who need additional support in learning and the preschool institution within the integrated approach to learning. The research started from the general assumption that the success of cooperation between preschool teachers and parents of children who need additional support in learning varies, that not all preschool teachers cooperate equally with the parents of these children, so for this reason, the different assessments of preschool teachers about the educational efficiency of their cooperation with the parents of children who need additional support in learning are understandable. The research was also based on special assumptions that the research will identify the differences in preschool teachers' assessments about the mutual information sharing between the parents of children who need additional support in learning and the preschool institution, as well as the inclusion of parents of these children in the activities in preschools.

Sample and Procedure

The research covered 52 preschool teachers who worked with children who need additional support in learning, and who assessed the collaboration between the preschool institution and parents of children who need additional support in learning during the 2019/2020 school year.

Instrument

A standardized combined instrument was used to assess the above collaboration – Parental Involvement Scaler with two sub-scales: 1) *Mutual information-sharing between parents and preschool teachers (MI)* and 2) *Parental involvement in kindergarten (PIK) that was partially adjusted for this research (Fantuzzo, Tighe and Childs, 2000)*. After a correction, the reliability of the instrument was tested using Cronbach's alpha coefficient, which showed a very good value ($\alpha = .086$). The scaler consists of 14 items

with a three-level scale of frequency intensity: 1) always, 2) often and 3) rarely. In addition to choosing one of the answers for each item, there is also an option to leave a short comment regarding the reasons for choosing the particular answer.

Statistical analysis

The data collected for the research purposes were analysed using descriptive statistics in the statistical software IBM SPSS 24.0, and the results of the research are shown in the form of tables.

Results and Discussions

Table 1 shows the results of the χ^2 test that was used to assess the differences in answers given by preschool teachers on the subscale MI.

Table 1

Mutual information-sharing between parents and preschool within the integrated approach to learning from the point of view of the preschool teacher

Items (The parent of this child...)	Always		Often		Rarely		χ^2	P
	F	%	f	%	f	%		
a1 Talks to the preschool teacher about how their child gets along with other children in the kindergarten.	29	55.76	17	32.69	6	11.53	15.269	.000
a2 Is interested in pedagogical education in order to improve their parental competencies.	10	19.24	14	26.92	28	53.84	10.308	.005
a3 Informs me about the interests and affinities of the child so that I can get to know them better.	27	51.92	18	34.61	7	13.46	11.577	.003
a4 Is familiar with the extent to which the child participates in everyday tasks in the kindergarten.	32	51.53	18	34.62	12	23.08	19.077	.000
a5 Attends parent meetings to stay informed about the child's success and behavior in kindergarten.	31	59.61	16	30.77	5	9.62	19.654	.000
a6 Exchanges information about the child with the preschool teacher in writing as well.	29	55.77	14	26.92	9	17.31	12.50	.001
a7 Initiates a conversation with the preschool teacher when there is a problem or they need a detailed explanation in regards to the child's education.	18	34.61	14	26.92	20	38.47	1.077	.583

The analysis of the results presented in Table 1 shows that most parents of children who need additional support in learning (53.84%) are rarely interested in pedagogical education with the aim of improving their parenting competencies with the support from preschool teachers. According to the observations of preschool teachers in the context of the integrated approach to learning, a total of 23.08% of parents rarely show interest regarding the degree to which their child participates in everyday activities in kindergarten.

The results of the conducted research are in line with some other studies that also points out the importance of pedagogical education of parents from the aspect of support children receive from their family environment (Milenović and Jeftović, 2012b). The presented results of the research also indicate the need for parents to gain trust in all preschool employees with the aim of developing a partnership between the parents and the preschool institution, in order to be able to openly communicate any problems. Pedagogically trained parents will be able to cooperate more efficiently with their children's preschool teachers. They will also have a more consistent educational effect on their children in the family environment, all in cooperation with preschool teachers. This achieves an additional effect that refers to greater connection and cooperation between the parents of all children, both in a certain educational

group and in the entire kindergarten, which is especially indicated by the results of the research shown in Table 2.

Table 2

Parents involvement in kindergarten activities within the integrated approach to learning from the point of view of preschool teachers

Items (The parent of this child...)	Always		Often		Rarely		χ^2	p
	f	%	f	%	f	%		
a1 Volunteers in different activities organized in their child's educational group.	11	21.15	12	23.08	29	55.77	11.808	.002
a2 Participates in social activities that are organized for socializing of all parents.	9	17.31	11	21.15	32	61.54	18.731	.000
a3 Participates in planning group activities.	14	26.92	17	32.70	21	40.38	1.423	.490
a4 Participates in kindergarten activities as a spectator.	10	19.23	9	17.31	33	63.46	21.269	.000
a5 Plans and programs activities with the preschool teacher.	14	26.92	6	11.54	32	61.54	20.462	.000
a6 Supports other parents.	12	23.08	16	30.77	24	46.15	4.308	.116
a7 Participates in activities related to fundraising in the kindergarten.	14	26.92	20	38.47	18	34.61	1.077	.583

By analysing the results presented in Table 2, based on the observations of the preschool teacher, we can see that the parents of children who need additional support in learning participate in kindergarten activities in a smaller percentage. We observe that a large percentage of parents rarely attends kindergarten activities as spectators (63.46%), participate in planning and programming of activities with preschool teachers (61.54%) and activities that are organized for parental socialization (61.54%).

The results of the research show that a smaller percentage of parents and children of the mass population is ready to participate in kindergarten activities; therefore, with that in mind, preschool institutions should take steps that would encourage parents to participate in planning and programming of learning activities together with preschool teachers and other professionals (Milenović and Jeftović, 2012a). If parents see that they are respected by preschool teachers and professional associates they will more eagerly participate in kindergarten activities. Encouraging families to engage within the integrated approach to learning also means inviting family members to attend kindergarten activities. The preschool teacher should encourage parents to relax and play and to emphasize that winning is of secondary importance and that in early childhood the process of learning is much more important than the outcomes and results. Preschool teachers and professional associates should talk to parents about how they can guide the child's behaviour by presenting them with specific strategies useful for achieving positive results. The collaboration between parents and the preschool institution can be further encouraged by the support from special educators and speech therapists, which is specifically defined by the Rulebook on additional educational, health and social support for children and students from 2018. The Rulebook stipulates that special educators and speech therapists provide support to both parents and preschool teachers. It is exactly the following of the recommendations of special educators and speech therapists and their consistent application in kindergarten and the family environment that will contribute to the strengthening of cooperation between preschool teachers and parents.

Conclusion

This research concludes that the collaboration between preschool teachers and parents of children who need additional support in learning in preschool institutions from the perspective of the integrated approach to learning in the realization of project activities is achieved with varying intensity and inconsistently, depending on individual preschool teachers. That is why the expected educational efficiency of this cooperation is missing. It is precisely the integrated approach to learning that enables families to actively participate in the education of their children in public, to become aware of their latent needs and capacities, and to develop parenting competencies. The integrated approach implies that, in addition to children and preschool teachers, parents are equal participants in the education process; in that sense,

they should be informed about the development of their child at all times by professionals employed in the preschool institution. Additionally, it helps parents by allowing them to get involved in kindergarten activities, because by participating in the activities they will spontaneously acquire pedagogical knowledge that will improve their parenting competencies.

By participating in the activities, parents can see the abilities of their children in relation to other children and understand that their child progresses at their own pace or that the child requires support from preschool teachers and other professionals. Preschool teachers and professionals will determine which learning style is most suitable for the child with developmental disabilities and further adapt it to the child. Encouraging parents to participate in kindergarten activities will contribute to parents understanding that they are welcome in the preschool because, by participating, they confirm that they are equal participants in the education process. Through more frequent contact with preschool teachers and other practitioners, parents will start a collaboration based on sincere trust, as this process has the child's well-being and achieving its functionality for the next level of education and everyday life as the ultimate goal. All of that indicates the need for providing guidelines and implementing practical procedures that would contribute to better cooperation between the preschool institution and the parents of children who need additional support in learning within the integrated approach to learning.

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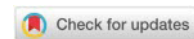
Conflict of interests

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Criterion-Based Review of Teachers' Classroom Performance in The Philippine School in Dubai: Administrators' Perception vs. Teachers' Self-Review

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Abstract: Many Philippine schools overseas encounter unyielding challenges, with the irresistible majority of teachers getting outstanding ratings, making it challenging to classify which teachers are genuinely exceptional. In specific instances, the evaluation of teachers' classroom performance validates the organizational policies of classroom management. Otherwise, the effect of poor classroom performance is immense, predominantly on the part of students. It is because of this motivation that the authors utilized a quantitative research design to examine the level of teachers' classroom performance using the criterion-based review model on various criteria. The measure is based on weighing the perspectives of purposely selected school administrators and teachers at The Philippine School in Dubai. This paper also explored the significant relationship between the teachers' profile and classroom performance, and the difference between the perspectives of school administrators and teachers' self-review to facilitate and impede meaningful performance review. The results adhere to continuing practices that will increase knowledge, enable impactful learning, develop critical thinking skills, improve problem-solving ability, and equip teachers with pedagogical competence. The findings revealed that both school administrators and teachers shared realistic feedback about teachers' classroom performance.

Keywords: classroom performance, teacher evaluation, teacher performance, criterion-based review.

Introduction

As teaching has become a fundamental emphasis of educational policy attention, teacher evaluation is currently the leading means being encouraged to enrich it. Teacher evaluation, in general, refers to the official process by which a school reviews and rates teachers' performance and effectiveness in the classroom. The results of these evaluations would ideally be utilized to provide feedback to teachers and guide their professional growth (Sawchuk, 2015). One of the most common procedures for teacher assessment is the school administrator's classroom observations, which are increasingly used around the world for a variety of purposes (Bell et al., 2019). School administrators can assess general teaching practices as well as subject-specific strategies, and the frequency should be determined by what the administration hopes to learn from the process. This has historically been seen as one of the critical tasks within the institute, and it has become a priority as reflected in every faculty evaluation system to presage teaching performance and competence. It is also seen to be the most direct technique to moderately align with student achievement, depending on the instrument (Little, Goe and Bell, 2009).

Despite claims that the assessment of teaching practices is an imperative means for enhancing teacher efficiency, sources outlining policies intended to guide teacher evaluation are crucial for schools and need an overhaul (Darling-Hammond, 2013, p.1). There is uncertainty in the evaluation procedure and associated instrument, or the model being used, wherein the majority of the evaluations considered were summative rather than formative. As a result, most evaluations were utilized for high-stakes, collective purposes, and there was less indication that they were used in a reliable and legitimate manner.

Rater dependability is another major challenge. There is no guarantee that the ratings of school administrators on teachers' performance are efficient, which means that various evaluators

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may assign different scores to the teacher based on their own perceptions of good teaching. In this instance, a teacher's effectiveness as measured by rigorous observations can change, jeopardizing the reliability of the methods (Little, Goe and Bell, 2009). On the other hand, to eradicate the unbiased application of this process, it requires parallel assessment, which emboldens the involvement of the teachers to evaluate their own theoretical knowledge, work practices, and actual connections with the class. This is a sort of introspection in which teachers can measure their own strengths and areas for improvement. These elements have resulted in a questionable method and model, and intricate teacher evaluation policies, impeding an appealing basis of research.

In The Philippine School (TPS) in Dubai, as in many other Philippine schools overseas (PSOs), a great deal of the teacher evaluation system has been devoted to improving the assessment process. But TPS does not give sufficient information to support the self-review process, which resulted in a poor rating and has been recommended to review lesson observation procedures in order to provide useful information to support self-review and action planning (DSIB, 2020). This is not to imply that TPS' systems of evaluation did not previously exist or efficient. Indeed, the school system was not only intended to bring an evaluation system into the decision-making process but also a more inimitable way to obtain the greatest advantages. Though the above claims, as stated, do not speak for all PSOs, it is convincing that the same patterns may be determined by other PSOs on the subject of teachers' evaluation process. This led the authors to the creation of a framework by adopting a criterion-based review model to assess teachers' classroom performance.

Furthermore, other elements contributing to the high caliber of teachers' productivity are the range of teachers' backgrounds and experiences (OECD, 2018). Recognizing that teachers cannot be expected to stay in the same role for 30 years (Stewart, 2012, p.110) and to prove the essence of teachers' background, one of the purposes of this study is motivated by a desire to carry out the impact of the teacher's demographic profile on those who possess qualifications that contribute to teachers' productivity. Indeed, the practice of profiling respondents is necessary and widely accepted as it is an integral component of the success of the research industry, and it is essential for explaining the methodology selected, as well as contextualizing impacts, results, and conclusions (Brooks, 2016).

Philippine schools overseas (PSOs), Filipino overseas students, and teacher interactions

With the tremendous number of Overseas Filipino Workers (OFW) around the world, which was estimated at 2.2 million (Mapa, 2020), brings challenges ranging from dependents like school-aged children to the requirements of educational opportunities in the host countries, and thus bring boundless concern for the Philippine Department of Education (DepEd) in delivering basic education. Presently, there are 42 operational PSOs in nine countries around the globe. These duly registered Philippine schools running outside the country adopted and implemented the Philippine basic education curriculum (Department of Education Memo. No. 479, 2009). The operation and the management of PSOs are under the umbrella of the Inter-Agency Committee on Philippine Schools Overseas (IACPSO) to demonstrate standards within the scope of the Philippine educational system. This policy-making body continuously supervises all the PSOs about the fundamental concerns of school management and undertakings, cooperating efficiently with the host government. However, despite the existence of IACPSO and the finest efforts to attain quality educational policies, there are still existing dilemmas concerning the supervision of PSOs.

In fact, many PSOs face some challenges, with the irresistible majority of teachers getting outstanding ratings, making it challenging to classify which teachers are genuinely exceptional. Certainly, conflicts and disagreements arise in organizations composed of multicultural teams like Philippine Schools Overseas (Acosta and de Guzman, 2017). Similarly, as alluded to by the school administrators, the Philippine schools in Jeddah have less concern with their teachers in terms of assessment and professional growth, which requires system change to benefit their teachers (Sapungan, 2013).

Furthermore, teacher interactions with students in the classroom predict student performance (Allen et al., 2019). It is certain that, in specific instances, the evaluation of teachers' classroom performance validates the organizational policies of classroom management. Or else, the effect of poor classroom performance is colossal, predominantly on the part of the students. This is why the PSOs have been established to provide children of overseas Filipino workers with the kind of education equivalent to the Philippine education system (Commission on Filipinos Overseas, Od). This adds to the fundamental concerns of quality Filipino students from PSOs, and poses a challenge to the Philippine Department of Education. Somehow, these students will also join the Filipino diaspora in different countries in the future. However, the poor academic performance of Filipino students was reflected in an international assessment test conducted by Trends in International Mathematics and Science Study (TIMSS). The Philippines ranked last among 58 countries in high school mathematics (TIMSS, 2019). This report underlines the challenge that all Philippine schools overseas have to create more sustainable development in attaining quality education and promoting

lifelong learning opportunities for all Filipino students, both from local and international schools. Filipino students today are therefore competing not just with students in the country but with students globally.

Criterion-based review of teachers' classroom performance

In the context of teacher review, one of the key issues that most educational systems face is the requirement to build a reliable personnel evaluation system that is based on a solid theoretical framework. Evaluators cannot easily be held accountable for how their judgments regarding teacher performance were reached unless the criteria for evaluating teachers are derived from tested theories on teacher and school effectiveness (Kyriakides, Demetriou and Charalambous, 2007). Chism (2007) points out the best method to combat the idiosyncratic type of performance review, which is driven by the unexamined biases of the individual reviewer and subject to the structural biases of the institutional cultural context, is to establish an explicit structure for performance review.

Notwithstanding this applicability, the criterion-based review of teachers' classroom performance intends to measure certain characteristics of teaching, and it is widely accepted that criterion-based evaluation is a collection of pre-specified traits or criteria, with no reference to the achievement of others (Kollöffel and de Jong, 2016). However, each approach has its advantages and downsides, such as the risk of developing ineffective approaches to teacher assessment if an appropriate understanding of the elements involved is not obtained. Such notions insinuate teachers' self-review, wherein teachers get the chance to observe their own performance as if from another's position, to tenaciously assess their own classroom management, content knowledge, approaches, and ways of interfacing with the students. The teacher's point of view is imperative because it allows teachers to convey their own opinions about their performance and reflect on the personal, organizational, and institutional elements that influenced their teaching (OECD, 2018).

Of central concern, therefore, such concepts decisively highlight the intentness of a solid theoretical framework, which best describes the variables unified in searching for the level of teachers' classroom performance in different dimensions using the criterion-based model. The authors believe in the principle that teachers' classroom productivity can be increased by recognizing critical issues that may form patterns in their responses to the classroom environment in which they are guided and supported by certain criteria. Exploring in the periphery of all PSOs, there is no uniform system of teacher evaluation. Teacher evaluation was conducted solely by principals, in others, department heads and subject coordinators assessed teachers as well. This study, interestingly, may persuade a certain decision intended for the standardization of the teacher evaluation system in all PSOs. However, each school is unique and has an individual approach to achieving its enhancement goals. Therefore, is it conventional for all schools to follow certain criteria.

In this study, the pre-qualified criteria are set per weighing the perspectives of school administrators as well as the teacher's self-review on identifying the level of the teachers' classroom performance and the explicit structure for criterion-based that emphasizes the value of the teacher's performance, such as: (1) Content Knowledge—this criterion is an affirmation of Neumann, Kind, and Harms (2019) whole idea that a teacher's knowledge is significantly essential to the enhancement of the teaching and learning process, and reverberates on students' performance; (2) Creating an Inclusive Classroom—many approaches that teachers can implement to create a productive, dynamic, and inclusive classroom situation. Thus, this criterion resulted in how teachers create a fair and inclusive classroom that respects students' differences, beliefs, cultural diversity, and ethnicity (Chism, 2007); (3) Use of Instructional Materials and Strategies - instructional materials and learning resources are substances, people, or other aspects of the environment that can be used to aid in any learning activity (Dhakal, 2017). This criterion elicits how the effectiveness of instructional materials and strategies is determined by their use and the extent to which they meet the essential needs of the teacher and student; (4) Rapport with and Responsiveness of the Students – this criterion elicits how teachers create a positive learning environment that is always conducive to students' learning. Chism (2007) also conveys that teachers need to be successful within the classroom setting, and they need to take the necessary steps to nurture a strong rapport with the students; and (5) Impact Learning - this criterion is deliberated with high importance as it reflects the outcome of the teaching-learning process within the students' ability as they go through life (Beauchamp and Kennewell, 2010).

The purpose of the research study

The authors aimed to assess the critical distinction between the school administrator's perception and the teacher's self-review by administering the criterion-based review model. Specifically, this paper addresses the following questions: (1) What is the level of teachers' classroom performance as perceived by school administrators and teachers' self-review using the criterion-based review in terms of Content Knowledge, Creating an Inclusive Classroom, Utilization of Instructional Materials & Strategies, Rapport with and Responsiveness of the Students, and Impact Learning?; (2) Is there a substantial

association between teachers' age, highest educational attainment, and length of service and their classroom performances?; and (3) Is there a significant degree of difference between the perception of school administrators and the teachers' self-review on the level of teachers' classroom performance?

Materials and Methods

This study utilized a quantitative method to deliver a clear outline of the survey procedure. This method produces quantifiable data and precise measurements of behavior, opinions, or knowledge (Indrawati, 2015). Purposive sampling was employed in selecting The Philippine School (TPS) in Dubai, United Arab Emirates as the core respondent of this study. This study was conducted during the second semester of the academic year 2019-2020. The twenty-five (25) school administrators, comprising the school principal, subject coordinators, and department heads, were identified as one group of respondents, and the other group were the 110 classroom teachers in both elementary and secondary education.

The instrument used for this study was adapted from the Centre for Teaching Support and Innovation (2017) at the University of Toronto. This measure is based on the frameworks of Chism (2007) and the University of Minnesota (2009) Peer Review of Teaching Guide. This criterion-based peer review is a widely used assessment instrument to measure the critical issues and level of classroom management. In this study, this instrument was utilized for the two groups of respondents, teachers, and school administrators. The teacher-respondents rated themselves by completing the review form, being as objective and impartial as possible about their own classroom performance. At the same time, the school administrators were requested to rate the corresponding teachers under their supervision using the same questionnaire based on classroom observations and pre-implementation interviews.

Part I of the survey contained questions to elicit the demographic profile of the respondents, such as age, highest educational attainment, and length of service. This part measures the magnitude of the relationship between the teachers' profile and their classroom performance. Part II of the questionnaire contained 45 questions on the provisions of the criterion-based review model, consisting of five (5) criteria such as Content Knowledge; Creating an Inclusive Classroom; Utilization of Instructional Materials & Strategies; Rapport with and Responsiveness of the Students; and Impact Learning. For each question, the two groups of respondents expressed their agreement on a four-point Likert-type scale by marking the corresponding number on the scale that best represents their agreement with the question. High scores indicated high agreement (4 = Highly Evident, 3 = Moderately Evident, 2 = Less Evident, 1 = Not Evident).

The responses of both respondents were compared and tabulated using SPSS. For the first research question, descriptive statistics, including mean, and simple percentages, were used to determine the level of teachers' classroom performance. The authors allotted scales with an equivalent description of the level of teachers' classroom performance in order to attain a certain interpretation of the scales in the questionnaire. The Pearson Chi-square test and the descriptive-correlational method of research were used for the second research question based on a series of assumptions with linear-by-linear association on each value and likelihood ratio, which is a commonly used technique to analyze the relationship between categorical variables and nominally structured categories (Sharpe, 2015). The Wilcoxon Signed Ranks Test was used to test the degree of difference between the perceptions of school administrators and teachers' self-review of the level of classroom performance as demanded by the third research question.

Results and Discussion

Level of teachers' classroom performance using criterion-based review

Content knowledge

Extracted from a criterion-based review of both school administrators and teachers, it was revealed in Table 1 that teachers' content knowledge was predominantly rated as "Moderately Evident" with a composite mean of 3.49. Ultimately, three out of five items demonstrated an "Excellent" classroom performance review of the teachers, predominantly in how the teachers' statements are precise according to the standards of the field, with the highest mean of 3.59. Certainly, it can be concluded that the teachers have the key components of content knowledge and pedagogical competence according to the standards of the field, as well as expertise to communicate the reasoning process behind operations or concepts. Yet, seemingly not reassuring, considerable points in how the teachers identify sources, perspectives, and authorities in the field, with a mean of 3.41, as well as in how the teachers incorporate current research in the field, with the lowest mean of 3.36. This suggests that

the teachers have a certain level of scrutiny when looking at different types of resources but probably haven't been able to critically appraise the substantiation and use the appropriate material for the right context. The teachers, somehow, haven't been able to incorporate the current research fully into the field to expand and enrich their teaching skills. Nevertheless, it may be challenging for them to look more closely into their own teaching practice and to conduct research right in their own classroom.

These findings are parallel to the study of [Roberto and Madrigal \(2019\)](#), which profoundly determined the significant difference in the level of teaching standards, competence, and performance of teachers. Thus, the findings have shown that the level of teaching competence and performance of basic education teachers have substantial components of content knowledge and pedagogical competence. Indeed, [Van Driel and Berry \(2010\)](#) implied that content knowledge influences teachers in ways that will best stimulate students' learning for understanding. Certainly, it can be concluded that, based on this criterion, the teachers of TPS have the key components of content knowledge and pedagogical competence according to the standards of the field, as well as expertise to communicate the reasoning process behind operations or concepts.

Table 1
Teachers' Classroom Performance in terms of Content Knowledge

Criteria	Classroom Performance		Mean	DV	Interpretation	Rank
	Perceived by Administrators	Teachers' Self-Review				
1. The teacher's statements are accurate according to the standards of the field.	3.59	3.58	3.59	HE	Excellent	1
2. The teacher incorporates current research in the field.	3.35	3.36	3.36	ME	Good	5
3. The teacher identifies sources, perspectives, and authorities in the field.	3.41	3.40	3.41	ME	Good	4
4. The teacher communicates the reasoning process behind operations or concepts.	3.53	3.51	3.52	HE	Excellent	3
5. The teacher corrects bias in assigned materials.	3.56	3.59	3.58	HE	Excellent	2
Composite Mean	3.49	3.49	3.49	ME	Good	

Legend:

Range	Descriptive Value
3.51 – 4.00	Highly Evident (HE)
2.01 – 3.50	Moderately Evident (ME)
1.51 – 2.00	Less Evident (LE)
1.00 – 1.50	Not Evident (NE)

Creating an inclusive classroom

This criterion has been proportionately placed within the mean range of 3.51-4.00 and measures teachers of TPS as "Excellent" in creating an inclusive classroom with the composite mean of 3.63, as shown in Table 2. This perception indicates that the teachers have evidently implemented the quality of the social dynamics in the classroom situation to create a productive and inclusive climate for all learners. The item with the highest mean considerably validated the perception of school administrators and teachers' self-review in terms of creating an inclusive classroom, especially in how the teachers convey the belief that all students can learn and succeed, and express openness and warmth to interact with others in the same way.

However, it is shown in Table 2 that the items with the lowest mean and such mean depletions have considerably substantiated the perception of school administrators and teachers' self-review in terms of creating an inclusive classroom, especially in how the teachers provide text, resources, and learning materials in the classroom that reflect the diversity of culture, ethnicity, faith, and language, and

differences in socioeconomic status, physical ability, and family structure, with a 3.59 mean; in how they use a variety of assessment tasks so that students with different learning styles can achieve success, with a 3.56 mean; and in how they use resources that present both local and global images and perspectives, with the lowest mean of 3.51. So, by no means an indication that the teachers are partly driven by creating an inclusive classroom where the teachers provide resources and learning materials that reflect the diversity of culture, ethnicity, language, and differences in socioeconomic status.

Table 2
Teacher's Classroom Performance in terms of Creating an Inclusive Classroom

Criteria	Classroom Performance					
	Perceived by Administrators	Teachers' Self-Review	Mean	DV	Interpretation	Rank
1. The teacher creates an equitable and inclusive classroom that respects gender differences, diverse ethnocultural and faith communities, family structures, student abilities/needs, and differences in socioeconomic status.	3.65	3.62	3.64	HE	Excellent	5
2. The teacher conveys the belief that all students can learn and succeed.	3.75	3.74	3.75	HE	Excellent	1
3. The teacher conveys openness and warmth and encourages students to interact with others the same way.	3.75	3.73	3.74	HE	Excellent	2.5
4. The teacher provides text, resources, and learning materials in the classroom that reflects the diversity of culture, ethnicity, faith, and language, and differences in socioeconomic status, physical ability, and family structure.	3.6	3.57	3.59	HE	Excellent	7
5. The teacher uses resources that present both local and global images and perspectives.	3.49	3.53	3.51	HE	Excellent	9
6. The teacher uses technology to provide additional visual, oral, aural, and/or physical supports for students who need them.	3.75	3.73	3.74	HE	Excellent	2.5
7. The teacher uses instructional strategies that reflect diverse learning styles.	3.61	3.58	3.60	HE	Excellent	6
8. The teacher uses a variety of assessment tasks so that students with different learning styles can achieve success.	3.56	3.55	3.56	HE	Excellent	8
9. The teacher provides accommodations for students who require extra time or additional explanations.	3.69	3.68	3.69	HE	Excellent	4
Composite Mean	3.64	3.62	3.63	HE	Excellent	

TPS teachers, therefore, exhibit openness and warmth and encourage students to interact with others in the same way. Remarkably, they use technology to provide additional visual, oral, aural, and/or physical support for students who need it. However, the least rated statements indicate that the teachers are partly driven by creating an inclusive classroom, wherein the teachers slightly administer a variety of assessment tasks so that students with different learning styles can achieve success, and partly use resources that present both local and global images and perspectives.

Utilization of instructional materials and strategies

On this criterion, and as for the rest of the school administrators' and teachers' remarks, it essentially ranged up to the uppermost mean of 3.76 on the utilization of instructional materials and strategies, specifically, in how teachers help students apply theory to solve problems and in how the timing of classroom activities considers attention spans, which implies that in the utilization of instructional strategies, the teachers performed above the framework of helping students apply theory to solve problems and engaging students' ability to maintain attention spans.

Table 3
Teachers' Classroom Performance in terms of Utilization of Instructional Materials and Strategies

Criteria	Classroom Performance		Mean	DV	Interpretation	Rank
	Perceived by Administrators	Teachers' Self-Review				
1. The teacher uses resource materials to have a clear purpose.	3.61	3.59	3.60	HE	Excellent	9
2. Handouts or digital resources are appropriate in number and subject.	3.51	3.52	3.52	HE	Excellent	13
3. The teacher gives assistance or insight into reading or using assigned texts.	3.60	3.61	3.61	HE	Excellent	7.5
4. The teacher's choice of teaching techniques is appropriate for the goals.	3.56	3.55	3.56	HE	Excellent	12
5. During the discussion, the teacher pauses after asking questions.	3.74	3.74	3.74	HE	Excellent	2
6. The teacher acknowledges student contributions to the discussion, helping students extend their responses.	3.76	3.75	3.76	HE	Excellent	1
7. The teacher keeps the discussion on track or facilitates small group discussion.	3.62	3.59	3.61	HE	Excellent	7.5
8. The teacher mediates conflict or differences of opinion and encourages students to do the same.	3.66	3.65	3.66	HE	Excellent	4
9. The teacher demonstrates active learning techniques.	3.56	3.57	3.57	HE	Excellent	11
10. The teacher provides explicit directions for active learning tasks.	3.6	3.58	3.59	HE	Excellent	10
11. The teacher allows enough time to complete active learning tasks, such as collaborative work.	3.71	3.71	3.71	HE	Excellent	3
12. The teacher specifies how active learning tasks will be evaluated.	3.63	3.64	3.64	HE	Excellent	5
13. The timing of classroom activities considers attention spans.	3.33	3.29	3.31	ME	Good	15
14. The teacher relates class to course goals, students' personal goals, or societal concerns. The teacher offers "real world" application.	3.65	3.6	3.63	HE	Excellent	6
15. The teacher helps students apply theory to solve problems.	3.47	3.45	3.46	ME	Good	14
Composite Mean	3.38	3.37	3.37	HE	Excellent	

As for the rest of the remarks in Table 3, they essentially ranged down to the lowest mean of 3.46 in how the teachers help students apply theory to solve problems, and a 3.31 mean in how the timing of classroom activities considers attention spans. This implies that in the utilization of instructional strategies, the teachers performed below the framework of helping students apply theory to solve problems and engaging students' ability to maintain attention span, which diminishes throughout the classroom activities. It is the authors' considered theory that the teachers of TPS surpassed the expected excellent utilization of instructional strategies such as collaborative discussion with the students by helping them extend their responses, allowing them to complete active learning tasks, and mediating conflict or differences of

opinion and encouraging them to do the same. These results confirmed that there is a certain gravity to the multidimensional utilization of instructional strategies practiced by the teachers of TPS, particularly the support from the school that provides explicit directions for active learning tasks. It is likewise a reality that in delivering the lesson objective is hampered by the perceived and actual unavailability of instructional materials and hinders students' personal goals (Ogbaji, 2017).

Rapport with and responsiveness to students

It is an understandable assumption that the vast majority of teachers are excellent at conveying rapport with and responsiveness to students with a 3.56 composite mean. With these collective results in Table 4, the implication that can be drawn is that the teachers' disposition and their subsequent repercussions for establishing rapport with and responsiveness to students are highly evident, especially in demonstrating flexibility in responding to students' concerns or interests and using positive reinforcement.

Table 4
Teachers' Classroom Performance in terms of Rapport with and Responsiveness to Students

Criteria	Classroom Performance		Mean	DV	Interpretation	Rank
	Perceived by Administrators	Teachers' Self-Review				
1. The teacher addresses students by name as possible.	3.88	3.78	3.83	HE	Excellent	1
2. Delivery is paced to students' needs.	3.75	3.7	3.73	HE	Excellent	2
3. The teacher provides feedback at given intervals	3.55	3.54	3.55	HE	Excellent	8
4. The teacher uses positive reinforcement	3.55	3.72	3.64	HE	Excellent	4
5. The teacher incorporates student ideas into the class	3.6	3.6	3.60	HE	Excellent	5.5
6. The teacher encourages students to build on each other's comments and ideas	3.51	3.51	3.51	HE	Excellent	10
7. The atmosphere of the classroom is participative	3.35	3.57	3.46	ME	Good	11
8. The teacher is available before or after class	3.24	3.14	3.19	ME	Good	13
9. The teacher pays attention to cues of boredom and confusion	3.45	3.58	3.52	HE	Excellent	9
10. The teacher provides students opportunity to mention problems/concerns with the class, either verbally or in writing	3.34	3.47	3.41	ME	Good	12
11. The teacher models good listening habits.	3.7	3.48	3.59	HE	Excellent	7
12. The teacher demonstrates flexibility in responding to student concerns or interests	3.72	3.66	3.69	HE	Excellent	3
13. The teacher is sensitive to individual interests and abilities	3.61	3.58	3.60	HE	Excellent	5.5
Composite Mean	3.56	3.56	3.56	HE	Excellent	

More so, the three low-rated items in this section are in the mean range of 2.01–3.50 and are perceived as “Good” particularly on whether the atmosphere of the classroom is participative, with a 3.46 mean; in how the teachers provide students an opportunity to mention problems or concerns with the class, either verbally or in writing, with a 3.41 mean; and if the teachers are available before or after class, with the lowest mean of 3.19. This criterion is merely meant to improve the teachers' determination to nurture a strong rapport with the students in a participative classroom atmosphere, giving them the opportunity to mention problems or concerns with the class, either verbally or in writing, and to intensify the teachers' availability before or after classes. Hence, establishing a positive learning environment for students should always be considered for students to learn (Waldman, 2016), and if teachers allow students to use various methods to reach a particular learning goal, they can choose to express themselves in the way that best fits them (Kumar, 2010).

Impact learning

While it is true that impact learning is deliberated with high-importance as it reflects the outcome of the teaching-learning process (Beauchamp and Kennewell, 2010), the fine-grained data in Table 5 identifies that TPS teachers make moderate effort in striving for excellent impact in learning as perceived by school administrators and teachers' self-review with a composite mean of 3.49. The highly rated items attribute that teachers have "Excellent" performance in how they encourage the development of students' analytic ability, broaden students' views, and help students develop an awareness of the process used to gain new knowledge. However, it is also shown in Table 5 that the lowermost mean, in turn, influences the teachers' classroom performance in terms of impact learning, particularly in how they stimulate independent thinking, with a 3.47 mean; how they foster respect for diverse points of view, with a 3.40 mean; and more importantly, how they help develop critical thinking skills and problem-solving ability, with the lowest mean of 3.39.

Table 5
Teachers' Classroom Performance in terms of Impact Learning

Criteria	Classroom Performance		Mean	DV	Interpretation	Rank
	Perceived by Administrators	Teachers' Self-Review				
1. The teacher helps develop critical thinking skills and problem-solving ability.	3.46	3.32	3.39	ME	Good	6
2. The teacher broadens student views.	3.48	3.65	3.57	HE	Excellent	2
3. The teacher encourages the development of students' analytic ability.	3.55	3.6	3.58	HE	Excellent	1
4. The teacher fosters respect for diverse points of view.	3.54	3.25	3.40	ME	Good	5
5. The teacher helps students develop an awareness of the process used to gain new knowledge.	3.57	3.53	3.55	HE	Excellent	3
6. The teacher stimulates independent thinking.	3.28	3.65	3.47	ME	Good	4
Composite Mean	3.48	3.50	3.49	ME	Good	

The foregoing responses demonstrate how excellent the teachers are in encouraging the development of students' analytic ability to broaden student views and develop an awareness of the process used to gain new knowledge. Of the five (5) areas of criterion-based review of classroom performance, Impact Learning is one of the least rated criteria by both school administrators and teachers. This is evident in how the teachers develop the students' critical thinking skills and problem-solving capabilities.

Teachers' profile and classroom performance

In the world of research, the practice of profiling respondents is necessary and widely accepted. It is an integral component of the success of the research industry, and it is essential for explaining the methodology selected, as well as contextualizing impacts, results, and conclusions (Brooks, 2016). This study, subsequently, involves a simple profiling method to obtain the background of the teachers, such as age, highest educational attainment, and length of service, in correlation to their own classroom performance.

Age. It pointed out that the majority of the respondents are between the ages of 30 and 34, comprising 39, or 28.9% of the respondents. To determine the direction of the relationship between age and teacher classroom performance, the data were subjected to a Chi-square test with the seven grouped-data (age bracket) versus the two most commonly used interpretations (Good and Excellent) of the level of the teachers' classroom performance, yielding a p-value of 0.171. Clearly, the computed p-value is less than the 0.05 level of significance, which permits acceptance of the null hypothesis stating that there is no significant relationship between age and the classroom performance of the teachers. In other words, teachers' age does not influence their classroom performance. Though the large age indicates teachers' level of maturity in their beliefs and attitudes toward this dimension of classroom performance, these findings have important implications for practice because most teachers in TPS are relatively young.

Highest Educational Attainment. The majority of the respondents finished their Bachelor

of Secondary Education, which consists of 66, or 48.9% of the total population. While 33, or 24.4%, have earned a Bachelor of Science in Elementary Education. Accordingly, 21 teachers and six school administrators have acquired M.A. units, which comprises 27 or 20% of the total respondents. Besides, two teachers and four school administrators are M.A. graduates, which is 4.4% of the total respondents. Only three school administrators, or 2.2%, earned doctoral units, but no one of the respondents has acquired a doctoral degree yet. The Chi-square test enabled us to identify the significant relationship between the independent variables. Whereas the computed probability of 0.848 is greater than the 0.05 level of significance. The null hypothesis, that there is no significant relationship between teachers' highest educational attainment and their classroom performance, is accepted. This feedback indicates that the highest educational attainment of the teachers in TPS has nothing to do with their classroom performance. This differed, somehow, from the high qualifications being imposed by the institutions that attract highly qualified and certified teachers who are more effective than teachers with low licensure requirements or less qualified teachers.

Length of Service. Most of the teachers have 1–5 years of service, and most of the school administrators have 6–10 years of service. The Chi-square test in determining the relationship with the given group data on length of service and classroom performance shows that the computed p-value of 0.502 is greater than the 0.05 level of significance. The null hypothesis, that there is no significant relationship between the length of service and the classroom performance of the teachers, is accepted. In other words, the number of years spent in the teaching field could not be associated with the classroom performance of the teachers. These results also have sound implications for practice and institutional perspective. It gives rise to an underlying and interesting interpretation between novice and experienced teachers if it is teaching experience or life experience that may cause this difference in the teachers' classroom performance. In fact, the greater part of the teachers in TPS have 1–5 years of service, and they are dominated by less experienced ones.

Administrators' perceptions vs. teachers' self-review

To answer the key question in this study, the Wilcoxon Signed Ranks Test identified the data collected from both school administrators and teachers on their perceptions of the level of classroom performance. Results shown in Table 6 indicate that the p-value of 0.981 is greater than the 0.05 level of significance, which means that it is conventional to accept the null hypothesis that there is no significant degree of difference between the perceptions of school administrators and teachers' self-review on the level of classroom performance. In other words, both school administrators and teachers are reasonably harmonious in their perceptions of the level of classroom performance.

Table 6
Administrators' Perceptions vs. Teachers' Self-review

		N	Mean Rank	Sum of Ranks
Teachers' Classroom Performance as Perceived by the School Administrators -	Negative Ranks	55 ^a	52.39	2881.50
	Positive Ranks	52 ^b	55.70	2896.50
Teachers' Classroom Performance as Perceived by the Teachers Themselves	Ties	3 ^c		
	Total	110		

$p = 0.981$, Result: Insignificant

Teachers Classroom Performance	N	Minimum	Maximum	Mean	Std. Deviation	Description
As Perceived by the Teachers Themselves	110	2.81	3.98	3.5666	.32394	Excellent
As Perceived by the School Administrators	110	2.77	3.98	3.5731	.33925	Excellent
Teachers Classroom Performance	110	2.94	3.95	3.5700	.21466	Excellent
Valid N (listwise)	110					

Undoubtedly, these results overwhelmingly point to the leniency of ratings by the school administrators, which reflects the realistic feedback of the teachers. It is also becoming clear that teachers who use peer observation and feedback systems ostensibly benefit from the greater opportunity to collaborate with one another (Amrein-Beardsley, 2020) and the reality of the model and method used.

Conclusion

It can be assertively concluded that a great number of exceptional teachers in The Philippine School (TPS) in Dubai made the classroom an exciting and interesting place for Filipino learners. It indicates that TPS teachers have evidently implemented the quality of the social dynamics in the classroom situation to create a productive and inclusive climate for all learners. But the results of criterion-based review can be imprecise, especially for the lowermost criteria such as Content Knowledge and Impact Learning, which determine that by far the most significant influencing factor in schools, TPS teachers have less convincing power to help develop more impactful learning. This is evident, and somehow the teachers have fewer key components of content knowledge and pedagogical competence according to the standards of the field and develop critical thinking skills and problem-solving ability.

Interestingly, there is a large extent of relationship that the teachers' profile in terms of age, highest educational attainment, and length of service couldn't be associated with their classroom performance. Though the most important consideration is that the large age indicates the teachers' level of maturity in their beliefs and attitudes towards classroom performance, these findings have important implications because most teachers in TPS are relatively young. This gives rise to the concept of knowledge that, with such an underlying and interesting interpretation between novice and experienced teachers, whether it is teaching experience or life experience, may not cause a difference in the teachers' classroom performance.

With the excellent results, both school administrators and teachers have the same review about the level of classroom performance of the TPS teachers, which points to the realistic and objective feedback of the two groups of respondents. By some means, the criterion-based review of teachers' performance is the unsurpassed method to combat a distinctive type of peer review of teachers, which is driven by a common understanding instead of the vague or unclear views of the individual reviewer. This is a sort of introspection in which teachers can assess their own strengths to irradicate bias in assessment.

Above all, the core dilemmas described in this study have been identified, and when it comes to policy implications, the Philippine Department of Education (DepEd) should continue to implement the programs that will increase the content knowledge, improve the proficiencies, and equip the teachers and school administrators in all PSOs with constructive attitudes and principles that will complement the educational trends and address issues in education in order to ensure unwavering results, especially on the part of the students. It is essential to conceptualize an enhancement program to improve the different dimensions of teachers' classroom performance to help achieve a higher number of teachers and meet part of the challenges for the Philippine schools' administrators and Filipino teachers in Dubai. More importantly, improving the education policy, which is expected to contribute to the attainment of the goals of the components of the Philippine educational system, along with the fundamental goals of the IACPSO, could make a paramount contribution incoherent with the standards of the [Dubai Schools Inspection Bureau \(DSIB\)](#).

Finally, this is an appealing source of future research with similar instruments and procedural matters that could be used to administer to other Philippine schools around the world, particularly the non-accredited institutions.

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Conflict of interests

The authors declare no conflict of interest.

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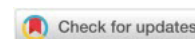
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The Quality of Online Higher Education Teaching During the Covid-19 Pandemic

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Abstract: This paper presents a study of online teaching in higher education during the 2021/2022 school year, during the Covid 19 pandemic. The theoretical foundation of this research is Community of Inquiry (Col) framework, according to which online teaching is realized through social presence (students' interaction), teaching presence (student-teacher interaction) and cognitive presence (student-content interaction). This quantitative research was conducted in six countries: Serbia, Croatia, Bosnia and Herzegovina, Slovenia, Romania and Russia, and the answers were received from 808 students. At all participating faculties, online teaching was applied during the observed period, and in almost 80% of cases it was realized in full or to a greater extent than in in-person classes. The aim was to determine Col presences and to identify possible differences among countries. The obtained data was processed with quantitative descriptive analysis and Kruskal–Wallis H test. The highest values of Col presence were noted in Russia and Romania, then Slovenia and Croatia, and the lowest in Bosnia and Herzegovina and Serbia. In the whole sample, teaching presence has been most represented, followed by social presence, while the cognitive presence has been scored the least. Entire Col presence was assessed as partially represented, as well as its three elements, the lowest of which is cognitive presence. In order to improve the online teaching process, in this paper technological and pedagogical training of teachers for online teaching, support for students for the use of digital tools for online learning and the provision of IT experts as necessary technical support are recommended.

Keywords: online teaching, Community of Inquiry, higher education, research, student.

Introduction

With the global Covid-19 pandemic, the world's education systems have faced a significant challenge - finding strategies to stop the spread of the virus. According to UNESCO data, by May 2020, the closure of educational institutions affected more than 1.21 billion students, almost 70% of the world's student population. In order not to lose the school and academic years, educational institutions at all levels have developed an urgent model of online education, which adopts the policy of "disrupted classrooms, undisturbed teaching" (Huang et al., 2020).

The organization of online higher education is a complex task at the pedagogical, organizational, infrastructural, economical, and even sociological level. However, it was not equally challenging for all higher education systems and institutions. For those with more experience in implementing online teaching, this was not a difficult task. Among them are higher education institutions from the United States, Great Britain, Asia and European countries. Higher education institutions and systems that first faced this challenge were in a position to organize online teaching that had not been tested before and all problems had to be solved ad-hoc (Rapanta et al., 2020).

Effective online teaching is far from urgent and improvised: it requires a different design from traditional teaching, which often cannot be projected into an online environment. Furthermore, experience shows that effective online teaching should have a pedagogical approach that creates a meaningful online learning experience, where students are motivated and engaged; not left in a passive position (Rapanta

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et al., 2020; Huang et al., 2020). For these reasons, it is extremely important to provide an evaluation of the online education that was realized in the conditions of the Covid-19 pandemic. The most effective and precise way to examine it is addressing the so-called Community of Inquiry model in online teaching (Col).

Developed by Garrison, Anderson and Archer (1999), this model is widely approved, and insures successful learning in an online environment. It implies a development of the community that supports meaningful and deep research-based learning, meaningful learning and knowledge sharing. The model is based on three types of presence: social, teaching and cognitive presence.

The teaching presence comprises a range of roles, activities, pedagogical forms and interventions that the teacher undertakes in order to enable interaction with students in the online learning process. Swan (2003) identified six best practices for teaching presence: establishing clear learning aims and instructions for students; using a wide range of presentations of course content; developing learning methods or exercises that enable students to be active and to be involved; providing students with feedback; being flexible in ways of achieving learning outcomes; and providing students support and mentoring as much as possible. The second element of the Col model is **Social Presence**, which represents the extent to which students feel socially and emotionally connected to others and to the online environment in which they learn. The specificity of the online environment gives a special challenge to this element, and many consider the existing tools to be inadequate and inefficient in replacing live models. Research has shown that social presence can and should be established in online learning communities (Swan et al., 2008). The third element is **Cognitive Presence**, and it represents “the extent to which the learners are able to construct and confirm meaning through sustained reflection and discourse” (Garrison, Anderson and Archer, 2001: 11). Cognitive presence includes the following phases: phase of developing students’ interest in the subject through the setting of a learning problem, a phase of researching and reflecting on problems and finding possible solutions, and a phase of problem solving and its application (Garrison and Archer, 2003). These phases are initiated and organized by the teacher, but to a large extent they are also the result of the social interaction between students, because it is feasible in an atmosphere of proactivity, dialogue and reflection. The three elements of the Col model are interrelated—the teaching presence is the design, facilitation, and direction of social and cognitive processes for the purpose of accomplishing personally meaningful and educationally worthwhile learning outcomes (Garrison, Anderson and Archer, 2001).

Numerous studies have been conducted to test and validate the Col model in online education (e.g., Garrison and Arbaugh, 2007; Arbaugh et al., 2008; Swan, Garrison and Richardson, 2009; Garrison, Cleveland-Innes and Fung, 2009; Akyol and Garrison, 2011). Nowadays - twenty years after its inception - the Col model has become indispensable and reliable in the theoretical understanding and practical research of online education.

This paper therefore presents an international survey of online teaching in higher education during the 2021/2022 year, using Col model.

Materials and Methods

The main aim of this paper is the international evaluation of online teaching in higher education that was realized in the school year 2021/2022 during Covid-19 pandemic. Online teaching has been evaluated through the prism of the Community of Inquiry model developed by Garrison, Anderson and Archer (2001). Specific goals are:

1. determining the teaching, social and cognitive presence as individual dimensions of online teaching on the whole sample and among the examined countries,
2. determining the entire Col presence in higher education among the examined countries and on the overall sample, and
3. determining the differences among countries regarding Col model and its dimensions.

The research was conducted from October 2021 to January 2022 in higher education institutions in six countries: Serbia, Bosnia and Herzegovina, Croatia, Slovenia, Romania and Russia. The sample was chosen as the countries are in different stages of economic and technological development and are all in Europe.

The data was collected through the questionnaire using the survey technique. Research participants were higher education students. The participation in the research was voluntary and anonymous. A semi-closed instrument with categorical or numerical responses was used. In addition to general data on respondents (college, country and field of education), the instrument includes a scale of online teaching assessment based on the Community of Inquiry model. Customized version of the Col instrument was

used (Arbaugh et al., 2008). The instrument is validated, tested and measures three elements of online teaching: teaching, cognitive and social presence.

The research is quantitative. The obtained data was processed by a statistical method and edited with quantitative descriptive analysis in IBM SPSS 20.0 software package (trial version). Frequencies and percentages were used to process categorical data, and on numerical scales - arithmetic mean and standard deviations. Kruskal–Wallis H test was used to determine the differences among the examined countries in teaching, social and cognitive presence and in the entire Col presence.

Research sample

There had been 808 collected complete responses of higher education students from six countries: Serbia, Bosnia and Herzegovina, Croatia, Slovenia, Romania and Russia.

Table 1
Respondents by countries

	Frequency	Percent
Serbia	249	30.8
B&H	69	8.5
Croatia	72	8.9
Slovenia	38	4.7
Romania	176	21.8
Russia	204	25.2
Total	808	100.0

Although the difference in the Col elements between the field of education had not been confirmed in earlier research, we wanted to provide all fields of education in a sample. Therefore, the sample consists of students of all areas of education (Table 1).

Results

General information about online teaching

In order to analyse the aspects of the quality and effectiveness of online teaching during the Covid-19 pandemic, it is necessary to gain a general picture of its nature and representation. Hence, the presence of online teaching was examined.

Table 2
The extent in which online teaching was represented

	Frequency	Percent
Completely	420	52.0
To a greater extent	203	25.1
As much as in vivo	106	13.1
To a lesser extent	75	9.3
Total	804	99.5
Missing	4	.5
Total	808	100

During the Covid-19 pandemic, the online model of the teaching process was dominant – according to more than half of the respondents it was fully represented; according to a quarter of them, it was present to a greater extent. Given that the research subject and goal presuppose a high level of online teaching; these results represent a favourable research context (Table 2).

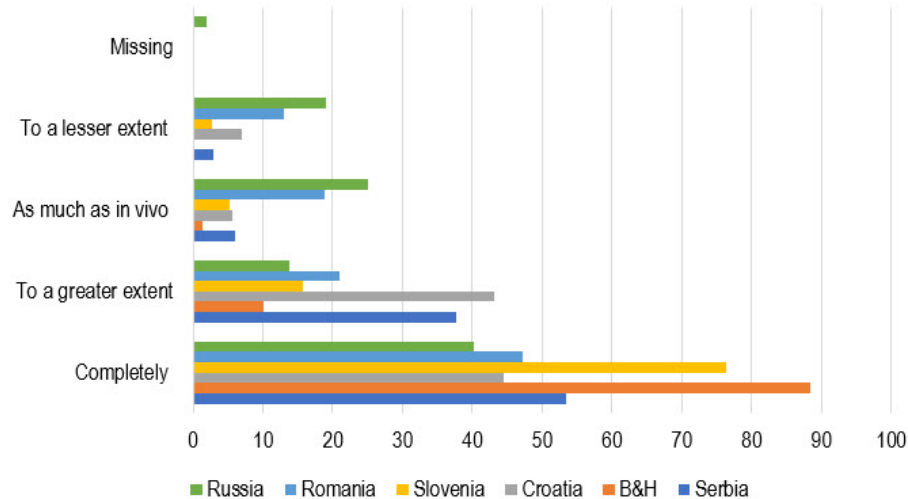


Figure 1. The extent to which online teaching was represented by countries

In Bosnia and Hercegovina, Serbia and Slovenia teaching process has been organized online almost exclusively, while in other countries, especially in Romania and Russia, there have been lectures in vivo as well (Figure 1).

Exploring Col elements

In accordance with the main issues and the goal of the paper, three elements of the Col model were examined: Teaching, Social and Cognitive Presence in online higher education, as well as their differences among countries.

Statistical analysis of the Kruskal-Wallis H test showed that there are statistically significant differences between examined countries in their teaching, social and cognitive presence as individual dimensions of online teaching. Moreover, there are statistical differences between the examined countries in the entire Col presence (Table 3).

Table 3
Statistics of differences in Col elements by country

	Kruskal–Wallis H test	<i>p</i>
Teaching Presence	66.398	.000
Social Presence	43.728	.000
Cognitive Presence	81.274	.000
Total Col	74.448	.000

Table 4
Col elements on whole sample and by countries

	Russia	Romania	Slovenia	Croatia	B&H	Serbia	Total sample
Teaching Presence	3.94	4.03	3.77	3.67	3.32	3.39	3.69
Social Presence	3.94	3.87	3.46	3.62	3.52	3.42	3.64
Cognitive Presence	3.89	3.70	3.44	3.38	3.15	3.12	3.45
Total Col	3.92	3.87	3.56	3.56	3.33	3.31	3.59

The highest values of Col elements in online teaching were noted in the subsample of Russia and Romania, then Slovenia, Croatia, and the lowest has been in Bosnia and Herzegovina and Serbia. In all countries, the Cognitive Presence has been the least represented (Table 4).

Based on the results of Col elements, the total evaluation of online teaching on the whole sample was defined as moderately developed, with the score 3.59. Teaching Presence has the highest score, followed by Social and then Cognitive Presence.

Discussion

The presented data show that there are differences in the average values of the overall assessment of the entire Col model and its individual elements in the examined countries. The highest values of the Col elements were noted in Russia (3.92) and Romania (3.87), and the lowest in Bosnia and Herzegovina (3.33) and Serbia (3.31) (Table 4).

Given the level of development of educational systems of these countries and their expenditure in education, these results should have been expected. According to Eurostat analysis in 2019, government expenditures on education in Croatia and Slovenia had been more than the European average (though Slovenia spends most of its share on primary education). Being economically weaker, less developed and regulated, Serbia and Bosnia and Herzegovina are not members of European Union. Their expenditure in education is far lower than the European average (UIS, 2019). Slovenia, the Russian Federation and Romania are the most developed countries out of the six. According to the Global Competitiveness Report for 2019 these three countries were more competitive than the rest, while Bosnia and Herzegovina and Serbia were the least competitive (Schwab, 2019). In 2015, Romania adopted a national strategy on the Digital Agenda setting out actions until 2020 in key areas that included the use of information and communication technologies (ICT) in education. Following the closure of schools, the Ministry of Education and Research organized online training for teachers and provided free access to educational platforms.

We see that the Teaching Presence is in first place, then the Social Presence, and the Cognitive Presence comes in last place. If the analysis is carried out in terms of the ratio of the elements of the Col model, then countries can be divided into three groups. The first group included Russian students for whom Teaching and Social Presence are important (3.94), the numerical values of Cognitive Presence differ to a very small extent from these two components (3.89). In other words, almost all three components in Russia are represented at approximately the same level. The second group includes countries (Romania, Slovenia, Croatia), which are characterized by a gap in numerical values between the elements of the Col model of the dominating Teaching Presence. The third group includes countries (Bosnia and Herzegovina, Serbia) in which Social Presence comes first, and the second and third places are occupied by the Teaching and Cognitive Presence. Cognitive Presence is least represented in all countries.

Mathematical analysis showed that there are statistically significant differences in Teaching, Social and Cognitive Presence between the countries included in the study (Table 3). The high values of Cognitive Presence in the responses of students from Russia coincide with the results obtained in a study (Janssen, et al. 2021) conducted in Sweden. In this study, the trend is exactly the opposite: the Cognitive Presence takes first place, then the social and the last place is occupied by the presence of the teacher. Mamuna, Lawrie and Wrighta, (2022) show the role of Cognitive Presence by highlighting student-content relationships in an online environment.

At the same time, it can be argued that the position of the teacher occupies a key position, forming the most significant space, or the most important element of the Col model – the Teaching Presence. This trend is typical for most of the countries studied in our sample. Capra (2014) showed that the teacher's participation in online learning is important for the formation of student interaction. Kupczynski et al. (2010) emphasized the importance of the presence of a teacher who provides students with knowledge on the subject, answers questions, clarifies inconsistencies and misunderstandings; is accessible to students and takes care of them (Dzubinski, 2014). Caskurlu et al. (2021) insist that the teacher's participation provides support for the direction of the discourse of joint discussion.

According to the results of our study, countries (Bosnia and Herzegovina, Serbia) were identified for which Social Presence acts as a primary element of the Col model. And this is an illustrative example, as it reveals that for students of these countries, interaction with other participants in the educational space and communication are the leading values. However, this perspective is possibly a result of the fact that in these countries, online teaching was organized to the greatest extent, and that social interaction was completely reduced to online form.

The importance of Social Presence in online education is shown in the works of many researchers. Garrison and Akyol (2013) noted that Social Presence is an element necessary for the development of cooperation, emotional relationships, emotional climate, contributing to the formation of each participant's contribution to the educational process. Studies (Belousova, Mochalova and Tushnova, 2022; Ryumshina et al., 2022) also showed that Russian students note the importance of live communication with students in the process of distance learning. In a similar survey of educational response to Covid-19 in Romania during the 2020-2021 school year, nearly all students lacked social contact, the school "atmosphere" and the social aspects of learning (Velicu, 2021). Research (Waddington and Porter, 2022) proved the necessity and importance of the formation of Social Presence, confirming the ideas (Kreijns et al.,

2014) that Social Presence contributes to the creation of a sense of reality. Currently, there is a further differentiation of the structure of Social Presence. Thus, [Wertz, \(2022\)](#) proposed to add the component "peer facilitation as a subscale of social presence". [Janssen et al. \(2021\)](#) supplemented the Col model with the emotional presence component.

However, moving from an international perspective and differences among countries to results of Col presence in total, further notions could be made. Having in mind that students' cognition and learning are the final result of online teaching, the most worrying result is that it had been scored as the lowest. Practice has shown that online teaching can result in successful learning: the students' academic success after online teaching had been equally high or even higher than in traditional teaching ([Akyol and Garrison, 2011](#); [Lee, 2021](#)). Specifically, the online environment can have a positive effect on students' cognitive presence, as indicated by numerous studies from practice. For example, the application of the Moodle platform for learning a foreign language resulted in improved student learning ([Gojkov Rajić and Šafran, 2019](#)). Therefore, results of the current situation in examined countries is not satisfying and should be changed.

According to the theoretical basis of Community of Inquiry, effective online teaching is reflected in a successful development of a community of students and teachers that encourages meaningful and deep learning ([Garrison, Anderson and Archer, 1999](#)). Several studies over the last twenty years ([Swan et al., 2009](#); [Garrison, Cleveland-Innes and Fung, 2009](#); [Gutiérrez-Santiuste, Rodríguez-Sabiote and Gallego-Arrufat, 2015](#)) have proven that all three Col elements are connected: Teaching and Social Presence had a direct influence on Cognitive Presence.

Having this in mind, as well as the unsatisfying results of three Col elements, it can be concluded that it is necessary to focus primarily on increasing the Social and Teaching Presence. This would consequently lead to the increase of Cognitive Presence. Research on online teaching practices in higher education had already shown that in practice a strong Social Presence can be established in online learning communities ([Swan et al., 2009](#)), in which a sense of belonging and connection develops and strengthens students' motivation and engagement ([Lee, 2021](#)). Moreover, [Janssen et al. \(2021\)](#) even considered the interaction between students and teachers and students themselves (Teaching and Social Presence) to be so important that Col model should be turned into the model the Relationship of Inquiry (RoI), and that another component should be added – Emotional presence.

In fact, social (and emotional) presence is actually a result of the teachers' actions, as the teacher is a class leader and his leadership influences the class social culture directly. That is why the key of the cognitive and social development is in the increase of teacher presence. To enable this, it is essential to improve the pedagogical competencies of teachers for designing online teaching. A drastic transition from one medium to another that realizes the educational process requires "increased methodological, pedagogical and didactic competencies of teachers for which there was no need until recently" ([Arsenijević, Andevski and Milin, 2012: 42](#)). By educating teachers, they will be trained to enable more intensive social online interaction of students (collaborative aspects of learning), through which deeper understanding, meaningful learning and building meaning in the teaching process (constructivist aspects) will be achieved. It is necessary to design the teaching process so as to develop students' motivation and creativity and to suit all their learning styles. From the domain of providing access to information and knowledge, it is necessary to redirect teaching to the domain of research and co-construction of knowledge. An effective method to achieve this is joint online projects of students, within which research and experiments are performed, application of knowledge in practice and solving specific problems, with the exchange of ideas, experiences, perspectives, and prior knowledge. Examples could be writing a Wikipedia or blog page, developing applications, or construct and designing a website.

Conclusion

The paper presents the results of a study in which students from six countries participated, with the goal of reflecting the state of online teaching in higher education, that was realized during the Covid-19 virus pandemic according to the so-called Community of Inquiry model. Differences among countries have been examined as well.

When it comes to international differences, online education has been evaluated as best in Russia and Romania, followed by Slovenia and Croatia, while the lowest results had been obtained in Bosnia and Hercegovina and Serbia. Having in mind the level of development of educational systems of these countries and their expenditure in education, these results had been expected.

In this sense, because this was a convenience sampling, the size and the structure of the sample

must be addressed as a limitation of this study and the direction for future studies. Before making generalised remarks, a more sizable sample across countries needs to be provided and more equally distributed among examined countries. Having in mind the direction of the discussion regarding the level of the economic and educational development and expenditure in education, it would be advisable to provide a more diverse international sample, especially including countries with the highest expenditure on education for comparison. In this sense, differences among countries regarding their economic development and expenditure on education could be made in more detail, but other variables could be included: the level of institutional support for teachers in implementing online teaching, their technological and pedagogical training for online education as well as their experience in online education before the pandemic. The inconsistency between results in Russia from our study and the one from Sweden could therefore be checked. Also, the extent to which online education is being realised could be controlled, in order to check if Social Presence would be best ranked, as it was in Serbia and Bosnia and Herzegovina, contrary to other countries in our study.

Regardless of international differences in scores, results of Col elements in total on the whole sample was estimated as moderately high. Teaching Presence had the highest score, followed by Social Presence and Cognitive Presence. In order to achieve high quality in online education in the countries included in this survey, therefore, it is necessary to develop the attitude among its participants and stakeholders that technology can achieve goals, but not always in the same way as it had been done in the traditional teaching process. Digitalization of existing teaching processes is needed, but it is also important to design a new one that was not possible in in-person classes. Instead of the translation of the old pedagogical practices into the new online environment, there needs to be a real adaptation of teachers to the opportunities and constraints of the online environment. Teachers should be empowered to enable new ways of creating social and cognitive interaction in an online environment.

Therefore, it is necessary for faculties to prepare students for work in the online environment before the beginning of the year, by providing instructions and training for the use of platforms and tools that will be used. Furthermore, it is necessary to provide the development of teachers' pedagogical competencies for designing teaching in an online environment. Partnerships between higher education management, pedagogical and technological institutes and non-governmental organizations is needed. In addition, technical support for teachers should be provided within the capacity of the IT services on higher education institutions, in order to make the best use of the platforms and tools for online teaching and enable teachers to create meaningful technological learning environments.

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Conflict of interests

The authors declare no conflict of interest.

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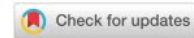
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Time Perception and Time Management during COVID-19 Pandemic Lockdown

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Abstract: Our perception of time changes with age, but it also depends on our emotional state and physical conditions. It is not necessarily mental disorders that distort human's time perception, but threatening or dangerous situations, induced fear or sadness trigger psychological defensive mechanism that speeds up or slows down the rate of the internal clock. Fear distorted time is caused by higher (slower) pulse rate, increased (decreased) blood pressure and muscular contraction. The given research is aimed at improving our understanding of the mechanism that controls this sense, opening the way for new forms of time management. Our perception of time is dependent on our emotional state, temporal distortion caused by emotion is not the result of a malfunction in the internal biological clock, but, on the contrary, an illustration of its remarkable ability to adapt to events around us. Development of time sensitivity is very important for timing, time perception, time-management and procrastination problem solution.

Keywords: time perception, defensive mechanism, rhythm of brain activity, internal clock, time management.

Introduction

The relevance of the topic under study is due to the fact that until now the processes and mechanisms of time reflection remain insufficiently studied, phenomenology is very diverse and extremely opposite, just as contradictory used concepts are usually not carried from the reflection area wanderings. Why do people constantly lose sense of time? Everyone has to make unusual decisions about organizing their lives in a pandemic isolation. Therefore, we conducted research in order to study people's experience of the current situation of uncertainty, their decision-making, time management and self-regulation during a lockdown; find out how the individual psychological characteristics of the personality affect time perception and management in these conditions. The goal of the study is to identify the degree of discomfort that a person experiences when in an ambiguous situation, to determine how different the daily routine is and how a person arranges work\study activity while working\studying online. Determination of gender, age, occupation and social status will make it possible to draw a conclusion about the awareness of the individual about time perception, ability to flexibly adapt to changing circumstances and effectively manage their routine. It is necessary to take into account the emotional component: the ability of people to analyze their behavior, to understand and manage their daily activities in a stressful situation of COVID-19 restrictions.

It seems that online mode of work\study is here to stay. COVID-19 pandemic has dramatically changed our lives: communication, working environment, self-isolation, quality of life itself, etc. (Rettie and Daniels, 2020). The study examined the impact of rapidly changing environment, remote working and loneliness on people who were grounded for a long period of time, on their individual perception of time. Some recommendations are made for time management and daily routine planning as a result of the study. The survey was conducted from March to August 2021, 85 people took part in the survey, their age,

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gender, marital status, education, social status were taken into consideration. People face the problem of time every day, every minute. Time is the regulator of all human activities. No activity takes place without the perception of time. Therefore, it is important to know what "time" is, how it is perceived by a person, what its perception depends on and whether this perception changes in extreme or dangerous situations when the whole world is restricted by a PC use. "There is no single, uniform time, but rather multiple times which we experience. Our temporal distortions are a direct translation of the way in which our brain and body adapt to these multiple times, the times of life" (Droit-Volet and Zélanti, 2013).

This can help a person organize activities, use time rationally or irrationally, meet the deadline or procrastinate. Time is a concept, and as any concept is taught to us. The feeling of time depends on future and past (Stockwell et al., 2021). Time exists objectively, continuously one minute replaces another and one day follows another, months, years, centuries pass. But, despite the fact that the course of time throughout the world obeys the same laws, for each individual person the same interval of objectively past time may seem shorter or longer than it actually is. There is a joke that you cannot compare 5 minutes in a queue with 5 minutes on a red-hot stove. For different people, the same period of time can have completely different meanings. For one person the week "stretches" into a month, for another the week "flies" like a couple of days or even hours (Surani and Hamidah, 2020). The purpose of this work is to study the features of human perception of time during COVID-19 pandemic lockdown or self-isolation. The research subject is a change in perception of time while working or studying online from the comfort of one's own home.

Research by neuroscientist Antonio Damasio shows that decision-making is inextricably linked with emotion, so it is not surprising that anxiety and depression are often characterized as states of being stuck in time and unable to make decisions during an uncertain situation (Damasio and Carvalho, 2013). The problem of psychological time in contrast to physical time was first posed by Henri Bergson "If I look at a road drawn on the map, nothing prevents me from turning back and looking if it forks in places. But time is not a line on which we go back". He differentiated time from duration, i.e., psychological time: "There is the time that is measured, the time of chronometers and science, a cold parameter like a dead fish. And there is the time that is not measured, which is subjective and incomparable, which is elastic and malleable, the time of the moment, the lived time that is called duration" (Bergson, 2014). The following features are characteristic of psychological time: it continuously changes the world, i.e. leaves a mark on things, is a symbol of change, and has an internal genetic relationship of moments. It should be noted that in this research we focus on psychological time. Psychological time is distinguished in different scales. First, there is a situational scale consisting of the direct perception and experience of short time intervals. Second, there is biographical scale based on the laws that manifest themselves when changes of direct forms of experiencing time in various life situations emerge. A certain system of generalized temporal representations is formed in a person's consciousness (the concept of life time in the scale of life). Historical - when events that occur before the birth of an individual, and those that occur after his death, are involved in the sphere of temporal relations and act as a condition for the formation of a personal concept and direct experiences of time (for example, genealogical succession). All these scales are interconnected (Martsinkovskaya and Balashova, 2017).

Materials and Methods

Our study is based not on a single method, but on a system of different methods. We used several questionnaires to get information necessary for generalization and conclusion. The first questionnaire used was aimed at problems that people had during COVID-19 pandemic (Martsinkovskaya and Tkachenko, 2021). The second one was designed to evaluate different people's time perception. one's own home. Time is a form of the flow of all mechanical, organic and mental processes, a condition for the possibility of movement, change and development, every process whether it is spatial movement, qualitative change, emergence or death, occurs in time.

A person's perception of time is provided with the help of a biological clock, including time-tested cyclical metabolic processes in the body. Comparing the course of real time with these processes, a person has the opportunity to evaluate it in such parameters as its duration, speed, acceleration or deceleration. The role of a biological clock can be claimed by many processes, for example, rhythmic contractions of the heart muscle, the rhythm of breathing, the rhythm of movement of the arms and legs of a person when walking, daily metabolic processes in the body, the rhythm of the electrical activity of the brain and probably some others, so far not sufficiently studied, but subordinate to a certain rhythm or cyclicity, organic processes (Meyer, McDowell and Lansing, 2020). The perception of time is conditioned not only

by the course of the “biological clock”, but also by the content and nature of the activity, which the time interval perceived by a person is filled with. The more saturated with affairs and divided into small intervals a given period of time is, the more individual it seems to a person. The past time in our memories seems to us the longer, the more it was occupied by events significant for us, and on the contrary, it seems shorter if during this time no events significant have happened. The waiting time for the desired event, especially if we “rush” its onset, usually lengthens in our perception (the passage of time seems to slow down). If the corresponding event is undesirable for us and we mentally strive to ensure that it would not occur as long as possible, then on the contrary its expectation in our consciousness is reduced (the course of time in its subjective perception on the contrary accelerates) (Galbraith et al., 2021). The time filled with events with a positive emotional connotation decreases in its experience by a person, and the time filled by the events with a negative emotional connotation, respectively, increases in duration. Long-term research by D. G. Elkin in 1962 showed that there was a direct connection between the perception of time and activity: the more accurate the perception of time, the more successful the activity; the more exciting the activity, the faster time flows (Elkin, 1962).

The first part of the questionnaire evaluated quantitative changes in time perception that people noticed during COVID-19 lockdown. The second part of the questionnaire contained open-ended questions that are accountable for the variety of opinions given by people of different age and occupation. In the third part of the study time–management matrix or the Eisenhower Matrix also known as Urgent Important Matrix or the Eisenhower Decision Matrix was suggested as a frequently used model for time management. It should help improve decision making process between priority and minor problems managing time to maintain work-life balance and not get burn out, as many respondents in their answers mentioned lack of time in the situation when some extra time should be found (as people didn’t have to commute or get ready to leave for work or study).

Using simple tools like the time-management matrix helps to keep things organized and reduce emotional stress. Tasks are categorized into specific quadrants, which in turn determine when and for how long you can complete a task:

- Quadrant I - “Do it now” (urgent and important). This includes priority tasks that require immediate attention. They have tight deadlines and must be followed above all else and personally.
- Quadrant II - “Decide when you will do it” (important but not urgent). The elements it includes are important but do not require immediate intervention or response. At the same time, tasks have a certain deadline and are also performed personally.
- Quadrant III - “Delegate as much as possible” (urgent but not important). This quadrant includes phone calls, emails, and scheduling meetings and events. These types of tasks usually do not require personal attention because they do not imply a measurable result.
- Quadrant IV - “Do it later” (unimportant, non-urgent). Actions that fall into quadrant IV can always be postponed without fear of any consequences. These tasks take time and interfere with the more important tasks that you put in the first two quadrants.

Using this matrix should definitely help manage time efficiently and effectively in situations of uncertainty and danger when people get stuck in lockdown, but still trying to do their best in work or study.

Results

During the research, a sociological survey was conducted according to the topic “Time Perception and Time Management during COVID-19 Pandemic”. In accordance with the goal and objectives set, a research procedure consisting of three parts was developed. Based on the results of the first part, a quantitative survey of respondents was conducted, which is devoted to attitudes towards COVID-19 in general, the study involved 85 respondents (12 males and 73 females) aged 19 to 65 years, all the respondents were from the education system: full-time bachelor students, part-time master students combining study and work, teachers and professors of the University. Gender factor was not considered, but age was. Teachers and professors of the University not only answered the questions of the survey, but also gave their expert opinion on the issue. The question “What is your marital status?” was answered like this: 59 people (69%) are single / unmarried, 15 people (18%) are married, 4 people (5%) are divorced, 7 people (8%) are in a relationship. The question “What is your occupation?” was answered by the interviewed respondents like this: 45 (53%) students, 30 full-time students (35%), 10 parttime students (12%). The respondents were asked the question “Do you work / study on-line?” 36 people (42%) answered that they study and work on-line; 21 people (25%) are partly on-line, 11 people (13%) remain in the full-time training / work system, 17 people (20%) answered that they had worked online

before the pandemic. The answer to the question "Have you restricted physical contacts with other people during COVID-19 pandemic period?" was answered like this: only 10 (12%) people completely stopped contacting other people, the majority of 54 people (64%) answered that they stopped partly, 21 (24%) people did not avoid physical contacts. The respondents were asked the question: Did you have more / less spare time during lockdown? Most of the respondents, 48 people (56%) answered that they had more spare time; 15 people (18%) answered that they had less spare time; 12 people (14%) did not notice any changes, 11 people (12%) didn't notice any difference before or during COVID-19. The respondents were asked the question "Do you consider the Internet an effective means of communication in the situation of COVID-19?" The majority of 41 people (48%) strongly agreed, 36 people (42%) partially agreed; only 9 people (10%) disagreed. The next question was "Do you follow news about COVID-19 on a regular basis?" Only 11 people (13%) answered affirmatively, the majority of 45 people's (53%) answer was "from time to time", 18 (21%) people did not follow the news about COVID-19 at all. The respondents were asked the question "Do you feel comfortable being made work / study on-line?" The majority of 37 people (44%) felt comfortable all the time, 30 people (35%) were partially satisfied with working and studying online and only 18 (21%) people did not feel comfortable working and studying distantly. Thus, the first part of the study showed that people who took part in the survey provided demographic variety, their answers were completely different, the majority of respondents enjoyed spare time provided by online work \ study, no need to commute saved time, they enjoyed working \ studying from the comfort of their own home, but they didn't completely restrict physical contacts with the outside world.

The second part of the study includes mostly open-ended questions and is devoted to people's individual perception of time during a pandemic. As the study shows, 47 respondents (55%) believed that their daily routine didn't change during self-isolation period, but 38 respondents (45%) noted that their life had changed dramatically.

About daily routine changes the answers to the open-ended question 4 were like these:

"I have more free time because," ... I don't spend time commuting and getting ready, everything is at hand, I can conjoin work\study with other activities at home, I was at home for 2 weeks, I didn't go to work, didn't waste time commuting (9 people), no need to spend time on a trip to and from work, (in the morning I could sleep longer, since there was no need to pack stuff, get ready and spend time travelling), did less work (2 people), I didn't have to spend a lot of time in traffic jams moving around the city (4 people), spent time at home (3 people), instead of walking to work, no need to stay late at work (no overtime work), no need to waste time in traffic jams, I finished my master's degree thesis, during the first pandemic lockdown, I didn't have more free time; I worked from home (tutoring).

To the open-ended question 5 "I didn't have enough time for obligatory activities because..." There was a lot of homework (3 people), a lot of offline / online work (7 people), there were chores \housework (2 people), commuting took a lot of time (3 people), the work schedule was less structured (3 people), a lot of work was accumulating that can only be done in the workplace, the whole real life had turned into a virtual one, there was not enough technical equipment for online work of all family members, household chores were distracting, a lot of new activities (2 people), I spent time on procrastination and anxieties, I got tired faster and often took a nap at lunchtime, it seemed that there was too much of it to rush, but I was lazy (2 people), I often got distracted by the phone calls, I don't know, I wasted time on unnecessary things, new hobbies appeared, I had enough time for everything (9 people).

6. The following responses were given to the open-ended question "During self-isolation period I did more, I did less" : I stayed at home more (5 people), worked less (2 people), relaxed, studied, spent time with my family (3 people), did household chores, watched movies, took care of my health, spent time meditating, went jogging less, self-developed (2 people), focused on courses, ate, slept more (4 people), went in for sports, developed new hobbies, read (2 people), worked at the computer (3 people), spent time surfing the Internet, I got tired more, spent time at home (3 people), did work less, procrastinated more, did exercises, walked more, worked, slept, ate more (2 people), I wanted to do something extra, listened to music, watched cartoons, was distracted from work\study, spent time with children more, was into self-development more, I was stressed less, relaxed (8 people), talked with friends / relatives (7 people), moved around the city, spent time driving, complained about the lack of time more, got nervous, played sports (2 people), was nervous (2 people), I slept at work, walked in the parks or shopping centers, communicated with people, spent money shopping online, socialized at work.

7. The following answers were given to the open-ended question "I like / don't like to function in online mode because...":

I like working online because it's better to work from home, it's comfortable, both online and offline are good for me, I can work / study from anywhere, I don't need to go anywhere, it saves time, I'm an introvert (I don't need to communicate with people), it's easier to schedule things when you work from

home, I interact with people less, I like a regular lifestyle, I experience less stress, have more time for self-development, have more free time, I don't have to worry about my appearance, I don't need to go to the office, my home is a comfortable environment both for work and study, I have more time, it is convenient, it is easier to find time for household chores, even when I feel unwell, I can attend classes, do not commute, I can superpose several activities (work\ study and some housework), I can work at your own pace.

I don't like it because academic performance has become much lower and there is not enough live communication and socialization, no time is saved, I have to do household chores, more time with family and friends means less time spent on work\ study, my home is not well-equipped for online study, I have poor contact with teachers, I communicate with people less, I go crazy being alone in my home, information is better absorbed in discussion and interaction, I get tired of a computer, I like face-to-face studies, everyday routine distracts, I need eye contact with the teacher and classmates, there are communication failures, I cannot meet deadlines working\studying from home, I do not participate in the activities of the university, I do not feel alive.

The following answers were given to the open-ended questions of the survey:

2. "During lockdown period the following activities were added to my everyday routine ...".

distant learning\working activities 21.33%, computer working activities 16.00%, cleaning / homework activities 6.67%, sport activities 9.33%, hobbies 13.33%, others 6.67%, no new activities 26.67%. Also, other activities were mentioned: online courses, household chores and babysitting, cooking, working out at home, cleaning, Spanish classes, organizing the learning process for children, watching TV shows / cartoons, taking long walks with the dog.

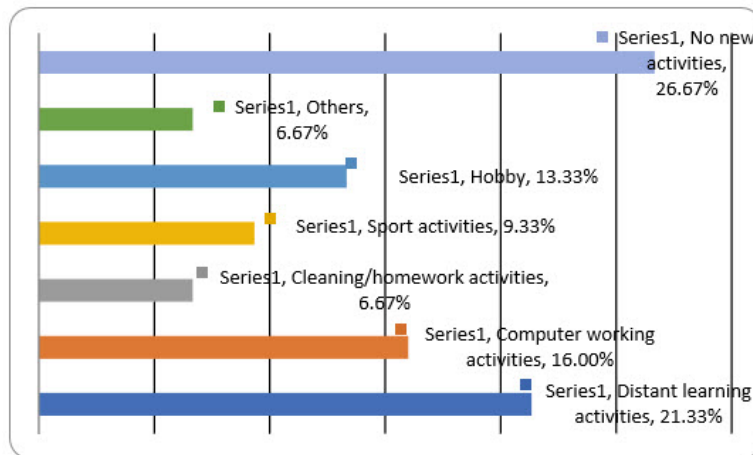


Figure 1. New activities added to regular schedule during COVID-19 lockdown

3. "The following activities were canceled during lockdown period":

commuting 20,69% , getting ready for work/ university 17,24%, street walking 13,79%, visiting public places 17,24%, meetings/ communication 13,79%, others 6,90%, no canceled activities 10,34%.

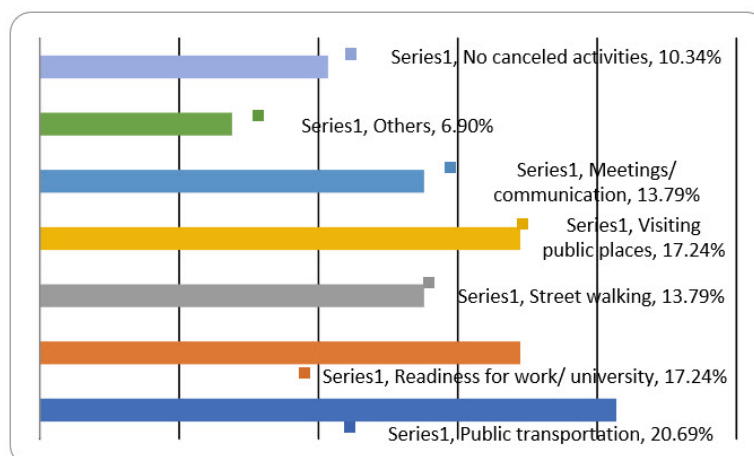


Figure 2. Activities deleted from the regular schedule during COVID-19 lockdown

Also, other activities were mentioned: going to college, going to school, meeting friends, chatting with people, eating fast food, going to the grocery store, applying makeup, attending events, dressing up, hiking, going to the gym, meeting elderly relatives, face-to-face interaction with students and colleagues.

In the third part of our study, recipients were asked 'to fill out this questionnaire by highlighting the statements that characterize your everyday routing during COVID-19 pandemic arranging them according to importance and urgency'. This made it possible to form a time-management matrix in the era of a pandemic when working in distant mode. This matrix is an example of the average indicators of the entire surveyed group, however, it can be filled out individually in order to plan your activities, manage time and set priorities (Fig.3).

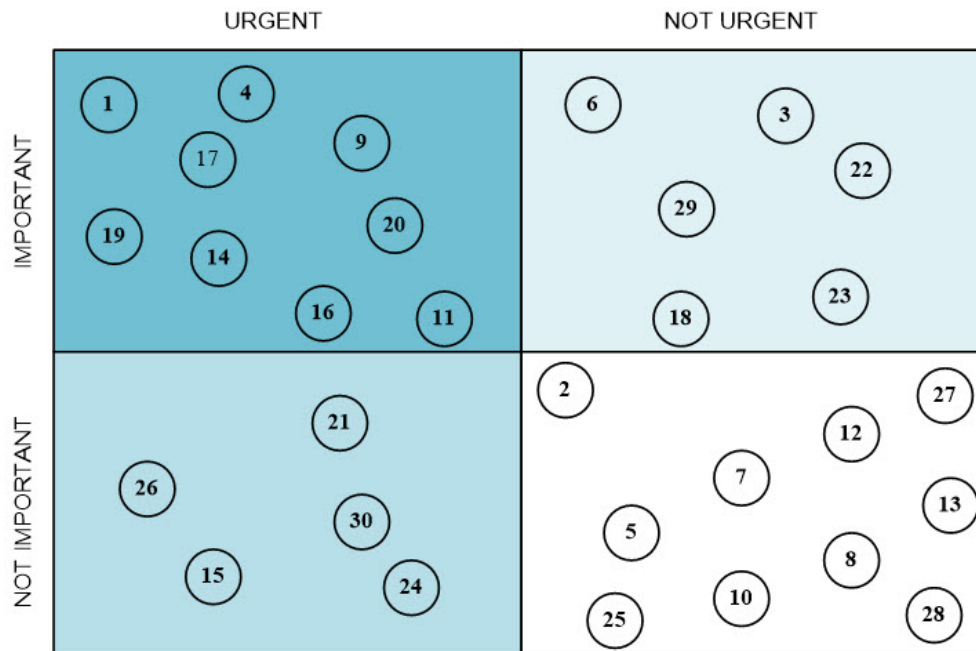


Figure 3. Time-management matrix example

1. Every day I use an on-line platform (Zoom, Teams, Skype, etc.) and get ready to on-line meetings.
2. Every day I check if the clock is visible in the room where I have my on-line meetings.
3. Every day I arrange (take part in) meetings that have a certain goal, have a time limit and reach this goal.
4. I check my E-mail as soon as it gets into my mail-box, usually the same day, and read messages at once.
5. I scan all the articles and on-line news, especially about COVID-19.
6. I block all spam letters and advertising sites, delete my name from the delivery lists of on-line magazines that I don't read.
7. I can find solution to several problems without being distracted from Zoom, Teams, Skype meetings or on-line game.
8. I decide how many meetings a day in Zoom Teams, Skype to plan.
9. I plan certain time for communication with friends and relatives.
10. I don't answer letters, SMS and phone calls when I am busy working (homework, getting ready to lectures, attending classes via Zoom, etc.).
11. I always answer the call but say that I will call back later.
12. I limit time on the phone and chatting on-line.
13. I never answer the phone, but check the messages left later or read SMS.
14. I decide how many phone calls a day to make, whom to call and how long to communicate.
15. I scan SMS messages as soon as I get them, no matter if there is a meeting in Zoom.
16. Later I read messages carefully and answer those to be answered.
17. I save all the letters in my mail-box, don't delete any letters.
18. I delete all the documents from my PC as soon as I don't need them anymore, I also delete SMS messages from my phone as soon as I read them.
19. I prefer to copy somebody else's solution of problems rather than do them myself, saving time.
20. I carefully check the homework I give to my students and grade them (I do all the assignments

that a teacher gives).

21. I ask students to limit their written papers to one page (I briefly do my written homework, never copying unnecessary material).

22. I decide whom to give information, which assignments to offer (I decide which assignments to complete and in which subject).

23. I reach the balance between thinking time and action time.

24. Every day I make a list of things to do, checking in the evening which ones are completed.

25. I spend limited time a day in front of my computer, not more than necessary.

26. I try to keep in touch with my friends and acquaintances personally, not only via phone or chat.

27. I communicate only with people who inspire positive emotions and avoid those who are negative.

28. I am sure I am aware about all the latest information technologies and newest gadgets.

29. I save all E-mail letters in order to reread them later.

30. I regularly check files in my computer and delete everything that I don't need.

Our study has shown that although people cancelled some of their time-consuming activities during lockdown period (commuting, meeting people, chatting with them etc.), they still lacked spare time because of the ineffective time management and procrastination. Being on their own during the lock-down period, people relaxed a lot, slept longer, spent time surfing the net or watching TV, thus contributing to waste of time leading to missing deadlines and lowering productivity. The above mentioned matrix is to help and arrange urgent and important activities in one part of the matrix, non urgent and unimportant activities in another part of the matrix thus contributing to the effective and efficient time-management. The matrix also helps and differentiates objective time (it does not depend on a person) and subjective time (feeling the flow of the own time). The respondents had the opportunity to try and arrange their daily activities according to the matrix provided.

Discussions

The simplest form of human perception of time is the perception of one's own "biological clock", which contains characteristics such as duration and sequence. Practically all living beings on the planet have a rhythmically changing state of functional systems. This formed the basis for the biological hypothesis of the perception of time by H. Hoagland (Hoagland, 1933). In humans, more than 100 different physiological parameters change with a period of 24 hours. These daily fluctuations can persist both in the absence of any external and internal factors (for example, sleep deprivation). A person is not able to thoroughly monitor the parameters of own body and does not need this, but people are able to arrange their lives in time. For example, the existence of "owls" and "larks" depends on coordination of optimal physiological and mental wakefulness with the cycle of the day, upon reaching which the human body is ready for productive functioning.

Famous Russian physiologist I.M. Sechenov's concept of the physiological foundations of experiencing time is of exceptional value: "Time is a very general concept, because very little of the real is felt in it. But it is precisely the latter circumstance that indicates that it is based on a part of a concrete idea. Indeed, only sound and muscle sensations give a person an idea of time, moreover, not with all of its content, but only with one side: the viscosity of the sound and the viscosity of the muscular feeling. When an object moves in front of my eyes, following it I move gradually either my head or my eyes, or both together; in any case, the visual sensation is associated with a stretching sensation of contracting muscles, and I say: "The movement stretches like a sound." People's daytime life is spent in the fact that they either move, receive a stretching sensation or see the movement of other objects – and again they hear stretching sounds (and olfactory and gustatory sensations also have a viscous character). Hence, it turns out that the day stretches like a sound; 365 days stretch like a sound, and so on. Separate the nature of viscosity from representations of the movement of a day and a year and you get the concept of time" (Sechenov, 2019). The deep analysis reveals an internal dialectical connection between the experiences of time and the spatial-motor functions and the process of generalization and reflection in the consciousness of objective time during which the body moves in objective space.

Another Russian physiologist, academician Pavlov I. P. experimentally showed the possibility of a conditioned reflex development in dogs. Pavlov believed that for the central nervous system time is as real a stimulus as any of the well-known ones. In the body itself, according to Pavlov, there are many cyclic phenomena. The function of time estimation is performed by the central nervous system as a whole. How can we physiologically understand time? - With the help of various cyclical phenomena, the setting and rising of the sun, the movement of the clock's hands, etc. But people also have a lot of these

cyclical phenomena in their body. And since each state of every organ can be reflected in the cerebral hemispheres, there is a reason to distinguish one moment of time from another" (Pavlov, 2012).

The next, more complex situation in which a person perceives the duration of time intervals, which was studied by the Russian psychologist D. G. Elkin (he turned to the problem of time perception back in the 1940s) is activity (Elkin, 1962). The nervous processes accompanying purposeful conscious activity can be studied, but doubts always arise about a person's ability to reliably interpret the knowledge gained. Depending on the prevailing conditions, the type of activity, the emotional-volitional component, the physical state of the body at the moment, the type of person's temperament, priorities, goals, motives, etc., an individual assessment of time may be different. When assessing the duration of an activity that was pleasant in nature, people tend to exaggerate the time interval, and if the activity was unpleasant, to underestimate it. Karl von Vierordt, a German physiologist, formulated a law: "When people estimate the duration of short periods of time, they usually overestimate their duration, and when long periods are subject to estimation, they underestimate it" (von Vierordt, 1868), thus contributing to psychology of time perception.

Individual differences in people affect the subjective assessment of the length of time. Thus, in the experiments of H. Ehrenwald (Ehrenwald, 1923), some subjects showed a persistent tendency to underestimate, while others - to overestimate time. In this regard, H. Ehrenwald suggested the need to distinguish between two individually unique types of time estimation: bradychronic and tachychronic. The terms are analogies to "bradycardia - a condition typically defined wherein an individual has a resting heart rate of under 60 beats per minute" and "tachycardia - a heart rate that exceeds the normal resting rate". The first is characterized by an overestimation of the speed of time, the second - by its underestimation, and the individual differences between people, correlated with these two types of time estimation, turned out to be stable.

"Perception of time is a figurative reflection of such characteristics of phenomena and processes of external reality as duration, rate of flow and sequence. Various analyzers are involved in the construction of the temporal aspects of the picture of the world (Hookway, 2005), of which the kinesthetic and auditory sensations play the most important role in the precise distinction of time intervals" (Güss, 2013). Individual perception of time periods duration significantly depends on the intensity of the activity performed at this time, and on the emotional states generated in the course of activity (James, 2021; Luria, 2018; Rubinshtein, 2016; Vainshtein, 2005).

Human perception of time has been studied much less than the perception of space. This is due to the fact that the spatial characteristics are very visual, real and can be reduced to an experiment. In the modern scientific picture of the world, time and space are connected with each other and with material bodies, therefore, temporary changes can be judged by the change in the physical state of the material world. People are able to judge about temporal characteristics, as about real ones, only by certain criteria, with the "passage of time". It turns out to be a kind of paradox. To notice that a day has passed, it is enough for us to see the change of the sun and the moon; however, for these changes to actually occur, time must pass (Rubinshtein, 2016).

In order to combine time and space the concept of "chronotope" can be used. This concept is defined as a regular relationship of space-temporal coordinates. In the past, present and future, from separate and unsynchronized images, in the process of social construction, certain centers of grouping objects, time and values - chronotopes, interconnected in space and time by semantic meanings are formed. Chronotopes are "no longer abstract points, but living and indelible events from being", connected not only by a random sequence, but also by life itself, by the will of living beings, regardless of whether these events are real or not (Zhuravlev and Kupreychenko, 2011). The concept of "chronotope" combines both time and space (the Greek word 'chronos' meaning time and 'topos' meaning place). Traditionally the chronotope is understood as the time-space continuum in which a person exists. The concept was introduced by A. A. Ukhtomsky (Ukhtomskiy, 2022): "From the point of view of the chronotope, there are no longer abstract points, but dependencies which express the laws of existence are no longer abstract curves in space, but 'world lines' that connect long-past events with the given moment and via them - with the events of the future" (Ukhtomskiy, 1996). This term became widely known due to its active use in the field of aesthetics by Michael Bakhtin: "The essential interconnection of temporal and spatial relations, artistically mastered in literature is called a chronotope (meaning 'time-space')" (Bakhtin, 2011). Since the beginning of the 1990s the idea of a chronotope as applied to psychology has been actively developed by V. P. Zinchenko: "The peculiarity of a chronotope is that it combines something that seems incompatible. Namely, spacial-temporal in the physical sense of the word, bodily limitations with the infinity of time and space, that is, with eternity and with infinity. The first concept is ontological, which rewards a person with death in the end; the second is phenomeno-logical coming from culture, history, from the noosphere, that

is, from eternity to eternity with all conceivable universal human values and meanings. In any behavioral or activity act performed by a person, we have all three time periods: past, present and future, that is, even a chronotope of living movement can be considered as an elementary unit of eternity... Of course, a chronotope is still a metaphor that successfully describes a space-time continuum in which human development proceeds, understood as a unique process within the Universe" (Zinchenko, 2012). According to most scientists, separately taken space and time are just a "shadow of reality" (Lawson, 2011; Loginova, 2010; Perrino, 2022), but real events occur undividedly in space and time, in a chronotope.

The mentally ill often complain about a change in the consciousness experiences of movement and space within the body, as well as in external phenomena and a change in the sense of time. This problem, especially the problem of time is one of the underdeveloped chapters in psychology and psychiatry. A number of authors divide the sense of time into "I - time" and "world time". We consider the concept of time by E. Husserl and M. Merleau-Ponty, which makes it possible to understand the origins of the modern problem of conceptualization of temporality and see possible ways of solving it. Time is recognized by researchers as central in the work of E. Husserl, according to the founder of phenomenology time is the basis of all experience, and experience is the only thing that we have. E. Husserl presented the most consistent views on temporality in his work "The Phenomenology of the Inner Consciousness of Time" (Husserl, 1991), which is a lecture, the main theme of which is related to criticism of psychology of time sense in humans. M. Merleau-Ponty (recognizing this point of view calls "I-time" - "bodily time" and believes that it flows unconsciously in a person) identifies the bodily sense of time with the sense of rhythm. The lower the level of an animal or a person, the more the parallelism of the world rhythm with its own subjective rhythm is noted. Thus, "I - time" or "bodily time" is a primitive sense of time ... According to the author, there is also a Gnostic sense of time - as the ability to place lived segments of time along the timeline. Our "I" has a consistent series in the history of our own experiences. This Gnostic sense of time is subject to changes in both pathology and normality (Merleau-Ponty, 2020). A. Carrel figuratively represents physiological and physical time in the form of two trains rushing in parallel. One of them (physical time) goes at a constant speed; at first the other one goes with the same speed, but then its speed decreases more and more - this is physiological time. If we are at the window of the second train in which we are going, we look at the first, then at first we will not notice the difference in speed, but then the further, the more we lag behind, the faster the other train (physical time) rushing will appear to us (Carrel, 2018). For children, time seems to flow slowly; for old people, time rushes by quickly (Ehrenwald, 1978).

People are able to forget about the duration and sequence of events, which means that such a mental process as memory plays an important role in the perception of time. The perception of the past, present and future ensures the normal functioning of a person in society. Russian psychologist S. L. Rubinshtein believed that all human life, including psychological well-being, depends on the awareness and the possibility of reproducing the timeline, consisting of successive causal relationships, memories, emotionally colored events and prospects for the future (an important role is given to the imagination) (Rubinstein, 2017). To make it easier for a person to navigate the time sequence in the modern world there are many ways to document all kinds of details of everyday life, which, on the one hand, opens up prospects for a deeper understanding and study of facts, but on the other hand, causes contradictions in one's own memories. In psychology, the perception of time is associated with intelligence.

Y. V. Bushov and M. V. Svetlik focus on the fact that the faster the neural connections are activated, the faster the operation to find a solution to the situation is performed. The faster the problem is solved, the more real time is left for the solution of the following, i.e. the volume of possibly solvable problems increases. Therefore the less time it takes to search for "answers", the higher the intellectual level (Bushov, Svetik and Krutenkova, 2010). In his work B. I. Tsukanov describes the quality of the "internal clock" and the problem of intelligence, it was found that the accuracy of time perception in persons with high intelligence is also high (Tsukanov, 2000). This is due to the fact that every single moment in time, the brain processes an incredible amount of information received both from the external environment and from the body. When the process of its merging into a single whole takes place and a more unique moment in physical space and time is created, the brain will be able to create and comprehend a complete picture of the moment. As stated in the definition of the concept of "perception of time", the most important role in the exact distinction of time intervals is played by kinesthetic and auditory sensations (according to Sechenov, 2019).

Ancient philosophers saw time as a measure of movement. Although some Greek philosophers considered time as illusion, others believed that the flow of time was the very essence of reality (Grünbaum, 1974). Albert Einstein expressed his doubt about the distinction between past, present, and future in a letter to his longtime friend Michelle Besso: "People like us, who believe in physics, know that the distinction between past, present, and future is only a stubbornly persistent illusion. ... time itself is not

what is in question here but rather the passage or flow of time” (Medicus, 1994).

From the early childhood, a person is taught to count and has to count for the rest of the life. Some people are able to very accurately measure the time: professional musicians, the military, athletes, dancers, etc. (according to some research, in the course of special long-term training, a person learned to increase the accuracy of the perception of time intervals) (Grondin, 2010). All these studies also involve the individual recitation of small time intervals that are necessary for the coordination of movements and actions. The connection between articulation, auditory sensations, the action itself and the comparison of response signals becomes obvious.

Like all mental processes, the perception of time is investigated using the substrate-carrier of the psyche - the brain. The subjects of the most research in this area were the people who suffered or had had traumatic experience. The “activation complex” of the time perception process was disturbed in the subjects. Therefore, the information received cannot be absolutely identical for people in the situation of COVID-19. The difficulty lies in the fact that the perception of time is based on other mental processes and cannot be investigated in isolation. In research by the Russian scientists the role of the left and right hemispheres of the brain is also ambiguously interpreted. L. Y. Balonov, V. L. Deglin, D. A. Kaufman, N. N. Nikolaenko in their work “On the functional specialization of the cerebral hemispheres of the human brain in relation to the perception of time” (Balonov et al., 1980) indicate that time flows differently in different hemispheres: the right hemisphere functions in the present and the past, the left - in the present and the future; people’s own physiological time goes faster in the right hemisphere. These data imply that duration is estimated differently by both hemispheres. There is another side to the issue: the perception of time becomes possible only with the joint simultaneous processing of information and the delays mentioned above would lead to a malfunction of the entire system.

It is also unclear whether the perception of time is innate or acquired. It is impossible to appreciate the inalienable meaning that people put into time. According to Y. Bushov, life is the time intervals from one heartbeat to another. No matter what situations a person finds himself in, one is still forced to live with an internal “ticking clock”, which cannot be stopped without ending life itself (Bushov et al., 2019). Physiology does not want to give in to the psychological aspects of this phenomenon. In the entire animal kingdom, only human is able to realize the importance and study the beating of the own heart, however, like no one else, humans seek to exalt themselves above the rest of the world, in the role of the bearers of reason; no matter how much knowledge people get, what they want to achieve, their timer keeps ticking and ticking, time is running out; the mind cannot separate from the body and live on, just as a man cannot take over nature. People were destined to “invent” time in a purely human interpretation (meaning the perception of time from the point of view of the past, present and future), which would bring together every person who has ever lived, would act as an eternal force beyond the control of human, and absolutely everyone feels own heartbeat. From this we can conclude that all the basics of time perception were given to people from birth, but the perception of time in the form in which a modern person can operate with it is a complex mental process acquired by own needs. At the age of two, the child cannot answer the temporal question “when?”, but already understands that the answer must contain a temporal category (today, tomorrow, yesterday, etc.). According to the research data of the French psychologist P. Janet, the very first two concepts in the perception of time “now” and “not now” are formed (Carroy and Plas, 2000). Further, in the process of the child’s development, with active teaching by parents, with the normal development of a child’s self-concept, an understanding of one’s own place in a situation and awareness of the place of others in it is formed. Thus, the conceptual base is being filled, and by the age of three, the child is already able to name a decent temporal hierarchy. One of the main temporary concepts is “now”. The ability to assess a given moment in time can deeply characterize a person. The very fact that, when describing the word “now”, in most cases, information contains a spatial character and a description of changes in the physical characteristics of objects, it makes a connection between the description of time and actions, which was already mentioned in the first paragraph. To describe what was then and what is now, the environment must change; in most of these changes, both nature and man play a major role. From this it follows that the activity not only affects the nature of the perception of time in terms of the dependence of the situation and the individual attitude to it, but also serves as the very instrument with which it is possible to give oneself an account of the change in the stages “before” and “after”. A person is able to set goals that are far from the present, capable of performing multiphase actions (unlike animals). This means that time-oriented purposeful activity is itself a mechanism for measuring intervals of different duration. For example, such a concept as “always” cannot absorb the meaning of the eternal and permanent, since the physical world changes every second, but it has a strong emotional character, implying the constant attitude of a particular person to something (someone) outside of time. From all of the above, we can conclude that the potential for a detailed study of the perception of time is great. There

is a lot of knowledge on the basis of which experiments can be designed to study this problem. Physical, psychological, neurophysiological, anthropological and historical knowledge can someday be combined into a single methodology that reveals the mysteries of this mental process. A person has a subjective perception of time, developed in the process of life, as well as internal biological time, which characterizes the course of the rhythmic cycles of the body. The topical location of the mechanism responsible for the individual assessment of time has not yet been found, however, its work is associated with the joint inclusion of all mental processes.

Conclusions

In the study we have considered processes associated with the idea of time in the psyche (representation), as well as the construction (creation) of time in the periods of lockdown during COVID-19 pandemic. However, we cannot be limited to the fact that we somehow perceive time, reflect it in our psyche (represent), and predict the development of the situation. In addition, our psyche is capable of more – constructing and managing time. This is already an active, directed process; however, it may not always be efficient. People are actively looking over options, choosing the most suitable one (according to some criteria - these are not necessarily the “most profitable” criteria), and even, perhaps, specially plan their further actions. Depending on the degree of efforts made, they change the world around, thereby changing space, time and meanings - not only their own, but also the entire environment. This can be called effective and efficient time management. If the past can be represented (remembered), then the future can be not only imagined - represented, but also constructed. Objective time differs greatly from subjective time (the way the person feels it). Subjective (psychological) time is a reflection in the human psyche of the system of temporary relations between the events of his life path. Psychological time includes: assessments of simultaneity, sequence, duration, speed of various life events, their belonging to the present, remoteness in the past and the future, experiences of compression and elongation, discontinuity and continuity, limited and infinite time, awareness of age, age stages (childhood, youth, maturity, old age), ideas about the probable life expectancy, about death and immortality, about the historical connection of one's own life with the life of previous and subsequent generations of the family, society, humanity as a whole (Davidson and Sternberg, 2003; Grondin, S. 2019; Zogby, 2017).

Using a matrix to evaluate urgency and importance of activities helps building a mental model of temporal relationships and determining the place of a person in it based on the perception of time. Naturally, it is not a purely individual human psyche that is involved in this, but the role of social mediation (social time and its relationship with subjective time), as well as sign and behavioral expression (shows how a person adjusts subjective time in the environment) is also very important. This is a transition from biologically perceived time (perceptual, immediate) to socially mediated (conceptual).

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Conflict of interests

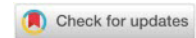
The authors declare no conflict of interest.

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Motivations for Choosing a Career and the Expectations of Serbian and Slovenian Preschool Teachers of Their Own Career Development

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Abstract: Studying motivations of teaching professionals for their profession is an important area of research. Knowing motivations is relevant to both school policy and teacher educators in order to tailor initial and further training accordingly, thus enabling individuals to be best equipped to meet the challenges of their careers. In the present article, we were interested in why Slovenian and Serbian preschool teachers choose their profession, how the preschool teachers with different motivations for their choice perceive their profession as a career, what factors they consider to have an impact on their career development, and what expectations they have in relation to it. The study was based on a survey approach and included 289 preschool teachers from Serbia and Slovenia. The results show that among preschool teachers in both countries intrinsic and altruistic motives prevail in their choice of the preschool teaching profession and that their importance increases as the importance of motives of a simplistic view of studies and work decreases. The results indicate that the predominant motivation for choosing preschool teaching as a career plays an important role in the preschool teachers' views of their profession, their identification of the career development factors, and their career expectations and plans. The implications of these findings for preservice and inservice preschool teacher education are discussed.

Keywords: career motivations, preschool teaching as a career, career development, expectations, Slovenia, Serbia.

Introduction

For the effective professional work of teachers, it is important to have both, subject matter knowledge and pedagogical and psychological competence (Marentič Požarnik, 1987; Peklaj et al., 2009; Shulman, 1987; Valenčič Zuljan et al., 2011), while research on effective schools and teacher professional development also highlight the importance of teachers' enthusiasm, commitment to their students' learning and the importance of their professional identity and commitment to the teaching profession (Day et al., 2007; Stronge, 2018). As Heinz (2015) notes in a review of studies, "quality education cannot be achieved without teachers who are motivated, enthusiastic, and truly committed to their students' education and to the teaching profession" (p. 259).

Older and more recent studies cite the importance of a teacher's personality for the quality of their work. When defining the qualities of effective teachers and distinguishing between more and less effective ones, Stronge (2018) specifically highlights the value of teachers' personal qualities and, in particular, the quality of the relationships they have with their students. Studies also point to conceptions, subjective theories and attitudes that preservice teachers bring with them upon entering their studies and that have a significant impact on the education process and the subsequent competence or quality of professional engagement of teaching staff (Šteh, 1999; Valenčič Zuljan, 2007). In this context, motivations for choosing teaching profession, or career choice factors, become an important area of pedagogical research.

According to some studies (Day et al., 2007; Flores and Day, 2006; Huberman, 1993), professional motivation and commitment exerted by teaching staff are linked to their professional identities, professional development, the quality of their teaching and their persistence in the profession. As pointed out by Lin et al., (2012), the knowledge of preservice teachers' motivations for entering teaching represents a knowledge base for developing teacher education policies and programs.

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Career choice is one of the more complex decisions a person has to make; it is influenced by the person's environment and personality. London (1983, as cited in [London and Noe, 1997](#)) developed a concept of career motivation and career choice with three strands which, in conjunction with situational conditions, influence the career decisions and behavior of an individual. The concept provides insight into the factors, their relationships and interrelationships that influence a career choice. Career motivation is understood as a multidimensional concept organised into three domains: *career resilience* (resilience and flexibility), *career insight* and *career identification*. *Career resilience* is the ability of an individual to adapt to changing circumstances, even when the circumstances are negative and discouraging. The variables, such as self-confidence, need for achievements, willingness to take risks, etc., develop with age and under the influence of the environment. They are developing in childhood and may be further strengthened or diminished later on. *Career insight* is the ability to take a realistic view of oneself and one's profession. This includes variables such as the formulation of clear career goals, knowledge of the shortcomings and weaknesses of the profession, etc. Career identity is the identification of individuals with their professional work. It means organisational and professional involvement and the need of promotion, recognition and leadership. Career identity is the direction of motivation, career insight is the energizing or arousal component, and career resilience is the maintenance or persistence component ([Noe, Noe, and Bachhuber, 1990](#)). Career insight and identification develop through information processes. We believe that information days organised by teacher-training institutions, and other forms of pretraining presentations of the profession can have an important influence on these factors. Career resilience, career insight and career identity combine to form a pattern that characterises a person's career motivation. According to London (1983, as cited in [London and Noe, 1997](#)), the concept allows to design interventions intended to increase career success and effectiveness.

Overview of research on motivations for choosing teaching as a career

Research on young people's motivation to enter teaching has been going on for more than 100 years. In one of the first studies of its kind, Lowery (1920, as cited in [Daniel and Ferrel, 1991](#)) lists the five most important reasons for choosing teaching as a career: a) an opportunity to do socially useful work, b) the joy of work, c) a long-standing desire to become a teacher, d) a general affection for children, and e) the joy of teaching also through other types of work. One of the first meta-analyses to analyse 19 studies (from 1925 to 1987) was carried out by [Daniel and Ferrel \(1991\)](#). They note that most of the studies done were empirical, retrospective, carried out on representative or ad hoc samples, using an interview or a questionnaire that included a list of reasons for the career choice. On the basis of their analysis, they identified the 10 most common reasons for choosing the teaching profession: a) a desire to work with children or young people, b) an adequate pay and assertiveness at work, c) favorable working conditions, d) an interest in a particular subject, e) an opportunity for lifelong learning, f) a possibility of teaching and being employed in other professions, g) work for the benefit of humanity or society, h) an influence of relatives or teacher, i) an interest in the field of education, and j) creativity and stimulation.

A more recent meta-analysis was carried out by [Heinz \(2015\)](#). The author asked the following question: Why do individuals all over the world choose to become school teachers? The paper provides a systematic and conceptual review of empirical research studies exploring student teachers' career motivations and commitment in 23 countries from 5 continents. The author has established that most studies investigating student teachers' reasons for entering teacher education summarise a variety of different factors under three main sources of motivations influencing their respondents' decision: intrinsic, altruistic, and extrinsic reasons. Intrinsic motivations include factors such as enjoyment of teaching, job satisfaction, creativity, and an interest in teaching subject(s). Those factors, which address the characteristics of the teaching job itself, have been identified as most influential on students' choices of teaching as a career in numerous studies. Extrinsic motives involve aspects not inherent in the immediate work, such as salary, status, and working conditions. Altruistic motives entail perceptions of teaching as a valuable and important profession and the desires to support children's development and to make a difference in society.

Intrinsic and altruistic reasons seem to be more frequent in numerous studies originating in the US, Australia, Northern Ireland, the Republic of Ireland, Norway, Canada, the Caribbean, Slovenia, China, the UK, Malaysia, and Hong Kong (termed "developed countries") than in developing countries, where extrinsic reasons are more prominent ([Ažman 2013](#); [Watt and Richardson, 2012](#)). [Watt and Richardson \(2012\)](#) also cite sociocultural contexts as an important factor influencing both motivation for a career choice and persistence in a career. [Gao and Trent \(2009\)](#) found a strong representation of extrinsic motives for career choice among Chinese teachers, who mainly showed interest in the teaching profession because of extrinsic rewards (e.g., the skills they acquire when preparing for teaching profession enable them to

move into other professions). Findings by [Watt and Richardson \(2012\)](#) are similar.

Research on the motives of student teachers and teaching staff for choosing the profession in Slovenia ([Cencič and Čagran, 2002](#); [Gradišek et al., 2020](#); [Ivanuš-Grmek and Krečič, 2005](#); [Polak and Devjak, 2014](#); [Tašner, Žveglič Mihelič and Mencin-Čeplak, 2017](#)) and Serbia ([Marušić, 2013](#)) shows a strong presence of intrinsic and altruistic motives.

Using a sample of 237 students in their second study year at the Faculty of Education of the University in Maribor, [Ivanuš Grmek and Javornik Krečič \(2005\)](#) have identified five reasons for choosing the teaching profession: a) self-actualising reasons (desire for personal and professional growth, useful, influential action), b) altruistic reasons (intrinsic motivation, talent, personal interest), c) material reasons (extrinsic motivation related to studies, promotions, socio-economic aspect, further education), d) aspirational and stereotypical reasons (influence of own and others' aspirations and stereotypes about work), and e) alternative reasons (choice of studies because failing to meet requirements for the desired studies), with the first two having a strong representation.

Results of a research among Primary Education and Two-Subject teacher students at the Faculty of Education, University in Ljubljana ([Tašner, Žveglič Mihelič and Mencin-Čeplak, 2017](#)), similarly identify four deciding factors in choosing a teaching profession as a career: a) advantages (i.e., lengthy holidays, convenient working days, relatively good promotion opportunities), b) caring tendency (contribution to a better life in society, desire to help others, learning and passing knowledge to others, as well as liking to work with children), c) gender advantage (profession that is recognised as typical for women, being privileged due to their gender, and wanting to become a principal one day), and d) job security (teaching provides a secure job, a job for an indefinite period, and provides good employment opportunities).

[Polak and Devjak \(2014\)](#) reported on the results of a survey among 71 Preschool Education students in Slovenia, who were mostly driven by internal motives when choosing a study programme: "working with children, personal fulfillment, opportunities for personal and professional development and creativity" (p. 308).

In a more recent study among 176 Slovenian and 171 Croatian primary school teachers, [Gradišek et al. \(2020\)](#) found that the respondents perceived teaching to the greatest extent as a calling, suggesting that socially useful work and investment in their professional identity is of the greatest importance to them.

[Marušić \(2013\)](#) carried out a comparative analysis of the teacher education system in Serbia and Greece to identify motives for choosing the teaching profession. The study showed that personal reasons for choosing a course of study were overwhelmingly the most common reasons for teachers' career choice in both countries (the highest mean values obtained love of young learners, personal interests and skills). Another important finding regarding the choice of studies relates to the claim that teachers in Serbia attach slightly more importance to family values and other influences, such as teachers or the media, than teachers in Greece. On the other hand, the influence of circumstances on the choice—inability to enroll in a faculty or to finance studies—is slightly more pronounced in Greece. A possible explanation is that young people in Serbia are more susceptible to environmental influences when making career decisions, whereas young people in Greece are more independent in making this decision and are not influenced by any factor when it comes to choosing their career. The author also raises the possibility that teachers in Serbia, in contrast to their colleagues in Greece, are more aware of the influence of the family, the environment and the media, which influence them in a direct way. Moreover, it should be taken into account that career choices in the two countries are influenced by differences in enrolment procedures. The difficult enrolling in a Greek faculty may be a reason for the greater expression of the influence of context on the choice of studies in the country. The study therefore shows that personal determinants continue to dominate the reasons for choosing a profession, with teachers in both countries most likely to choose the profession because they like working with young learners, i.e. because they feel the work suits their personality, abilities and interests. However, at another important turning point in their professional career, when they enter the teaching profession, there are other important factors of choice, i.e. objective circumstances (job opportunities, job security, etc.). The influence of external and internal determinants of the career choice is found to converge (i.e., even out); an adult chooses a job and compromises with his/her interests, with the current stage of the life cycle—which mainly involves family commitments—being an important factor. Job opportunities and job security are important factors in a person's choice (ibid).

The motives for choosing the studies and the motives for choosing to take up a particular job are interrelated and have an important influence on the persistence of the individual in the occupation. [Sinclair \(2008\)](#) notes that altruistic and intrinsic reasons are supposed to be beneficial for teacher retention. On the other hand, [Bergmark et al., \(2018\)](#) validly argue that students entering teacher training based on altruistic and intrinsic motives, may leave the occupation when they encounter a reality that does not match their perceptions of the profession (either in terms of the demanding profession or collegial support,

etc.). All this can lead to teacher dissatisfaction, burnout and, ultimately, to leaving the profession. It is therefore important to know and encourage students to know their own career motives on the one hand and the demands of the profession on the other. Information days, where the teaching profession is introduced to potential future students, can already make an important contribution to this. A special role is played by a well-organised teaching practice, in which students learn more about the professional role of a teacher, become increasingly active and independent in this role, and develop the competences that enable them to enter the profession with confidence (Valenčič Zuljan et al., 2011). In addition to learning about the fundamental mission of the preschool teacher, the teaching practice also provides the student with an insight into different kindergartens and the ways in which teaching staff work together and are managed, this being an important element of learning about the possibilities for professional learning and development within the profession and different communities.

Subject of the research

As pointed out by Cencič and Čagran (2002), “it is really those individuals who have made a conscious and deliberate decision to work with children at their most challenging and sensitive stage of development” who should choose to become preschool teachers (p. 107). However, a balance between intrinsic, altruistic and extrinsic motives is suggested in order to encourage teacher retention (Struyven et al., 2013) and their professional development. The majority of the previous research focused on teachers or student teachers. Preschool teaching, however, also represents a teaching profession. Moreover, preschool teachers represent the first subjects of professional, institutionalised education and care of a child outside their primary family, thus playing a crucial role in early childhood education and development in its broadest sense. In the present research, we wanted to research the motives, career perceptions and expectations among preschool teachers in two European countries: Slovenia and Serbia.

The study sought to answer the following research questions:

RQ1. Why do preschool teachers choose their profession?

RQ2. How do preschool teachers perceive the teaching profession as a career?

RQ3. How do preschool teachers assess the importance of different factors influencing career development?

RQ4. What expectations do preschool teachers have in relation to the development of their professional careers?

We were interested in whether there are differences between Slovenian and Serbian preschool teachers with regard to the questions above, and whether there are differences between preschool teachers with different motives for choosing a career with regard to questions 2–4.

Materials and Methods

The research reported was designed as a study, with data collection based on a survey approach using a questionnaire.

Sample

A summary of the most important characteristics is presented in Table 1 for both countries and shows that the samples are similar according to gender and age but quite different according to professional degrees and professional titles.

Table 1
Demographic characteristics as a percentage of Slovenian and Serbian samples

Characteristic	Slovenia (n = 145)	Serbia (n = 144)
Gender		
Female	93.8	92.4
Male	6.2	7.6
Age range (years)		
Up to 20	4.8	.7
21-40	63.4	49.0
41-60	30.3	49.0
61 and above	1.4	1.4
Level of professional degree		
Secondary school or equivalent	12.4	4.1
Teacher diploma	55.2	56.8
Bachelor's degree or equivalent (university)	26.9	16.4
Master's degree (Master of Science) or specialisation	5.5	22.6
Professional title ^a		
No title	46.9	52.9
Mentor	30.3	28.1
Consultant	20.7	8.3
Senior Consultant	2.1	10.7

^a Approximate translations of Slovene professional titles are given.

Instrument

A bilingual questionnaire was used for the survey, designed exclusively for the purpose of the study. It was first prepared in Slovene, and was then translated to Serbian.

The questionnaire consists of four descriptive rating scales with five response anchors each. The Motives for Choosing Preschool Teaching scale is designed to measure the deciding factors for choosing preschool teaching profession. It consists of 12 items, each with five response anchors ranging from 1 (*not at all important*) to 5 (*very important*). The Career Perceptions scale is meant to measure preschool teachers' perceptions of their own careers. It consists of eight items, each with five response anchors ranging from 1 (*very untrue of me*) to 5 (*very true of me*). The Factors of Career Development scale measures the level of importance assigned to different factors which may influence the development of one's career, while The Career Expectations scale is designed to measure one's expectations and plans in terms of their career development. The first scale consists of 17 items and the second scale of 15 items; both with five response anchors of importance for each item ranging from 1 (*not at all important*) to 5 (*very important*). In addition, preschool teachers' personal characteristics (gender, age, level of education, level of professional degree, years of work experience, and country of residence) are included in the questionnaire.

Data collection and data analysis procedures

The survey was carried out online during a two month period. Response rate was 60%. To establish the structural validity and reliability of the scales, exploratory factor analysis (EFA) was carried out on the Slovenian data first. Based on the EFA results, the scales were modified, aggregate variables were formed, and the final scales were tested for reliability. The final models were then run in the Serbian data. Principal component analysis (PCA) was conducted separately on the groups of items from all scales with orthogonal rotation (Varimax). The Keiser-Meyer-Olkin measure (KMO) verified the sampling adequacy for the analysis, $KMO \geq .71$ (see Table 2), which is good according to Field (2009). All of the KMO values for individual items were above the acceptable limit of .5 in the analyses (ibid). Bartlett's test of sphericity

for the analyses indicated that correlations between items were sufficiently large for the PCA. The factors that had eigenvalues over Kaiser's criterion of 1 in the initial analysis were retained in the final analysis.

Table 2
Keiser-Meyer-Olkin measure, Bartlett's test of sphericity, percentage of total variance explained by the factors, and Cronbach's alpha for the scales

Scale	Slovenia					Serbia				
	KMO	Bartlett's test		% of variance	α	KMO	Bartlett's test		% of variance	α
		χ^2	df				χ^2	df		
Motives for choosing preschool teaching	.84	704.08***	55	65.92	.65	.80	573.31***	55	58.82	.63
Career perceptions	.77	484.81***	28	66.67	.79	.71	376.45***	28	75.75	.74
Factors of career development	.90	1439.10***	136	69.87	.89	.87	1282.32***	136	72.98	.89
Career expectations	.84	1017.15***	66	72.39	.80	.88	941.40***	66	71.33	.91

Note. The results are presented separately for the Slovenian ($n = 145$) and Serbian preschool teachers ($n = 144$). KMO = Keiser-Meyer-Olkin measure.

*** $p < .001$.

Table 3 presents the final loadings after rotation for the Motives for Choosing Preschool Teaching scale. The items that cluster on the same factors suggest that factor 1 represents Intrinsic and Altruistic Motives and factor 2 represents Motives of a Simplistic View of Studies and Profession. One item ("4. Working time suits me") had to be removed from the model due to its lowering of the reliability of the subscale, and one item ("7. The profession has a good reputation in society") had to be left out of factor score due to its high loading on different factors in both countries. The subscales of the final 2-factor model had high reliabilities of .82 or above, except for the Motives of a Simplistic View of Studies and Profession subscale for Serbian data which stands at .66 but is still acceptable.

Table 3
Results from a factor analysis of the Motives for Choosing Preschool Teaching Scale

Motives for choosing preschool teaching	Factor loading			
	1		2	
	Slovenia	Serbia	Slovenia	Serbia
Factor 1: Intrinsic and altruistic motives				
1. It offers the opportunity for creativity and originality	.78	.86		
2. It is socially useful work	.77	.82		
6. I have the possibility of postgraduate studies	.73	.61		
7. The profession has a good reputation in society	.73			.70
10. The profession provides me with a regular income	.68	.70		
5. I like working with children	.64	.86		
12. Preschool teacher's profession encourages and enables professional development throughout my career	.63	.78		
Factor 2: Motives of a simplistic view of studies and profession				
9. Preschool teacher's work is not demanding			.88	.79
11. Preschool teacher profession is a tradition in my family			.80	.49
3. There are long holidays			.76	.61
8. Studies are not demanding			.71	.79
Eigenvalues	4.43	4.30	2.82	2.17
% of variance	40.29	39.11	25.63	19.70
α	.84	.86	.82	.66

Note. The results are presented separately for the Slovenian ($n = 145$) and Serbian preschool teachers ($n = 144$). The extraction method was principal component analysis with an orthogonal (Varimax) rotation. Factor loadings below .40 were omitted.

The EFA of the Career Perceptions scale as well as the Factors of Career Development scale showed a structure of factors that cannot be explained meaningfully in a theoretical way. For this reason, we analysed each item of both scales separately.

The EFA of the Career Expectations scale showed a structure of two factors: Continuous Learning and Professional Collaboration and Achieving a Leading Position (see Table 4). Four items had to be removed from the model due to their high loadings on both factors in both countries: "8. Obtaining a second Bologna degree (professional master's degree)", "11. Work closely with faculties that provide teacher training", "13. Preparing training for colleagues", and "14. Participating in changing school policy". The subscales of the final 2-factor model had high reliabilities of .82 or above, except for the Achieving a Leading Position subscale for Serbian data which stands at .70 but is acceptable.

Table 4
Results from a factor analysis of the Career Expectations Scale

Career expectations	Factor loading			
	1		2	
	Slovenia	Serbia	Slovenia	Serbia
Factor 1: Continuous learning and professional collaboration				
6. Participating in international projects and publishing the findings in an international context	.87	.80		
5. Participating in research and publishing the findings in a national context	.85	.80		
15. Active participation in professional associations of preschool teachers	.82	.77		
2. Promotion to higher pay grades	.79	.83		
7. Attendance of professional development courses	.79	.83		
16. Mobility	.79	.75		
1. Promotion to higher professional titles	.79	.81		
3. Possibility to express one's own initiatives (innovating, etc.)	.78	.89		
4. Regular reading of professional literature	.74	.86		
Factor 2: Achieving a leading position				
9. Obtaining a PhD			.88	.73
10. Taking on leadership roles, be kindergarten principal			.82	.82
12. Setting up one's own kindergarten			.78	.74
Eigenvalues	6.36	6.85	2.33	1.71
% of variance	52.96	57.12	19.43	14.21
α	.94	.95	.82	.70

Note. The results are presented separately for the Slovenian ($n = 145$) and Serbian preschool teachers ($n = 144$). The extraction method was principal component analysis with an orthogonal (Varimax) rotation. Factor loadings below .40 were omitted.

Results and Discussion

Motivations for choosing preschool teaching as a career

We wanted to know which motives for choosing a career in education are prevalent among preschool teachers. We presented 12 career choice motives to them and asked them to rate how important each motive was in their career choice on a scale from 1 (*not at all important*) to 5 (*very important*). We organised the data separately by country and tested the statistical significance of the differences between them.

Table 5
Means, standard deviations, and Mann-Whitney test for individual items of the Motives for Choosing Preschool Teaching Scale

Motives for choosing preschool teaching	Slovenia		Serbia		U	z	r
	M	SD	M	SD			
5. I like working with children	4.42	1.06	4.37	1.21	8362.50	-.04	-.00
1. It offers an opportunity for creativity and originality	4.07	1.12	3.99	1.23	8271.50	-.31	-.02
2. It offers an opportunity for socially useful work	3.75	1.06	3.70	1.14	8075.50	-.18	-.01
12. Preschool teacher's profession encourages and enables me to professionally develop throughout my career	3.74	1.14	3.54	1.36	7260.00	-.89	-.06
10. Profession provides me with a regular income	3.24	1.15	3.41	1.26	7179.50	-1.44	-.09
6. I can opt for postgraduate studies	3.16	1.22	3.18	1.26	8007.50	-.19	-.01
4. Working hours suit me	3.07	1.31	3.14	1.39	7791.00	-.46	-.03
7. The profession has a good reputation in society	2.91	1.10	3.14	1.33	7175.00	-1.65	-.10
3. There are long holidays	2.61	1.36	2.84	1.39	7468.00	-1.33	-.08
9. Preschool teacher's work is not demanding	2.57	1.42	2.28	1.29	6881.50	-1.57	-.10
8. Studies are not demanding	2.55	1.18	2.73	1.39	7544.00	-.91	-.06
11. Preschool teacher profession is a tradition in my family	2.51	1.48	2.12	1.36	6739.00	-2.14*	-.13

Note. Mean parameter values for each of the analyses are shown for the Slovenian preschool teachers ($n = 145$) and Serbian preschool teachers ($n = 144$), as well as the results of Mann-Whitney tests comparing the parameter estimates

between the two countries. Effect size r was calculated using the formula $r = \frac{z}{\sqrt{N}}$.

* $p < .05$.

As seen in Table 5, preschool teachers in both countries rated the motives associated with predominantly intrinsic motivation as the most important. On average, they rated the two so-called altruistic motives the highest: Item 5 ("I like working with children"; $M_{SLO} = 4.42$, $M_{SRB} = 4.37$) and Item 2 ("It offers an opportunity for socially useful work"; $M_{SLO} = 3.75$, $M_{SRB} = 3.70$), which is also confirmed for preservice and inservice teachers by other studies (Andrews and Hatch, 2002; Bastick, 2000; Brookhart and Freeman, 1992; Cencič and Čagran, 2002; Gradišek et al., 2020; Flores and Niklasson, 2014; Hobson et al., 2009; Ivanuš Grmek and Javornik Krečič, 2005; Kyriacou and Coulthard, 2000; Kyriacou and Kabori, 1998; Lin et al., 2012; Polak and Devjak, 2014; Richardson and Watt, 2006; Tašner, Žveglič Mihelič and Mencin-

Čeplak, 2017; Watt and Richardson, 2007, 2012). Two professional motives were also highly rated: Item 1 ("It offers an opportunity of creativity and originality"; $M_{SLO} = 4.07$, $M_{SRB} = 3.99$) and Item 12 ("Preschool teacher's profession encourages and enables professional development throughout my career"; $M_{SLO} = 3.74$, $M_{SRB} = 3.54$). The latter would suggest that preschool teachers in the study have a mature conception of career, linking career progression to professional growth. It is interesting to note that the professional motive of postgraduate study (Item 6) is on average of medium importance in both countries ($M_{SRB} = 3.18$, $M_{SLO} = 3.16$), which is probably due to the fact that legislation does not require a second level of study for employment as a preschool teacher in Slovenia and Serbia.

A slightly more important motive in both countries is that of a regular financial income (Item 10; $M_{SRB} = 3.41$, $M_{SLO} = 3.24$), which can be described as a material motive. A study by Richardson and Watt (2006) reached a similar finding. Material motives also include motives in Item 4. ("Working hours suit me"; $M_{SRB} = 3.14$, $M_{SLO} = 3.07$), and Item 3. ("There are long holidays"; $M_{SRB} = 2.84$, $M_{SLO} = 2.61$), which are on average of medium importance for preschool teachers in both countries.

Motives associated with a predominantly extrinsic motivation were rated lower, which is consistent with other research (Andrews and Hatch, 2002; Bastick, 2000; Brookhart and Freeman, 1992; Cencič and Čagran, 2002; Gradišek et al., 2020; Ivanuš Grmek and Javornik Krečič, 2005; Kyriacou and Koberi, 1998; Richardson and Watt, 2006; Tašner, Žvegljč Mihelič and Mencin-Čeplak, 2017; Watt and Richardson, 2007; Watt and Richardson, 2012). The motive of being in a profession with a good reputation in society was shown as more important of these (Item 7; $M_{SRB} = 3.14$, $M_{SLO} = 2.91$). Other motives from this group—Item 9 ("Preschool teacher's work is not demanding"; $M_{SLO} = 2.57$, $M_{SRB} = 2.28$), Item 8 ("Studies are not demanding"; $M_{SRB} = 2.73$, $M_{SLO} = 2.55$), and Item 11 ("This profession is a tradition in my family"; $M_{SLO} = 2.51$, $M_{SRB} = 2.12$)—are on average less important or unimportant in the decision to become a preschool teacher (see also Brookhart and Freeman, 1992; Flores and Niklasson, 2014).

The comparison between the two countries showed statistically significant differences among the 11 motives only for the motive in Item 11, that the profession has a tradition in the family, which is on average more important to Slovenian preschool teachers ($M_{SLO} = 2.51$) than to Serbian ones ($M_{SRB} = 2.12$).

For further analyses, we grouped the EFA motives into two broad groups of career choice motives (see Table 3): Intrinsic and Altruistic Motives (established by high intrinsic motivation) and Motives of a Simplistic View of Studies and Profession (established by high extrinsic motivation).

The Intrinsic and Altruistic Motives variable (IM) is thus made up of all altruistic and professional motives, as well as the motive of a regular financial income (Item 10), which is theoretically classified as a material motive. Item 4 ("Working time suits me") was excluded from the sum of the values of the motive variables of both motivations, as it is saturated with both EFA factors in both countries. This means that this motive cannot be strictly classified as either an intrinsic and altruistic motive or as a motive of a simplistic view of studies and profession. Thus, similarly to the study by Richardson and Watt (2006), who, with this item, focused on the presence of the "line of least resistance motive", our study has shown that preschool teachers (also) understand this motive through the prism of concern for quality of life and the possibility of spending time with family. In both countries of our study, it appears that this motive was understood in both ways, while the motive of regular financial income seems to be understood predominantly in terms of a concern for quality of life and family, thus both items load also (Item 4) or predominantly (Item 10) on the Intrinsic and Altruistic Motives factor.

The Motives of a Simplistic View of Studies and Profession variable (EM) includes the motive of long holidays (Item 3), which would theoretically be classified as a material motive. Interestingly, the motive of a good reputation of the profession in society (Item 7) is saturated with the factor of Intrinsic and Altruistic Motives for the Slovenian data, and with the factor of Motives of a Simplistic View of Studies and Profession for the Serbian data. For the sake of comparability of country data, we have excluded this item from the sum of the items of the two groups of motives.

In line with the data presented for each item, IM are statistically more important on average for Slovenian preschool teachers ($M_{IM} = 3.75$, $SE = .08$) than EM when choosing a career ($M_{EM} = 2.60$, $SE = .10$), $t(116) = 7.89$, $p < .001$. The same conclusion was also reached by the analysis of the Serbian preschool teachers' data ($M_{IM} = 3.67$, $SE = .09$ vs. $M_{EM} = 2.48$, $SE = 0.09$), $t(110) = 8.17$, $p < .001$. There are, however, no statistically significant differences between the two countries in this respect.

As expected from the above reported results, the correlation between IM and EM when choosing a career as a preschool teacher is negative in both countries (Slovenia: $r[145] = -.341$, $p < .001$; Serbia: $r[144] = -.282$, $p < .01$), meaning that the more intrinsic and altruistic motives are expressed in a person, the less motives of a simplistic view of studies and profession are expressed in that person. It is known that while both intrinsic and extrinsic motivations are present in a person, one of them is most often expressed to a greater extent. For the purpose of further analyses, we also defined the

variable of predominant motivation: this was determined for those respondents, for whom the both types of motives were not equally represented (97.7%), but one of the two was predominant; and we analysed the data only for these. Among Slovenian preschool teachers, the share of those with intrinsic and altruistic motives predominating in their choice of preschool teaching profession (IMs) is 81.7%. It is—statistically insignificantly—slightly more numerous among Serbian preschool teachers, 85.2%. The share of preschool teachers with predominant motives of a simplistic view of studies and profession when choosing a teaching profession (EMs) is 18.3% in Slovenia and 14.8% in Serbia.

Preschool teachers' perceptions of preschool teaching as a career

Based on various studies (Hoyle, 1989, as cited in Marentič Požarnik, 1993; Marentič Požarnik, 1993), we developed a scale of 8 items of the characteristics of the profession, which preschool teachers rated on a 5-point scale ranging from 1 (very untrue of me) to 5 (very true of me). We were interested in how preschool teachers perceive the preschool teaching profession and whether their conceptions of their careers differ statistically significantly according to country and predominant motivation.

Table 6
Means, standard deviations, and Mann-Whitney test for individual items of the Career Perceptions Scale

Career perceptions		Predominant motivation				U	z	r
		EMs		IMs				
		M	SD	M	SD			
Performing an important social function	Slovenia	2.67	1.24	4.43	.77	237.50	-5.73***	-.55
	Serbia	3.88	1.75	4.11	1.01	659.00	-.36	-.04
High level of specific knowledge and skills	Slovenia	2.85	1.53	4.41	.64	391.50	-4.17***	-.40
	Serbia	2.00	1.41	4.32	.85	140.00	-5.12***	-.50
Higher or post-graduate education	Slovenia	3.79	1.23	4.18	.78	709.50	-1.10	-.10
	Serbia	4.81	.54	3.88	1.03	313.50	-3.65***	-.36
Developed professional ethics (codes of ethics)	Slovenia	2.90	1.26	4.38	.72	333.50	-4.88***	-.47
	Serbia	1.93	1.39	4.24	.84	142.50	-5.09***	-.50
Ability to work in unpredictable problem situations	Slovenia	2.86	1.39	4.48	.68	323.00	-5.01***	-.48
	Serbia	3.63	1.86	4.09	1.07	685.50	-.10	-.01
Self-improvement through reflective analysis of your experience	Slovenia	2.38	1.16	4.40	.75	159.00	-6.28***	-.60
	Serbia	1.87	1.30	4.32	.76	110.00	-5.44***	-.54
A considerable degree of freedom and autonomy in the choice of working procedures	Slovenia	3.67	1.39	4.19	.82	774.00	-1.30	-.12
	Serbia	2.88	1.82	3.78	1.03	510.00	-1.70	-.17
Joining professional organisations	Slovenia	4.38	1.20	3.81	.90	548.00	-3.09**	-.29
	Serbia	2.81	1.72	3.64	.91	510.00	-1.66	-.16

Note. EMs = preschool teachers with predominant motives of simplistic view of studies and profession when choosing a teaching profession; IMs = preschool teachers with predominant intrinsic and altruistic motives when choosing a teaching profession. Mean parameter values for each of the analyses are shown for the Slovenian EMs ($n = 21$) and IMs ($n = 89$) and Serbian EMs ($n = 16$) and IMs ($n = 87$), as well as the results of Mann-Whitney tests comparing the parameter estimates between the two predominant motivations, separately for each country. Effect size r was calculated using the

$$\text{formula } r = \frac{z}{\sqrt{N}}$$

** $p < .01$. *** $p < .001$.

On average, Slovenian preschool teachers agree with all the descriptions regarding the perceptions of their careers, rating 7 out of 8 items with an M above 4 (see Table 6). On average, they agree the most

that it is characterised by the ability to work in unpredictable problem situations ($M_{SLO} = 4.17$), a high level of specific skills ($M_{SLO} = 4.12$), a university or postgraduate degree ($M_{SLO} = 4.11$), performing an important social function ($M_{SLO} = 4.10$), developed professional ethics ($M_{SLO} = 4.10$), a high degree of freedom and autonomy in the choice of work practices ($M_{SLO} = 4.09$), and self-improvement through reflective analysis of one's own experience ($M_{SLO} = 4.02$). On average, they are least likely to agree that their career is characterised by joining professional organisations ($M_{SLO} = 3.92$).

Serbian preschool teachers also agree on average with all the descriptions of their own career, but slightly less when compared to Slovenian preschool teachers (see Table 6); out of the 8 items, they rated 3 items with an M above 4. On average, the most agreed statements are that they perform an important social function ($M_{SRB} = 4.08$) and that their career is characterised by higher or postgraduate education ($M_{SRB} = 4.03$) and the ability to work in unpredictable problem situations ($M_{SRB} = 4.02$). M scores above 3 were given to 5 items which are: "a high level of specific skills" ($M_{SRB} = 3.97$), "self-improvement through reflective analysis of one's experience" ($M_{SRB} = 3.96$), "developed professional ethics" ($M_{SRB} = 3.90$), "a considerable degree of freedom and autonomy in the choice of work practices" ($M_{SRB} = 3.64$), and "joining professional organisations" ($M_{SRB} = 3.50$).

The comparison between Slovenian and Serbian preschool teachers showed statistically significant differences in two items: "joining professional organisations" ($M_{SLO} = 3.92$ vs. $M_{SRB} = 3.50$, $U = 8183.50$, $z = -2.58$, $p < .05$, $r = -.15$) and "a considerable degree of freedom and autonomy in the choice of work practices" ($M_{SLO} = 4.09$ vs. $M_{SRB} = 3.64$, $U = 6112.50$, $z = -2.82$, $p < .01$, $r = -.17$). On average, Serbian preschool teachers agree with both descriptions statistically significantly less than Slovenian preschool teachers.

When comparing career perceptions in relation to the predominant motivation for choosing a preschool teaching profession, we find that in both countries, IMs are statistically significantly more likely to agree with most of the descriptions of their own careers on average compared to EMs. Slovenian IMs are on average more likely to agree that their careers are about self-improvement through reflective analysis of their experience ($M_{IMs} = 4.40$) than EMs, who disagree with this on average ($M_{EMs} = 2.38$). This difference is even more evident among Serbian preschool teachers ($M_{IMs} = 4.32$ vs. $M_{EMs} = 1.87$). In Slovenia, IMs are statistically significantly more likely than EMs to agree on average that their career is characterised by a high level of specific skills ($M_{IMs} = 4.41$ vs. $M_{EMs} = 2.85$). The difference is again more pronounced among Serbian respondents ($M_{IMs} = 4.32$ vs. $M_{EMs} = 2.00$). Furthermore, Slovenian IMs associate their career with the performance. IMs in Slovenia ($M_{IMs} = 4.38$) and Serbia ($M_{IMs} = 4.24$) on average agree that their career is characterised by developed professional ethics, while EMs in Slovenia on average partially agree ($M_{EMs} = 2.90$) and in Serbia disagree ($M_{EMs} = 1.93$) with this description.

The exceptions among Slovenian preschool teachers include the item "joining professional organisations", which is on average more highly attributed to their own career by EMs ($M_{EMs} = 4.38$) than by IMs ($M_{IMs} = 3.81$), and "higher or postgraduate education" among Serbian preschool teachers, which is on average statistically significantly more strongly agreed with by EMs ($M_{EMs} = 4.81$) than by IMs ($M_{IMs} = 3.88$).

Based on the data presented, we conclude that IMs perceive their career as one that requires a high level of knowledge and skills, concern for their own professional development, and developed professional ethics; they prioritise "content". Conversely, EMs do not strongly agree that their careers are about professional development, career development in a "positive substantive sense", but are more likely to be concerned with "form"; it is more about careerism, suggesting greater agreement by EMs than by IMs with the description of their careers as being about joining professional organisations (amongst Slovenian preschool teachers) and having a university or postgraduate degree (amongst Serbian preschool teachers). As the perceptions are linked to individual behaviors (Clark and Peterson, 1986), it can be inferred that while IMs tend to be concerned with their own career development in conjunction with professional growth when choosing a profession, EMs at the time of choosing a career understand career development in the context of achieving external (formal) validation, which reflects in educational attainment, membership of formal associations, etc. In this context, it would be interesting to find out how these two groups of preschool teachers differ in their views on professional development of preschool teachers.

Preschool teachers' assessment of the importance of different factors that influence their career development

Arnold (1997, as cited in [Petre, 2015](#)) defines career as “the sequence of employment-related positions, roles, activities and experiences encountered by a person” (p. 938). As stated by Baruch (2004, as cited in [Petre, 2015](#)) there is a considerable overlap between individual and organisational roles in the career. Personal characteristics have a strong influence on the choice of occupation, as well as on the career progression and its shaping. Research on the professional development of teaching professionals also points to the important role of social aspects—the work environment, colleagues and management ([Day et al., 2007](#); [Valenčič Zuljan, 2018](#))—in career learning and progression.

We were interested in which factors preschool teachers consider influencing their career development and whether preschool teachers differ in their assessment of the importance of factors influencing their career development depending on the country and the predominant motivation when choosing a career. The respondents were offered 17 items which they rated on a scale ranging from 1 (*not at all important*) to 5 (*very important*).

Table 7

Means, standard deviations, and Mann-Whitney test for individual items of the Factors of Career Development Scale

Factors of career development		Predominant motivation				U	z	r
		EMs		IMs				
		M	SD	M	SD			
1. Life period	Slovenia	2.29	1.01	4.19	.73	136.50	-6.22***	-.59
	Serbia	3.33	1.68	3.80	1.04	539.00	-.79	-.08
2. Gender	Slovenia	4.48	.98	2.96	1.17	280.50	-4.80***	-.46
	Serbia	2.94	1.69	2.30	1.07	524.00	-1.25	-.12
3. Variety of work experience	Slovenia	2.48	1.03	4.30	.68	149.00	-6.09***	-.58
	Serbia	3.88	1.75	3.60	.97	459.00	-1.97*	-.19
4. Level of education	Slovenia	2.57	.98	4.03	.73	214.50	-5.59***	-.53
	Serbia	2.06	1.44	3.89	1.02	231.00	-4.28***	-.42
5. Ambitions	Slovenia	2.38	.87	4.56	.61	52.50	-7.12***	-.68
	Serbia	2.06	1.44	4.38	.84	167.00	-5.06***	-.50
6. Readiness for education	Slovenia	2.48	.75	4.41	.83	95.00	-6.60***	-.63
	Serbia	2.06	1.44	4.41	.72	150.50	-5.22***	-.51
7. Years of service	Slovenia	3.95	1.28	3.50	.81	573.00	-2.07*	-.20
	Serbia	3.69	1.58	3.48	1.01	546.00	-1.09	-.11
8. Aspiration for new career challenges	Slovenia	2.71	1.01	4.22	.71	204.50	-5.56***	-.53
	Serbia	2.25	1.57	4.29	.79	224.00	-4.42***	-.44
9. Competences	Slovenia	2.57	1.08	4.54	.60	121.50	-6.47***	-.62
	Serbia	2.06	1.12	4.38	.83	93.50	-5.79***	-.57
10. Kindergarten climate and culture	Slovenia	2.33	.86	4.34	.73	89.00	-6.59***	-.63
	Serbia	2.13	.96	4.02	.97	126.50	-5.28***	-.52
11. Relationship with colleagues	Slovenia	2.57	.93	4.35	.75	141.00	-6.12***	-.58
	Serbia	2.13	1.15	4.01	.82	138.00	-5.18***	-.51
12. Relationship with the management	Slovenia	2.81	1.03	4.23	.77	242.50	-5.19***	-.49
	Serbia	3.00	1.51	3.83	.91	436.00	-2.15*	-.21
13. Possibility of a better pay	Slovenia	2.80	1.15	3.97	.95	346.50	-3.93***	-.37
	Serbia	2.13	1.36	4.17	1.02	186.00	-4.74***	-.47
14. Management skills	Slovenia	3.57	1.40	3.77	.89	781.00	-.43	-.04
	Serbia	2.33	1.50	4.06	.86	227.00	-4.02***	-.40
15. Communication skills	Slovenia	2.57	1.08	4.48	.75	138.50	-6.31***	-.60
	Serbia	1.75	1.13	4.32	.80	84.00	-5.81***	-.57
16. Desire to promote the professional development of others	Slovenia	3.00	1.27	3.92	.94	469.00	-3.17**	-.30
	Serbia	2.00	1.16	3.96	.98	161.50	-4.96***	-.49
17. Desire to lead	Slovenia	3.48	1.63	3.38	1.02	733.50	-.85	-.08
	Serbia	3.31	1.89	3.39	1.16	609.00	-.24	-.02

Note. EMs = preschool teachers with predominant motives of simplistic view of studies and profession when choosing a teaching profession; IMs = preschool teachers with predominant intrinsic and altruistic motives when choosing a teaching profession. Mean parameter values for each of the analyses are shown for the Slovenian EMs ($n = 21$) and IMs ($n = 89$) and Serbian EMs ($n = 16$) and IMs ($n = 87$), as well as the results of Mann-Whitney tests comparing the parameter estimates between the two predominant motivations, separately for each country. Effect size r was calculated using the formula

$$r = \frac{z}{\sqrt{N}}$$

* $p < .05$. ** $p < .01$. *** $p < .001$.

With an average $M \geq 4$, Slovenian preschool teachers rated four out of the 17 items, while the Serbians rated three items. In both countries, preschool teachers rated 13 items as $M \geq 3$. In both countries, preschool teachers thus rate most of the factors listed as at least moderately important for their career development or “making a career”. There are no statistically significant differences between the two countries, with the exception of “gender”, which is rated as moderately important by Slovenian preschool teachers ($M_{SLO} = 3.26$), and unimportant by Serbian preschool teachers ($M_{SRB} = 2.40$), $U = 4379.00$, $z = -4.71$, $p < .001$, $r = -.28$.

On average, the most important factors for career development or making a career are those that are entirely the person’s own or that are largely within the person’s control: “competences” ($M_{SLO} = 4.13$, $M_{SRB} = 4.00$), “ambitions” ($M_{SLO} = 4.11$, $M_{SRB} = 4.00$), “communication skills” ($M_{SLO} = 4.08$, $M_{SRB} = 3.90$) and “readiness for education” ($M_{SLO} = 4.00$, $M_{SRB} = 4.03$). Research by Day et al. (2007) confirms that education—various forms of professional training—has a lasting positive impact on preschool teachers at all stages of their professional development.

The second group of factors for career development is represented by those related to the relationships and climate in the work organisation: “relationship with colleagues” ($M_{SLO} = 3.97$, $M_{SRB} = 3.70$), “relationship with the management” ($M_{SLO} = 3.93$, $M_{SRB} = 3.69$) and the “kindergarten’s climate and culture” ($M_{SLO} = 3.92$, $M_{SRB} = 3.71$). As noted in the introduction, climate and relationships between staff are important for quality professional work and development at different points in one’s career in education (Day et al., 2007; Javrh, 2008) and especially in the early years (Valenčič Zuljan and Marentič Požarnik, 2014; Valenčič Zuljan and Vogrinc, 2008). Given the importance of “relational items”, we are therefore left with the question of what more can be done to foster a learning organisation by kindergartens employing the preschool teachers who participated in the survey (Senge, 1997).

In both countries, preschool teachers also rate as important “variety of work experience” ($M_{SLO} = 3.92$, $M_{SRB} = 3.64$). On the basis of an analysis of a number of empirical studies, Clark (1988) states that a teacher is to make an interactive decision every few minutes and concludes that the management of educational activities in practice is very complex, uncertain and full of dilemmas. A similar definition of the professional role of educational workers is given by Doyle (1986), who emphasises the variety and simultaneity of events, the immediacy, unpredictability, public character and developmental orientation of teaching work. Variety of work experience is therefore an important promoter of career development, and it is essential that preschool teachers are aware of the complexity of their professional role and prepare for it accordingly. Among other things, the acquisition of students’ professional development competences already during their studies—developing skills of reflection (Pečar, 2012; Šarič and Šteh, 2017) and learning from experience—is thus crucial in a career development perspective.

Preschool teachers in both countries also rate as important “life period” ($M_{SLO} = 3.79$, $M_{SRB} = 3.73$), “management skills” ($M_{SRB} = 3.79$, $M_{SLO} = 3.73$), “desire to lead” ($M_{SLO} = 3.40$, $M_{SRB} = 3.38$), “possibility of a better pay” ($M_{SRB} = 3.84$, $M_{SLO} = 3.73$) and “desire to promote the professional development of others” ($M_{SLO} = 3.73$, $M_{SRB} = 3.64$). Mentoring and taking responsibility for shaping members of the profession can make an important contribution to the development of these skills and to the realisation of the desire to lead and manage (Javrh, 2008).

Further, we compared the responses in terms of the predominant motivation for choosing a career in education and found statistically significant differences between IMs and EMs for most of them (see Table 7).

The data for both countries show that IMs rate most of the career development factors as more important compared to EMs. The differences in the average rating are largest in both countries for factors that are mostly within the individual’s control (items “ambitions”, “competences”, “communication skills”, “readiness for education”, etc.); IMs rate them as important or very important on average ($M_{IMs} \geq 4.32$), while EMs rate them as less important or unimportant ($M_{EMs} \leq 2.57$). Similar differences were also found for relational items (“relationship with colleagues”, “relationship with the management”, and “kindergarten climate and culture”) in both countries; IMs rate these as important or very important career development factors on average ($M_{IMs} \geq 3.83$), while EMs rate them as less important or unimportant ($M_{EMs} \leq 3.00$).

Among Slovenian preschool teachers, the exceptions are “gender” ($M_{IMs} = 2.96$ vs. $M_{EMs} = 4.48$) and “years of service” ($M_{IMs} = 3.50$ vs. $M_{EMs} = 3.95$), and among Serbian preschool teachers, “diversity of work experience” ($M_{IMs} = 3.60$ vs. $M_{EMs} = 3.88$), which are rated statistically significantly higher by EMs than IMs. According to the Slovenian data, these are again factors beyond the control of the individual; hence, IMs are more likely to believe that career development is determined by increasing the length of service and experience, and is also determined by gender. In this context, it would also be interesting to find out which gender they consider to be privileged in terms of career development. In their research, Tašner, Žvegljič Mihelič, and Mencin Čepelak (2017) found that 3rd and final year student teachers generally perceive male

teachers as having a higher status among colleagues than female teachers. The sample in the research also “displays a trend that men, on average, feel better positioned in relation to women in the teachers’ profession overall” (p. 66). Since (preschool) teaching is perceived as a female profession, it would be interesting to further research the underlying reasons for the recognition of gender as an important factor of a preschool teacher’s career development; especially, taking into account significant differences in the perceived importance of this factor between IMs and EMs.

Statistically insignificant differences between IMs and EMs in Slovenia emerged in the ratings of the importance of one’s managerial skills, which both IMs and EMs rate as important for career development ($M_{SLO} = 3.73$), and the desire for leadership, which are both rated as a factor of medium importance for career development ($M_{SLO} = 3.40$). For Serbian preschool teachers, statistically insignificant differences in the ratings of importance for career development were found for the factors of “life period”, which preschool teachers rate as important ($M_{SRB} = 3.73$), “years of service” ($M_{SRB} = 3.51$) and “desire for leadership” ($M_{SRB} = 3.38$), which they rate as moderately important, and the factor of “gender”, which they rate as unimportant on average ($M_{SRB} = 2.40$), although there is a trend in the sample to attribute a more important role to it among EMs than IMs, which we confirmed in the Slovenian sample (see Table 7).

Preschool teachers’ expectations in relation to the development of their professional careers

Preschool teachers were asked what they expected or planned for their career. For each expectation, they chose their answer on a 5-point scale ranging from 1 (*not at all important*) to 5 (*very important*). The answers were again compared by country and by the prevailing motivation for choosing a career as a preschool teacher.

Table 8
Means, standard deviations, and Mann-Whitney test for individual items of the Career Expectations Scale

Career expectations		Predominant motivation				U	z	r
		EMs		IMs				
		M	SD	M	SD			
3. Possibility to express your own initiative (innovating, etc.)	Slovenia	2.48	.93	4.25	.73	120.50	-6.10***	-.58
	Serbia	2.40	1.55	4.35	.84	200.50	-4.29***	-.42
2. Promotion to higher pay grades	Slovenia	2.57	.98	4.25	.91	159.00	-5.72***	-.55
	Serbia	2.00	1.41	4.40	.67	127.00	-5.35***	-.53
4. Regular reading of professional literature	Slovenia	2.57	.81	4.17	.81	151.50	-5.76***	-.55
	Serbia	2.13	1.54	4.14	.91	202.00	-4.41***	-.43
1. Promotion to higher professional titles	Slovenia	2.81	1.17	4.01	1.01	332.50	-4.04***	-.39
	Serbia	2.06	1.44	4.19	.84	171.50	-4.77***	-.47
7. Attending professional development courses	Slovenia	2.45	1.15	4.11	.84	184.50	-5.27***	-.50
	Serbia	2.38	1.59	4.04	1.02	256.50	-3.83***	-.38
5. Participating in research and publishing the findings in a national context	Slovenia	2.62	.92	3.50	1.09	407.00	-3.22**	-.31
	Serbia	2.06	1.29	3.74	1.15	223.00	-4.13***	-.41
16. Mobility	Slovenia	2.29	1.06	3.57	.98	293.50	-4.34***	-.41
	Serbia	2.06	1.18	3.80	1.00	169.50	-4.63***	-.46
13. Preparing training for colleagues	Slovenia	3.25	1.16	3.09	.97	660.00	-.31	-.03
	Serbia	4.38	1.26	3.47	1.10	311.00	-3.22**	-.32
8. Obtaining a second Bologna (Master of Science) degree	Slovenia	2.86	1.39	3.16	1.19	627.50	-1.04	-.10
	Serbia	2.31	1.30	3.90	1.21	240.50	-3.96***	-.39

Continuation of the table on the next page

Table 8 (Continuation of the table from the previous page)

Means, standard deviations, and Mann-Whitney test for individual items of the Career Expectations

Scale

15. Active participation in professional associations of preschool teachers	Slovenia	2.43	1.08	3.33	1.02	404.00	-3.28**	-.31
	Serbia	1.75	1.07	3.91	1.01	115.00	-5.25***	-.52
6. Participating in international projects and publishing the findings in an international context	Slovenia	2.43	1.03	3.26	1.06	411.00	-3.12**	-.30
	Serbia	2.25	1.34	3.84	.97	218.50	-4.13***	-.41
14. Participating in changing school policy	Slovenia	2.43	1.03	3.14	1.22	486.00	-2.41*	-.23
	Serbia	4.31	1.35	3.51	1.13	323.00	-3.05**	-.30
11. Closer cooperation with preschool teacher training faculties	Slovenia	2.33	.91	3.27	1.08	324.50	-3.28**	-.31
	Serbia	1.94	1.44	3.66	1.13	230.00	-4.05***	-.40
9. Obtaining a PhD	Slovenia	4.24	1.00	2.55	1.18	223.50	-4.98***	-.47
	Serbia	1.80	.94	3.59	1.31	171.50	-4.37***	-.43
10. Taking on leadership roles, be a kindergarten principal	Slovenia	3.67	1.43	2.48	1.21	382.00	-3.35**	-.32
	Serbia	4.25	1.39	3.16	1.32	316.50	-3.12**	-.31
12. Setting up one's own kindergarten	Slovenia	4.52	.87	2.39	1.17	136.50	-5.77***	-.55
	Serbia	1.88	1.46	3.27	1.26	271.50	-3.58***	-.35

Note. EMs = preschool teachers with predominant motives of simplistic view of studies and profession when choosing a teaching profession; IMs = preschool teachers with predominant intrinsic and altruistic motives when choosing a teaching profession. Mean parameter values for each of the analyses are shown for the Slovenian EMs ($n = 21$) and IMs ($n = 89$) and Serbian EMs ($n = 16$) and IMs ($n = 87$), as well as the results of Mann-Whitney tests comparing the parameter estimates between the two predominant motivations, separately for each country. Effect size r was calculated using the formula

$$r = \frac{z}{\sqrt{N}}$$

* $p < .05$. ** $p < .01$. *** $p < .001$.

On average, preschool teachers in both countries rate all their career expectations or plans as important or at least moderately important ($2.76 \leq M \leq 4.01$, see Table 8). They find most important: "possibility to express your own initiative (innovating, etc.)" ($M_{SRB} = 4.03$, $M_{SLO} = 3.85$), "promotion to higher pay grades" ($M_{SRB} = 3.99$, $M_{SLO} = 3.87$) and "promotion to higher professional titles" ($M_{SRB} = 3.83$, $M_{SLO} = 3.74$), "regular reading of professional literature" ($M_{SLO, SRB} = 3.80$) and "attending professional development courses" ($M_{SLO, SRB} = 3.75$). They assigned the least importance to the plans or expectations related to taking on leadership roles: "setting up one's own kindergarten" ($M_{SRB} = 3.03$, $M_{SLO} = 2.88$), "taking on leadership roles, being a kindergarten principal" ($M_{SRB} = 3.34$, $M_{SLO} = 2.76$) and "obtaining a PhD" ($M_{SRB} = 3.30$, $M_{SLO} = 2.93$).

A comparison between the two countries shows that all career development plans are more important to Serbian than to Slovenian preschool teachers, with statistically significantly higher ratings for items: "preparing training for colleagues" ($M_{SRB} = 3.62$ vs. $M_{SLO} = 3.12$, $U = 4240.00$, $z = -3.28$, $p < .01$, $r = -.19$), "obtaining a second Bologna degree" ($M_{SRB} = 3.62$ vs. $M_{SLO} = 3.09$, $U = 4379.00$, $z = -3.00$, $p < .01$, $r = -.18$), "active participation in professional associations of preschool teachers" ($M_{SRB} = 3.53$ vs. $M_{SLO} = 3.12$, $U = 4394.00$, $z = -2.94$, $p < .01$, $r = -.17$), "participating in international projects and publishing findings in an international context" ($M_{SRB} = 3.56$ vs. $M_{SLO} = 3.07$, $U = 4262.50$, $z = -3.13$, $p < .01$, $r = -.18$), "participating in changing school policy" ($M_{SRB} = 3.65$ vs. $M_{SLO} = 2.98$, $U = 3908.00$, $z = -3.93$, $p < .001$, $r = -.23$), and "taking on leadership roles, being a kindergarten principal" ($M_{SRB} = 3.34$ vs. $M_{SLO} = 2.76$, $U = 4608.00$, $z = -2.41$, $p < .05$, $r = -.14$).

A comparison of the ratings of the importance of the individual modes of care or plans for one's own career between IMs and EMs in the two countries shows that they are on average more important to IMs than EMs in all but a few exceptions. Slovenian EMs, compared to IMs, rate statistically significantly higher the items "setting up one's own kindergarten" ($M_{EMs} = 4.52$ vs. $M_{IMs} = 2.39$), "obtaining a PhD" ($M_{EMs} = 4.24$ vs. $M_{IMs} = 2.55$) and "taking on leadership roles, being a kindergarten principal" ($M_{EMs} = 3.67$ vs. $M_{IMs} = 2.48$). However, compared to IMs, Serbian EMs rate statistically significantly higher "preparing training for colleagues" ($M_{EMs} = 4.38$ vs. $M_{IMs} = 3.47$), "participating in changing school policy" ($M_{EMs} = 4.31$ vs. $M_{IMs} = 3.51$) and "taking on leadership roles, being a kindergarten principal" ($M_{EMs} = 4.25$ vs. $M_{IMs} = 3.16$). The differences in the importance ratings of each expectation are statistically insignificant among Slovenian preschool teachers only for "obtaining a second Bologna degree (Master of Science degree)" and "preparing training for colleagues", while all differences in the ratings between Serbian IMs and EMs are statistically significant.

Based on EFA, we created two new variables for the ways of caring or planning for one's career: Continuous Learning and Professional Collaboration and Achieving a Leading Position, and we aimed to establish whether there are statistically significant differences in these two variables between Slovenian and Serbian preschool teachers, and between IMs and EMs in each country.

Table 9

Means, standard deviations, and Mann-Whitney test for individual items of the Career Expectations Subscales

Career expectations subscales	Predominant motivation				U	z	r	
	EMs		IMs					
	M	SD	M	SD				
Continuous learning and professional collaboration	Slovenia	2.54	.89	3.86	.62	143.00	-5.32***	-.51
	Serbia	2.15	1.22	4.06	.66	137.50	-4.56***	-.45
Achieving a leading position	Slovenia	4.14	.76	2.48	1.02	149.00	-5.52***	-.53
	Serbia	2.64	.73	3.33	1.13	362.00	-2.24*	-.22

Note. EMs = preschool teachers with predominant motives of simplistic view of studies and profession when choosing a teaching profession; IMs = preschool teachers with predominant intrinsic and altruistic motives when choosing a teaching profession. Mean parameter values for each of the analyses are shown for the Slovenian EMs ($n = 21$) and IMs ($n = 89$) and Serbian EMs ($n = 16$) and IMs ($n = 87$), as well as the results of Mann-Whitney tests comparing the parameter estimates between the two predominant motivations, separately for each country. Effect size r was calculated using the formula

$$r = \frac{z}{\sqrt{N}}$$

* $p < .05$. *** $p < .001$.

Analysis has shown that continuous learning and professional collaboration are more important for career development than achieving a leading position for both, preschool teachers in Slovenia ($M_{SLO} = 3.56$ vs. $M_{SLO} = 2.87$, $z = -3.28$, $p < .01$) and in Serbia ($M_{SRB} = 3.73$ vs. $M_{SRB} = 3.22$, $z = -4.22$, $p < .001$). Comparison between the two countries shows that continuous learning and professional collaboration are on average important for career development for preschool teachers from both countries, but are statistically significantly more important for Serbian preschool teachers than for Slovenian ones, $U = 4293.00$, $z = -2.26$, $p < .05$, $r = -.13$. In both countries, preschool teachers rated their expectations or plans related to leadership as moderately important on average, but the differences between the two countries are not statistically significant in this case. In both countries, there are statistically significant differences between IMs and EMs in both variables (see Table 9). Among Slovenian preschool teachers, EMs on average have higher expectations related to achieving a leading position ($M_{EMs} = 4.14$) than IMs ($M_{IMs} = 2.48$). Conversely, continuous learning and professional collaboration are on average more important for IMs ($M_{IMs} = 3.86$) than EMs ($M_{EMs} = 2.54$). Among Serbian preschool teachers, however, both sets of expectations are more important to IMs than to EMs: achieving a leading position ($M_{IMs} = 3.33$ vs. $M_{EMs} = 2.64$) and continuous learning and professional collaboration ($M_{IMs} = 4.06$ vs. $M_{EMs} = 2.15$).

Conclusions

Both professional competence with in-depth knowledge of the professional role and professional challenges and motivation, in which realistic professional expectations are important, represent crucial characteristics of a quality preschool teacher. A preschool teacher without insight into the possibilities and limitations of a career in preschool education and who does not have realistic expectations of the professional role may experience more stress when entering the profession and facing its reality, which in turn may lead to burnout and earlier exit from the profession, or to staying in the profession with significantly less professional commitment.

The present study has shown that altruistic and professional motives prevail among both Slovenian and Serbian preschool teachers when choosing the educational profession, and that their importance increases as the importance of motives of a simplistic view of studies and the profession decreases. Preschool teachers in both countries generally have a high view of their profession as a career, but Serbian preschool teachers rate it lower compared to Slovenian preschool teachers in terms of its characteristic of joining professional organisations and as a profession with a considerable degree of freedom and autonomy in the choice of work practices. It was also shown that preschool teachers with predominantly intrinsic and altruistic motives in both countries value this profession higher than those with simplistic motives for choosing a career in education, which suggests that preschool teachers with predominantly intrinsic and altruistic motives prioritise content when guiding their career, while those with predominant motives of a simplistic view of studies and the profession prioritise form over content or typically understand the career as careerism. Understanding preservice teachers' motivations for entering the teaching profession creates a knowledge base for developing teacher education policies and programmes (Assunção Flores and Niklasson, 2014). Additionally, knowledge of teaching professionals' views on their careers allows for the optimal promotion of career development of preschool teachers at both systemic and individual levels, and also enables their educators to raise preservice teachers' awareness of career paths in appropriate ways.

Just like pointed out in the work of Baruch (2004, as cited in Petre, 2015), the importance of individual and organisational factors in career development was also evident in our study. Particularly preschool teachers with predominant intrinsic and altruistic motives in both countries are those who identify the most important factors in their career development as those related to their own initiative, such as competence, ambitions, communication skills, and readiness for education. This is followed by factors related to the relationships and climate of the work organisation: the relationship of a preschool teacher with colleagues, with management, and the climate and culture of the kindergarten. In both countries, preschool teachers rate diversity of work experience, life period and managerial skills, as well as a desire to lead, as important factors in career development. The importance attached to the factor of life period in career development reflects the preschool teachers' awareness of the importance of balancing personal and professional aspects, which is an important element of resilience, while the importance attached to the influence of skills and desire for leadership and management among preschool teachers in terms of their career development highlights the importance of mentoring and taking responsibility for shaping the members of the profession. The latter can also be an important factor in the professionalisation of preschool teaching. Among Slovenian preschool teachers, whose motives for choosing a profession were dominated by a simplistic view of studies and the profession, gender was also identified as a factor in their career development. This finding, in the light of data from a recent study among Slovenian future teachers (Tašner, Žveglič Mihelič, and Mencin Čeplak (2017)), which suggests that men feel more respected in the teaching profession than women, leads to the conclusion that it would be worthwhile to research in more detail the actual situation of possible inequality in the position of men and women in the preschool teaching profession in the future. Finally, we found that the career expectations or plans of teachers with prevalent intrinsic and altruistic motives are predominantly focused on the care of their own professional development in terms of continuing professional development, participation in professional associations, and research in national and international contexts, whereas they are less focused on taking up leadership positions.

To conclude, the research sheds light on the role of the nature of the motives for choosing preschool teaching in the perception of the profession as a career: a career with an emphasis on content, with investment in one's own professional development, or a career with a focus on formal promotion, careerism. The nature of the motives for choosing a career also determines whether preschool teachers relate their career development opportunities to factors largely within their control or to predominantly external circumstances beyond their control. These findings support the importance of informing and raising awareness among future preschool teachers about the complexity of the profession and of

developing realistic expectations about their future professional role; they also support the importance of mentoring, of developing professional development competences in gaining insight into the opportunities and constraints of a preschool teacher's career, and in raising awareness of career paths among both future preschool teachers in the course of their studies and those already working in practice.

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Conflict of interests

The authors declare no conflict of interest.

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Conceptual Predictors of The Adolescents With Different Cognition Types Intellectual Activity

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Abstract: Such predictors of intellectual activity as categoric, conceptual and semantic ones are analyzed in the article; the analysis is aimed at defining structural peculiarities of the adolescents' conceptual predictors exemplified by the adolescents with open-minded, closed-minded and neutral (mixed) cognition. Design of the research can be defined as a deductive-correlated one. The research is based on mixed-method studies, containing qualitative and quantitative methods of the data processing and interpreting. Principal Component analysis (PCA) as well as the Kruskal-Wallis rank sum test (IBM SPSS Statistics) allowed us to find out peculiarities of the adolescents with different cognition types intellectual activity conceptual predictors. The average value of the factor structures summary dispersion and differences in predictors significance values from $p \leq 0.01$ to $p \leq 0.05$ reflects the veracity of the research results. The research proves that adolescents with open-minded cognition are characterized by well-developed long-term semantic memory, i.e. they are able to generate more ideas ($H_{emp.} = 12.082$, $p \leq 0.01$), their categoric abilities are highly developed ($H_{emp.} = 13.764$, $p \leq 0.01$). Factor structure in this group of adolescents is a sign of conceptual abilities and conceptual predictors systems integration. The level of cognition openness is one of the basic characteristics of intellectual success. The attained statistic results prove that there are great differences between structural peculiarities of the adolescents with different cognition types intellectual activity conceptual predictors; the results of the research are as well indicatives of the fact that intellectual activity of adolescents with different cognition types is conditioned by the conceptual predictors structure.

Keywords: conceptual structures, intellectual activity, cognition, adolescents.

Introduction

Intellectual activity determines success of a person at all stages and in all spheres of life: beginning with playing in early childhood, then while studying at school and university as well as in a period of building a career in adulthood. Challenges and success of intellectual activity management are related to a person's metacognitive experience. Metacognitive experience, containing effortful and involuntary control, metacognitive awareness and open-minded cognition (defined as a component of person's intellectual resource), determines regulation of the intellectual activity. Studying the roles of metacognitions in condition of education digitalization taking place nowadays is of great importance and especially relevant, because the regulatory aspects of educational activity are important predictors of this activity being successful and effective; they are insufficiently studied as well. The research shows that the students with high metacognitive awareness are characterized by higher indices of internal motivation in studying, as well as by being much more successful in meeting the challenges in creative thinking, which is an important factor of studying being successful (Norman and Furnes, 2016). Generally speaking, metacognitive experience is considered by researchers as the basis of creative activity (Volkova, 2016) and intellectual competence. Thus, comparing highly-qualified specialists (teachers of Physics) and newcomers (students) it was found out that professional success is connected and interrelated with intellectual competence only in case of all metacognitive experience structures being well-developed (Savin, 2004).

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Well-developed metacognitive characteristics of experience (e.g., awareness of one's own process of thinking and the content of one's own representation system as well as a cognitive process active monitoring) are quite universal and act as predictors of effective solving problems in various fields of knowledge (Schuster et al., 2020; Litvinov and Ivolina, 2013).

One of the key components of the metacognitive experience is cognition defined as the way of analyzing the circumstances and current situation, being ready to perceive new information and being open for new experience. The cognition is studied as an important condition of person's success in one's own intellectual activity and in life in general, because person's being flexible in interacting with the surrounding world and being ready to process even paradoxical information in rapidly changing world is of great importance. Cognition as a peculiar type of cognitive attitude to the world around is subdivided into different types: open-minded, neutral/mixed and closed-minded. If studying person's success, open-minded cognition is of great research interest; this kind of cognition is characterized by the following features (Kholodnaya, 2019): realizing that there may be different points of views on the same phenomenon; ability to percept and use different types of describing the phenomenon and to switch from one method of describing to another one fluently; decentralizing as the ability to take other point of views into account; readiness to conceptualize any unusual phenomena and contradictions in an objective way; flexibility of individual judgments; being open for experience as the ability to accept even the most unusual and inconceivable events.

Open-minded cognition is a resource of cognitive, personal and social success of human. If speaking about personal and social success of a human, one's own being open for experience (as a sign of open-minded cognition) reveals as a resource of being satisfied with own life. People open for new experience can benefit from the personal growth opportunities offered in this very period, i.e., they are able to meet their own needs (Stephan, 2009). Success in meeting the challenges is connected with cognition openness and genius of a person: gifted adolescents are more likely to have open-minded cognition and unidimensional coping-strategies with their adaptive types prevailing (Klimontova, 2010).

Open-minded cognition is an important indicator of human being cognitively active, creative and effective. So, generating new ideas is a result of person being open for new experience interrelation with high cognitive interest. This fact helped researchers and practical persons in Psychology to identify employees with creative potential and to optimize their activity to develop this potential (Madrid and Patterson, 2016). Studying the ability to solve divergent problems showed the connection between person being open for new experience and creative assessments as well as the significance of the identified strengths and weaknesses of the decisions made. The researchers also found out that the open-minded cognition makes significant additional contribution to creative assessments. This cognition turned out to be an important predictor of generating and assessing the ideas (Puente-Díaza et al., 2022). Personal need in cognition (i.e. tendency to search actively, being engaged into activity and enjoy this activity) is a sign of an open-minded cognition; it affects person being internally motivated and highly involved in studying. Students with low need in cognition (closed-minded cognition) are on the contrary (Lavrijsen et al., 2021).

Thus, open-minded cognition is an effective cognitive method of processing information and one of the measures of metacognitive experience formation, person's intellectual development level and being successful in intellectual activity (Kibal'chenko and Eksakusto, 2020).

Effective intellectual activity is a factor of cognitive, personal and social success. Cognitive abilities and intellectual stimulation as well as other factors (being involved in activity, inspiring motivation and individual attention) have an influence on leadership efficiency (performing leading functions) and success in any project implementing as well as on eliminating the potential losses and unnecessary failures (Shanqaiti and Farea, 2021).

Moreover intellectual activity and its being successful (as well as the internal locus of control, various experience conation) leads to personal and general human's abilities development (Austerberry et al., 2021; Ackerman, 2017; Shadrikov, 2019) and has an influence on professional thinking development (Levich, Marchenko and Filippova, 2019), self-acceptance intensity and self-esteem. Intellectually gifted students are characterized by a higher self-actualization (statistically insignificant); while students whose self-actualization is just developing are specified by internal locus of control and need to be motivated and have different experience (Pufal-Struzik, 1995). Positive correlation between integral self-esteem and creativity (as a cognitive ability) is identified by researchers (Pavlova, 2018).

The degree of intellectual activity efficiency is a determining factor for academic achievements/success. There are lots of studies proving these persistent connections. General (i.e. intelligence, creativity) and specific (speed of information processing, memory, thinking, attention, imagination and speech) cognitive predictors determine academic success at the beginning of studying and at other stages

of getting education and define an ability to establish logical connections as well as an ability to identify what is critically important and what is merely a detail (Postavnev et al., 2020; Larkina and Anufriev, 2021).

Thus, it is obvious that intellectual activity is helpful to the person being successful in life; this fact proves the necessity of studying the predictors stipulating intellectual activity. Intellectual activity (expressed in solving wide range of cognitive and personal problems) predictors are defined as factors predicting the success of this activity. It should be as well emphasized that the predictor is much more informative if it includes two or more factors, i.e. is complex in nature; this fact is taken into account at the empirical stage of the research (Maryutina, Ermolaev and Trubnikov, 1998).

There are many studies nowadays that analyze cognitive and personal predictors of the intellectual activity success (Hülür et al., 2018; Veenman and Verheij, 2003; Vladimirov, Podshivalenko and Smirnitckaya, 2021). Personal predictors of the intellectual (educational and cognitive in particular) activity and its being successful are as follows: motivation, self-esteem, self-efficacy, idiosyncrasy, individual character and personal traits (e.g., responsibility, emotivity, etc.), "Big five" factors and individual regulatory features (Zirenko, 2018; Kholodnaya, 2019). Thus, the success of students in Mathematics (as a sign of intellectual success) is correlated with regulatory indices. This success is significantly correlated with a "models building" index, determined as a variable reflecting the ability to identify significant conditions for achieving goals both in current situation and in future. Therefore it is quite evident that "models building" is connected with the cognitive activity being successful (Morosanova, Fomina and Kovas, 2014).

General abilities (i.e. intelligence and creative abilities) are analyzed on the basis of intelligence tests fulfillment; cognitive predictors of these abilities development level are as follows: cognitive control, information processing speed and the sense of number (Tikhomirova, Misozhnikova and Malykh, 2020; Goryunova and Druzhinin, 2000; Shcheblanova, 2011)

Indices of emotional intelligence and intellectual humility (i.e. being able to change one's opinion in case of evidence of another point of view, being open for new facts, experience and information) are cognitive predictors of successful intellectual activity. The higher these indices are, the more successful the student in a process of studying is. In other words, if a student is able to accept ideas contradicting own principles/knowledge and is open for them, he/she will be able to solve challenges of different levels of complexity and cope with problems in future life efficiently (Ratu, Ra and Savitri, 2021).

It should be also pointed out that conceptual thinking (Kholodnaya, 2012) performing a peculiar function in an intellectual activity regulation, is a form of cognitive predictors and cognitive structures integration. According to M. A. Kholodnaya, the success of conceptual thinking as well as of different types of cognitive activity of conceptual nature is based on conceptual abilities. Conceptual abilities can be defined as specific mental peculiarities that cause intellectual activity success by forming semantic nets, using categories of various generality degrees, interpreting, making hypotheses and substantiations (Kholodnaya, 2019). The level of conceptual abilities development and a high level of these abilities correlation can identify that all intellectual abilities of a person are highly-developed, i.e. intellectual activity is efficient (Kholodnaya, 2015; Kholodnaya et al., 2019). More to the point, the structure of conceptual abilities is heterogeneous and includes the following abilities: semantic (verbal signs assimilation, storage and updating); categoric (defining and using categoric signs of generalization of different degree); and conceptual ones (generating new mental content). Conceptual structures include three types of conceptual abilities mentioned above; but only in case of conceptual structures being well-developed the unique ability to conceptualize (which is the basic ability of human intelligence) can be formed (Kholodnaya, 2012; Kholodnaya, 2019).

The research carried by M. A. Kholodnaya and Y. I. Sipovskaya proving the fact that the intellectual ability efficiency correlates with conceptual abilities. This research provides the data on sensory-emotional experience in a process of describing fuzzy visual images; as well as on this experience being connected with the level of conceptual (i.e. categoric and generative) abilities. Generative abilities, comparing to categoric ones, play a leading role in defining the degree of modalities variety and the level of their being expressed while visual images forming. The generative abilities represent the highest level of personal conceptual experience organization; this experience becomes multimodal thanks to integrity of conceptual (generative) structures. In other words, conceptual (generating) structures determine the form of top-down" conceptual representations (Kholodnaya and Sipovskaya, 2021).

Conceptual thinking and abilities are formed in a period of adolescence; they ensure qualitative changes in all cognitive processes and intellectual activity; these abilities are the factors of cognitive sphere integrating and human holistic intelligence structure forming (Kholodnaya, 2015; Kholodnaya et al., 2019). Specific functions of conceptual thinking, necessary for intellectual resources development, are formed by the time of adolescence. These functions include developing, integrative, predictive, conceptual and generating ones.

Thus, the levels of conceptual thinking, conceptual abilities structure and conceptual system formation are included in a generalized system of intellectual activity conceptual predictors and serve as predictors of intellectual resources development. The conceptual system is studied as a form of cognitive structures integration.

Theoretical analysis showed that the coverage of cognition and intellectual activity separate predictors is of different aspects, and peculiarities of cognition multiple links with semantic, categoric and conceptual abilities characteristics is still an open issue. The research is of great current interest for studying intellectual activity of adolescents. Studying the specificity of cognitive structures and the signs of their differentiation and integration may complete the scientific facts of adolescents' intellectual activity conceptual predictors; this fact will help to define the most effective technologies and methods of teaching adolescents.

It is fair to assume that specificity of the adolescents' (characterized by different cognitions) intellectual activity conceptual predictors lies in abilities (semantic, categoric and conceptual) development level and peculiarities as well as in structural connections between these abilities. Specific character of adolescents (characterized by different cognitions) intellectual activity conceptual predictors formedness correlates with the level of its openness. These very assumptions defined the purpose of this study.

Materials and Methods

The design of the research is defined as a deductive-correlated one including such qualitative and quantitative methods (Briggs et al. (eds.), 2012) and techniques of the data processing and interpreting as Principal Component analysis (PCA) and the Kruskal-Wallis rank sum test (IBM SPSS Statistics); "Perfect computer" was used to study cognition of students; "Generalization of three words" was aimed at defining the level of categoric generalization (abilities); "Conceptual synthesis" helped to identify the degree of connections and conceptual abilities complexity; "Concept cognitive content" is used in order to test adolescents' awareness of the concept content (semantic abilities) based on activating a long-term semantic memory (Kholodnaya, 2015; Kholodnaya et al., 2019); "Words free sorting test" by V. A. Kolga helped to define concept style as a form of involuntary intellectual control (Kholodnaya, 2019).

The results statistic processing included Kruskal-Wallis one-way dispersion analysis, helping to compare the average values in three groups or more; factor analysis (principal component method) allowed to study correlations between variables characteristics (IBM SPSS Statistics). Correlating variables ($r \geq 0.5$) were included into one factor. The number of observations in each group (32 students with closed-minded cognition, 72 students with neutral cognition and 36 students with open-minded cognition) exceeded the number of variables (13) more than twice.

One hundred and forty students took part in the research. Average age of the respondents was 15.5 years (14-17 years old). Forty-nine comma eight per cent male and 50.2 per cent female students.

Results

As a diagnostic was carried out at the first stage of the research, 140 adolescents were subdivided into three groups:

First group: adolescents characterized by a closed-minded cognition; this group includes 32 students (23 per cent);

Second group includes 72 adolescents with neutral (mixed) cognition (51 per cent);

And third group consisting of 36 open-minded cognition students (26 per cent) (see Figure 1).

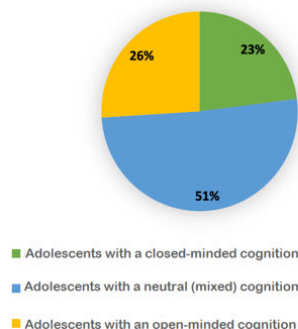


Figure 1. Grouping of adolescents with different cognition types

Basic method used for differentiating was “Perfect computer” and its cognition openness measure. Three groups of adolescents with open-, closed-minded and neutral cognition were compared to specify differences between them; this comparison was carried out on the basis of indices mean values, characterizing the level of cognition openness. (Table 1).

Table 1

The results of variables (characterizing the level of cognition openness in groups) statistic processing

Variables	Kruskal-Wallis coefficient value	H _{emp.}	Accepted hypothesis, significance value
1. Objectified questions	42.087		H1, p≤0.01
2. Subjectified questions	53.526		H1, p≤0.01
3. Categoric questions	54.153		H1, p≤0.01
4. Substantial questions	39.727		H1, p≤0.01
5. Total	0.6567		H0

Thus, significant (p≤0.01 p≤0.05) quantitative and qualitative differences between the groups of adolescents were identified. There were no significant differences between the groups in a quantity of questions, i.e. adolescents create almost equal quantity of questions. But we should point out that if speaking about the group of adolescents with an open-minded cognition, the quantity of questions they create is characteristic of the intellectual activity speed; contrariwise: the quantity of questions asked by the adolescents with a closed-minded cognition shows their intellectual activity being impulsive.

Intellectual activity signs analysis let us suppose that its conceptual predictors in groups of adolescents with different cognition types are described as a system of conceptual abilities (semantic, categoric and conceptual), i.e. as an individual conceptual system. This supposition specified the following step of the research.

Categoric abilities of adolescents with different cognition types

Studying students' categoric abilities (categoric generalization) score the following results:

Nineteen adolescents (60 per cent) in a closed-minded cognition group showed thematic generalization based on associative coupling, 11 (34 per cent) of them are characterized by analytic generalization; only 2 students (6 per cent) had the signs of class-descriptive category. I.e. this group is notable for thematic generalization based on associative coupling predominance; this fact is a sign of a low level of categoric abilities formedness.

Analyzing the group of adolescents with neutral (mixed) cognition helped to get the following results: 20 (28 per cent) of these students showed thematic generalization based on associative coupling, 48 (67 per cent) – analytic generalization and 4 (5 per cent) using class-descriptive category. Analytical generalization based on specific sign defining predominates in this group.

If speaking about the group with an open-minded cognition, 7 adolescents (19 per cent) are characterized by thematic generalization based on associative coupling, 19 students (53 per cent) are specified by analytic generalization and 10 (27 per cent) of them are able to use class-description. So, statistic processing of the categoric generalization (categoric abilities) results acquired in groups with different cognition types showed significant differences of this variable (H_{emp.} = 13.764, p≤0.01).

On the assumption of the results we can note that the more open cognition is, the higher the level of categoric generalization is.

The number of students included into an open-minded cognition group, who are able to define the signs using categoric generalization (high level of categoric abilities), is higher than in two other ones. Categoric abilities correlate with conceptual abilities.

Conceptual abilities of adolescents with different cognition types

Statistic operating of conceptual abilities mean values received by using “Conceptual synthesis” method showed that the more open the cognition is, the more ideas adolescents create and the more complex these ideas are. This fact can prove that the open-minded cognition formedness level correlates with conceptual abilities.

Adolescents included into a group with a closed-minded cognition create fewest number of ideas (mean value is 2.72), and the range and depth of these ideas and their connections are focused on peculiar situations and simple calculating, but not on cause-and-effect links. Nineteen per cent of students included into this group are characterized by a low level of conceptual synthesis formedness; they use

meaningless words combinations while making sentences. Conceptual synthesis average formedness level is characteristic of 15 adolescents (47 per cent) in this group. Complexity level of the connections established by these students is concentrated on peculiar situations, simple words enumerations or uncreative oppositions. Eleven (34 per cent) of adolescents are notable for having an above-average level and are able to make phrases with given words, including them into peculiar situation description, and find the cause-and-effect links as well.

Statistically meaningful differences in “ideas quantity” and “the level of the established links complexity” were obtained in three groups of adolescents with different cognition types (see Table 2).

Table 2

The results of conceptual abilities variables statistic processing

Variables	Kruskal-Wallis H _{emp.} coefficient value	Accepted hypothesis, significance value
1. Quantity of ideas (min=3)	10.27	H1, at p≤0.01
2. The level of the established links complexity	9.97	H1, at p≤0.01
3. The level of conceptual synthesis formedness	2.77	H0

Conceptualization style diagnostic resulted in absence of meaningful differences between indices characterizing conceptualization style as a form of involuntary intellectual control in groups of adolescents with different cognition types.

Semantic abilities of adolescents with different cognition types

Then the research concentrated on analyzing mean values of indices, characterizing semantic abilities of adolescents.

Those of them included into an open-minded cognition group are notable for having the biggest concept indices quantity (mean value = 8.42); by comparison, a mean value of these indices in a group of students with a neutral (mixed) cognition is 8.06, in a group of adolescents with a closed-minded cognition this value is 5.09. These values can be facts of extensiveness escalation, awareness on the concept content (“Knowledge”) followed by the students’ cognition becoming more open.

Analysis of the results characterizing the level of verbal and speech, emotional and other modalities being included into cognitive concept content (integrity) opened up statistically meaningful differences in a positive modality index (Hemp. = 23.630, p≤0.01). Negative and neutral modalities as well as a “Knowledge” cognitive concept content integrity have no differences statistically; but if comparing average results of three groups (closed-minded cognition group – 2.66, neutral (mixed) one – 4.88 and an open-minded cognition group – 4.97) there is a tendency of conceptual abilities being formed better in a group of students with an open-minded cognition. There are some signs of cognitive mechanisms interaction while information processing and using different modalities for concept content description. The adolescents use sensory and emotional coloring for concept, as well as show complexity of the “Knowledge” concept cognitive content.

These results of the research become bases for further studying, i.e. defining structural features of adolescents with different cognitions conceptual abilities.

Features of adolescents with different cognition types conceptual abilities factor structures

The research is aimed at defining conceptual abilities (conceptual structures) factor structures in groups of students with different cognition types.

The study is focused on adolescents with a closed-minded cognition conceptual abilities factor structures (see Table 3).

Table 3
Adolescents with a closed-minded cognition conceptual abilities factor structures

Variables	Component				
	1	2	3	4	5
1. The level of generalization	.19	-.08	.02	.29	-.86
2. The quantity of ideas	-.07	.12	.04	.89	-.19
3. The level of the links complexity	<u>.39</u>	<u>.38</u>	<u>.24</u>	<u>.39</u>	<u>.02</u>
4. The level of conceptual synthesis	<u>.60</u>	.33	.23	.59	.07
5. The quantity of the concept indices	.34	<u>.79</u>	.45	.08	-.04
6. Concept indices negative modality	.23	<u>.86</u>	-.16	.14	.00
7. Concept indices neutral modality	.27	.40	<u>.69</u>	-.03	-.28
8. Concept indices positive modality	.27	<u>.73</u>	.21	.11	.25
9. Concept indices integrity	.09	<u>.71</u>	.59	.19	.028
10. The quantity of the words groups	.12	.14	<u>.75</u>	.17	.47
11. Characteristics improving the group of words description	<u>.91</u>	.22	.29	.07	.10
12. Characteristics impairing the group of words description	<u>-.93</u>	-.16	.20	.04	.21
13. Categorization coefficient	<u>.96</u>	.19	.07	.10	-.07
Percentage load	25.87	42.73	59.52	70.69	81.09

NB: the most important variables, included into corresponding factor are underlined in the Table. Color marking means the lack of variable No. 3 in a factor structure (The level of the established links complexity).

Summary dispersion is 81.09 per cent, i.e. the factor structure defined in the research is significant. The links here are generally direct, but inverse correlations can be found here as well. This structure is incomplete and characterized by the lack of the third variable (i.e. "The level of the established links" ("Conceptual synthesis")). This variable is connected with such characteristics as ingenuity and fluency.

First factor is a crystallizing one with a load of 25.87 per cent, ambivalent, including four correlating variables; three of them are directly correlated and one of them has an inverse correlation.

The directly correlated variables are as follows: The level of conceptual synthesis formedness ("Conceptual synthesis") (0.60); characteristics improving the group of words description ("Words free sorting test") (-0.91); categorization coefficient ("Words free sorting test") (0.955). The variable "characteristics impairing the group of words description" is inversely correlated variable ("Words free sorting test") (0.93). This inversely directed variable means that the oftener the characteristics impairing the group of words description appear, the lower the level of characteristics improving the group of words description becomes and vice versa. The variables of semantic abilities are not presented in a key factor. This is a sign of the lack of integrity in conceptual abilities structure in a group of students with a closed-minded cognition.

The second factor with a cumulative load of 42.73 per cent includes four following co-directional variables: the quantity of concept indices ("Cognitive concept content") (0.79), concept indices negative modality ("Cognitive concept content") (0.86), concept indices positive modality ("Cognitive concept content") (0.73), integrity ("Cognitive concept content") (0.71).

The third factor is characterized by cumulative load of 59.52 per cent and includes two correlated variables: concept indices neutral modality ("Cognitive concept content") (0.69) and general quantity of the words groups ("Words free sorting test") (0.75).

The fourth factor's cumulative load is 70.69 per cent; this factor includes one variable: the quantity of ideas ("Conceptual synthesis") (min=3) (0.89).

The fifth factor has an 81.09 per cent cumulative load. One inversely directed variable is included into this factor; this variable is the level of generalization ("Generalization of three words") (-0.859), indicating the categoric abilities characteristic. This fact can be a sign of low categoric abilities formedness level (if speaking about adolescents with a closed-minded cognition).

The factor structure including 5 factors was figured out as a result of factorization and rotation in a group of adolescents with a neutral cognition (see Table 4).

Table 4
Adolescents with a neutral cognition conceptual abilities factor structures

Variables	Component				
	1	2	3	4	5
1. The level of generalization	-.14	<u>.58</u>	-.12	.23	-.15
2. The quantity of ideas	-.07	<u>.56</u>	.48	.01	.41
3. The level of the links complexity	-.021	.05	.35	.19	<u>.87</u>
4. The level of conceptual synthesis	.00	-.09	.08	.12	<u>.91</u>
5. The quantity of the concept indices	<u>.89</u>	.13	.11	.12	.32
6. Concept indices negative modality	<u>.59</u>	.49	-.12	-.03	.027
7. Concept indices neutral modality	<u>.86</u>	-.17	-.04	.15	-.01
8. Concept indices positive modality	<u>.47</u>	<u>.08</u>	<u>.29</u>	<u>.09</u>	<u>.44</u>
9. Concept indices integrity	<u>.74</u>	.12	-.04	.09	-.16
10. The quantity of the words groups	-.11	-.06	<u>.93</u>	-.08	.21
11. Characteristics improving the group of words description	.08	-.06	<u>.76</u>	.54	.26
12. Characteristics impairing the group of words description	-.20	.02	.12	<u>-.94</u>	-.09
13. Categorization coefficient	.13	.02	.25	<u>.90</u>	.16
Percentage load	21.21	36.93	52.61	66.99	80.61

Summary dispersion in this structure equals 80.61 per cent. Direct correlation prevails here, but there is a factor with inverse correlation as well. The structure is also incomplete and notable for the lack of the 8th variable (concept indices positive modality) ("Cognitive concept content"). This variable is correlated with positive emotional attitude to studying and a meaning of getting education. These results are characteristic of some challenges connected with cognitive sphere and intellectual success of students included into a neutral cognition group.

Cumulative load of **the first factor** is 21.21 per cent, co-directional and includes four following variables: the quantity of concept indices ("Cognitive concept content") (0.89), concept indices negative modality ("Cognitive concept content") (0.59), concept indices neutral modality ("Cognitive concept content") (0.86), integrity ("Cognitive concept content") (0.74). The variables reflecting semantic and conceptual abilities characteristics are the core indices of the factor structure in this group of adolescents.

The second factor with cumulative load of 36.93 per cent is directly correlated, includes two variables: the level of generalization ("Generalization of three words") (0.58) and the quantity of ideas ("Conceptual synthesis") (0.55). This factor is formed by the variables describing separate indices of categoric and conceptual abilities integration and is characteristic of a neutral cognition group.

The third factor's cumulative load is 52.61 per cent; it includes the following co-directed variables: total quantity of groups ("Words free sorting test") (0.925), characteristics improving the group of words description ("Words free sorting test") (0.755).

The fourth factor includes two ambivalent variables: categorization coefficient ("Words free sorting test") (0.90) and characteristics impairing the group of words description ("Words free sorting test") (-0.94). Cumulative load here is 66.99 per cent. Presence of the "characteristics impairing the group of words description" variable proves that the more often it appears, the lower the level of notions categorization coefficient is and vice versa. This fact is theoretically grounded.

Fifth factor has an 80.61 per cent cumulative load and includes two directly correlated and mutually complementary variables: the level of the links complexity ("Conceptual synthesis") (0.87) and the level of conceptual synthesis formedness ("Conceptual synthesis") (0.91).

Factor structure containing 4 factors is formed as a result of data factorization and rotation in a group of adolescents characterized by an open-minded cognition (see Table 5).

Table 5
Adolescents with an open-minded cognition conceptual abilities factor structures

Variables	Component			
	1	2	3	4
14. The level of generalization	.64	.43	-.07	.29
15. The quantity of ideas	-.21	.19	.85	-.12
16. The level of the links complexity	.36	-.17	.89	.04
17. The level of conceptual synthesis	.70	-.36	.14	.17
18. The quantity of the concept indices	-.19	.89	.24	-.14
19. Concept indices negative modality	-.37	.44	.72	-.26
20. Concept indices neutral modality	-.24	.83	-.09	.07
21. Concept indices positive modality	.63	.38	.05	-.25
22. Concept indices integrity	-.41	.69	.36	.10
23. The quantity of the words groups	.09	.05	-.06	.93
24. Characteristics improving the group of words description	.89	.04	-.04	.35
25. Characteristics impairing the group of words description	-.87	.01	-.02	.45
26. Categorization coefficient	.90	-.08	-.14	-.25
Percentage load	24.03	42.49	60.29	76.37

Summary dispersion in this group is 76.37 per cent. Direct correlation prevails in this complete structure.

First factor: cumulative load is 24.03 per cent; the factor includes six variables, five of which are directly correlated; one of them is inversely correlated, this correlation is theoretically grounded.

The variables with direct correlation include: the level of generalization (“Generalization of three words”) (0.64); the level of conceptual synthesis formedness (“Conceptual synthesis”) (0.70); concept indices positive modality (“Cognitive concept content”) (0.63); characteristics improving the group of words description (“Words free sorting test”) (0.89); categorization coefficient (all groups total points divided into the number of groups) (“Words free sorting test”) (0.90). Inversely correlated variable is “characteristics impairing the group of words description” (“Words free sorting test”) (-0.87) in case of characteristics improving the group of words description occurrence frequency increasing.

Crystallizing factor is formed by variables proving the fact that categoric, conceptual and semantic abilities of the adolescents included into this group are well-formed. This is the sign of conceptual abilities structure being integral.

The second one is notable for cumulative load of 42.49 per cent, co-directed and includes three following factors: the quantity of concept indices (“Cognitive concept content”) (0.89), neutral modality (“Cognitive concept content”) (0.83) and integrity (“Cognitive concept content”) (0.69).

The third factor of this group is characterized by cumulative load of 60.29 per cent; it includes three correlated variables: the quantity of ideas (“Conceptual synthesis”) (0.85), the level of links complexity (“Conceptual synthesis”) (0.89) and concept indices negative modality (“Cognitive concept content”) (0.72).

The cumulative load of **the fourth factor** equals 86.11 per cent; there is only one variable in this factor: total quantity of groups (“Words free sorting test”) (0.97). This factor expresses the significance of analytical conceptualization style formedness for adolescents. As this factor includes only one variable, it can be called instable, i.e. conceptual system is to be further developed as a factor of intellectual success.

Discussions

First of all, the measure of cognition openness was revealed in a group of adolescents; this measure helped to subdivide students into three groups, each group is characterized by: open-minded cognition, neutral (mixed) cognition and a closed-minded one.

The results of the cognition openness average values showed that adolescents included into a closed-minded cognition group (22.9 per cent) put forward a significantly larger number of ideas comparing to the adolescents from other groups. However this fact is a sign of their being impulsive, because the

ideas they suggest are noncognitive and are concentrated within the boundaries of individuals' personal situations.

If speaking about the adolescents with neutral (mixed) cognition, they are characterized by a significant predominance of objective and practical ideas and questions; but these students put forward subjective ideas as well. These results prove that these students are characterized by imprecise differentiation of the surrounding world. Their questions fall into ambivalent categories. On the one hand, most of ideas and questions generated by the students of this group are objective and connected with the reality knowledge updating. On the other hand, they do relate to specific actual experience. So, the results obtained in this research prove that adolescents included into this group are specified by intellectual potential at the stage of open-minded cognition (as an intellectual success descriptor) forming.

The adolescents (25.7 per cent) with an open-minded cognition ask objectified and categoric questions (e.g., "What is truth?", "What is the meaning of human life?", etc.). Although nowadays open-minded cognition of adolescents is a reference point for modern education system, it is still poorly studied. These results corroborate M.I. Zalegay's research clarifying the fact that an open-minded cognition is a type of cognitive attitude to the surrounding world characterized by positive emotional attitude to studying, by realizing the significance of studying for self-actualization; by readiness to accept unusual information and phenomena as well as to assess this information and phenomena flexibly (Zalegay, 2014).

So, adolescents with an open-minded cognition show positive emotional attitude to studying, educational activities make sense to them. They realize the importance of studying for life and professional self-actualization. They are ready to accept unusual information and phenomena, try to assess them flexibly, but still it does not always happen like this. These results in groups of adolescents are indicators of an intellectual activity success as well as reflect some struggles. This fact is the indicative of the problem being currently topical and further research being important. For example, the level of cognitive synthesis being formed has no statistic differences, but the results indicate that the adolescents with open-minded cognition tend to conceptualize; this conceptualization is expressed (more often than in other groups) in a cause-and-effect link between the words in a sentence. The student included into an open-minded cognition group put forward nonsignificantly more ideas than the students of neutral cognition one; but the students of neutral cognition group suggest more ideas than those from closed-minded cognition group. It is noteworthy that there are no students characterized by a low level of conceptual synthesis among the adolescents with an open-minded cognition.

Significant differences between indices, characterizing conceptualization style as a form of involuntary intellectual control and categoric abilities were not found in groups of adolescents with different cognition types. However, the groups differ in categoric abilities while analyzing the names of groups created by the adolescents from stimulus words. It should be noted that the more open cognition is, the more accurate and full the description and analysis of word groups is.

The results of adolescents' semantic abilities showed that the more open cognition is, the more concept features adolescents create on the basis of long semantic memory activating ($H_{emp} = 12.082$, $p \leq 0.01$). These results are compliant to the modern researches carried out by M. A. Kholodnaya, A. V. Trifonova, N. E. Volkova and Ya. I. Sipovskaya (Kholodnaya, 2015; Kholodnaya et al., 2019); these researches studied the fact that conceptual thinking and abilities are formed during teenage and adolescence period. Conceptual thinking and conceptual abilities are interconnected and provide qualitative changes in all cognitive processes and intellectual activity.

The research identified a number of differences that allowed defining structural peculiarities of the adolescents with different cognition types conceptual abilities as well as their intellectual abilities predictors peculiarities. The factor structure in a group of adolescents with closed-minded cognition is incomplete and is characterized by direct correlation prevailing, although inversely correlated factors can also be found here. These structure peculiarities reflect the ability of students to create lots of similar/homotypic ideas and topics, generally characterized by neutral correlation. This fact may indicate a vaguely general level of awareness, low level of categoric abilities maturity as well as gaps in a system of intellectual activity conceptual predictors development.

The factor structure of conceptual abilities of adolescents with neutral cognition is characterized by generally direct correlation; the structure is incomplete, this fact reflects a problem in cognitive sphere and intellectual success. Factor structure in this group has the signs of theoretically justified combination of conceptual system characteristics as well as the signs of consistency and integration of semantic, categoric and conceptual abilities. While comparing the adolescents with neutral and closed-minded cognition, this factor structure reflects both advantages of conceptual predictors (emotional attitude to studying, realizing the aim of educational activity) of adolescents with neutral cognition and disadvantages of conceptual predictors (studied as the factor of cognition maturity and intellectual success) formation

level.

The factor structure in a group of adolescents with an open-minded cognition is full and is characterized by direct correlations. This factor structure is a sign of conceptual abilities structure being integrated. This group is notable for a well-formed conceptual predictors system aimed at intellectual activity qualitative changes. The results of the study reflect correlation of intellectual activity efficiency and conceptual (categoric and generative ones in particular) abilities. Generative abilities express the top level of personal conceptual experience organization and the integrity of conceptual (generative) structures. These changes are reflected in a significant intellectual activity characteristic, i.e. open-minded cognition, which is coherent with an opinion that intellectual humility determines the efficiency of fulfilling tasks of different complexity degrees and intellectual activity in general (Ratu, Ra and Savitri, 2021).

The obtained results corroborate Psychological and Pedagogic theory by adding new scientific data on the peculiarities of the adolescents with different cognition types intellectual activity conceptual predictors.

Conclusions

The research helped to find out that conceptual abilities of adolescents with different cognition types are represented by features of connections between the elements of semantic, categoric and conceptual abilities being conceptual predictors of an intellectual activity success. Structural peculiarities of the adolescents with different types of cognition conceptual abilities reflect specific character of an intellectual activity success conditions. The specific character of adolescents with different cognition types conceptual structures maturity is directly correlated with the level of its humility.

The adolescents with an open-minded cognition (being a descriptor of an intellectual activity success) are characterized by prevailing of analytical clustering, while some signs of categoric clustering are also typical of this group. These students are able to express certain meaning by using different ways of its representation based on semantic abilities; to put forward new ideas and thoughts. This fact proves the tendency to conceptual abilities developing.

The adolescents with neutral cognition are marked by some intellectual capability to have an open-minded cognition in future.

Adolescents with a closed-minded cognition differ from other adolescents groups by clustering based on simple associative coupling; this fact indicates a low level of categoric abilities maturity and non-cognitive way of activity.

Interestingly, one of the peculiarities of the adolescents with different cognition types conceptual abilities is represented by different features of conceptual structures differentiation and integration. This fact, in our opinion, shows that the predictors of all students (having closed-minded, neutral and even open-minded cognition) intellectual success are insufficiently formed.

The results of the research prove viability of developing a special remedial program, including methods, procedures and psychotechnologies aimed at developing conceptual predictors of adolescents' intellectual activity as well as at forming their conceptual abilities and an open-minded cognition.

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Conflict of interests

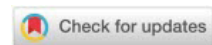
The authors declare no conflict of interest.

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The Role of Literary Texts in Relation to The Development and Respect of The Child's Identity

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Abstract: Identity is a very complex structure. There are many aspects of identity and those start to form and develop in early childhood. This study explores specific age-related characteristics of children which influence the forming and shaping of different layers of identity and points out the important role that legislature and various social environment factors have in this process. Special attention is dedicated to the positive influence that preschool teachers and institutions have and to a range of possibilities that literary texts offer in this whole process. Concrete examples illustrate how complex semantic structure of a literary text can initiate conversation about different layers of identity. The advantages of this kind of work are numerous and are reflected in the fact that the development and the strengthening of the identity is approached from an integrative standpoint, given the fact that we are simultaneously working on children's speech development through reading activities and literary text analysis. The main implication of this study is 1) the need for conducting future research with the aim of identifying literary texts which, apart from their aesthetic quality, also possess semantic potential as a tool for learning about identity and 2) further work on strengthening the competences of preschool teachers so that they can integrate activities directed towards development of the child's identity in all the areas of their educational activities within preschool institutions and carrying them out with continuity.

Keywords: child, speech development, literary text, child's right to identity, preschool education, preschool teacher.

Introduction

Respecting the right to identity enables human beings, despite their individuality, to feel accepted by others. If we derive the aspects of identity from the semantic range of this Latin word (*identitas*), we will obtain two meanings between which there is seemingly no semantic congruence. The first meaning conveys "sameness", total agreement and equivalence, whereas the second one represents "a number of characteristics which make one person different from all others" (Klajn and Šipka, 2008, p. 491). The term collective identity is derived from the first meaning and it is established based on the criteria which are the same or identical for everyone, such as race, religion, nation, gender and the like; on the other hand, the term individual or personal identity is derived from the second meaning of the word. It is necessary to integrate personal identity with group identity and this human need to receive guidance, to belong and to have own identity represents one of the distinctive characteristics of human personality (Jerotić, 2002). Problems arise when there is discrepancy between the collective and the personal, especially in the cases when personal identity is not consistent with what is socially acceptable, what offers the feeling of safety and stability, because every society, if it wants to survive, "must shape the character of its members in such a way that they want to do what they basically have to do" (From 1977, p. 224). In the area of personal, social and political determination, there may occur separation between different roles that form personal identity. In this case, social existence actually represents their alignment (Milivojević, 2011). Within individual psychological area, this inner feeling of conflicted roles may lead to identity crisis. The problem can additionally be heightened by the fact that there is generally insufficient tolerance towards anything that differs from the elements which define a group or make it self-distinctive, such as a language, religion, sexual or political orientation, etc. In relation to this, a term ethos of conflict appears. It is defined as "a set of social beliefs related with a violent intergroup conflict" (Međedović and Petrović, 2021, p.

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347). Apart from that, the focus on collective identity within multi-ethnic communities is also observed from a perspective of a majority-minority relationship (Kartag-Odri and Simović-Hiber, 1996). We must also take into consideration the fact that primordial principles related with the belief that national identity is something fixed and permanent have been widely criticized, like the one stating that a person can declare themselves "a member of the human race" or change national identity depending on a broader social setting (Milošević Đorđević, 2003, p. 130). Therefore, "identity is not fixed or singular, but multi-faceted and reflects a range of social, cultural and political influences" (Cooper, 2014, p. 281). All of this indicates that identity is, in fact, a very complex structure, i.e., that there are different aspects of identity, some more visible and some less, therefore, in scientific literature, we talk about layers of identity. Those are related with "gender, ethnic origin, nationality, race, immigration status, religious beliefs, socioeconomic status, skills, etc." (Vranješević, 2019, p. 14).

Vladeta Jerotić points out that identity depends on maturity and that "the main question posed is how much do people actually achieve it throughout life" (Jerotić, 2002, p. 73). Identity acquisition is a process that starts in early childhood. Jelena Vranješević, referring to previous studies, states that children, from an early age, "start to shape their own identity, acquire values and form opinions and preferences related with differences based on gender, ethnicity, race, class, religion, growth impairment or disabilities" (Vranješević, 2019, p. 15). Wrong guidance during this process, as well as disrespect of identity can have far-reaching consequences when it comes to identity development, and vice versa, positive guidance and incentives, as well as the respect of identity in early childhood represent some of the key factors of a versatile identity development. For that reason, in this study, we are going to discuss the importance of the child's right to identity and on the role that literary texts play in the process of the child's identity development and in raising awareness regarding the importance of respecting it, while, at the same time, taking into consideration the uniqueness of the child's personality.

The importance and the role that literary texts have in developing and respecting children's identity is elaborated and analysed in this study. This is a theoretical research that consists of two parts. Special characteristics of the child's growth and development which influence the forming of various layers of identity are analysed in the first part of this study, as well as the legislature which provides special protection to children, given the fact that they belong to a particularly vulnerable category, which also covers the protection of identity and incentives for its development through support from institutions and education system from an early age. In the second part of the study, special characteristics of literary texts written for children which can incentivise conversations about various layers of identity are analysed. A semantic analysis of Ljubivoje Ršumović's poetry for children is conducted for the purpose of identifying such layers. Two poetry collections of this author were analysed in this study (Ršumović, 1979; Ršumović, 2012), and the reason why he was chosen for this study is the fact that Ljubivoje Ršumović has marked "the spirit of an entire literary epoch" in Serbian literature for children (Opačić, 2011, p. 33). The aim of this study is to point out the semantic potential not only of this kind of poetry, but of children's literature in general as an important tool for learning about identity.

Development and Respect of Identity at an Early Age

Self-awareness is an experiential construct that appears in early childhood; "at an early age, as early as when they are 18 months old, children already have a clear idea of their own different and unique identity" (Stojanović, 2016, p. 55). By the age of two, many children start to recognise some of their main characteristics, such as gender, age (they know that they are children, not adults) (Vasta, Haith and Miller, 1997, p. 497). The first form of learning is learning by imitating (mimicking) because, at that point, external perspective dominates. Children form opinion (image) of themselves based on what the others are saying about them, which is why it is very important that those descriptions be positive. Development of self-awareness plays a key role in building relationships with others because "the way they see themselves, children also see others" (Brković, 2011, p. 187). Robert Selman's model of the development of the child's self-awareness (Selman, 1980) suggests that early childhood is a period when a child starts to develop self-awareness.

During this period, the child "differentiates psychological states from behaviour and believes that thoughts can control actions" (Vasta, Haith and Miller, 1997 p. 489). This occurs between the ages of 2 and 7. According to Piaget's theory of cognitive development, this period is characterised by spontaneous interindividual feelings (affection, sympathy and antipathy) and social relationships of submission to adults (Piaget and Inhelder, 1978). Opinions are pre-operationalised because children use representations, due to symbolic and semiotic function. Even self-evaluation is too positive during this period (Butler,

1990, p. 201). Later on, as the child grows, it diminishes and so, the question of the influence on child development leads to important connection of developmental and social psychology, at a conceptual level (Pomerantz and Newman, 2000). The results of some recent studies are encouraging because they suggest that professionals included in the institutional protection of children aged 3 or less are aware that their identity is developed in this period and that it is important to understand and respect differences among children, their families and communities. Nonetheless, there is the need to improve the work in these areas (Dermendzhieva, 2019).

At the age of six, children start to talk about less visible traits of their personality, such as emotions and they base descriptions of themselves on social comparisons to other children. They even start valuing the information obtained in this way. Moreover, "believing that one is competent or capable of handling a particular task, can be highly motivating" (Cole et al., 1999, p. 459). Erroneous upbringing at this age can have serious consequences on further development of personality because "difficulties during one developmental period contribute to specific difficulties in a succeeding period, resulting in increasingly broad areas of dysregulation over time" (Lyons-Ruth and Brumariu, 2021, p. 32). Consequences can be manifested through various forms of asocial behaviour or through lack of self-esteem and self-confidence because, positive sense of identity is crucial for the child's development (Pulido-Tobiassen and Gonzalez-Mena, 1999). Many developmental changes in this period are caused by cognitive, socio-cognitive and socio-contextual factors (Higgins and Parsons, 1983), which is why many studies explore the role that peers, parents, preschool teachers and educators, as well as everyone else within the child's immediate environment play in the process of personality development (see Bridgett et al., 2016; Brown et al., 2009; Cassidy, 1988; Harris, 1995; Hay, 2005; Hoffman, 1989; Kochanska, 2001; Papadopoulos, 2021; Parke and Buriel, 1998; Pomytkina et al., 2021; Stojanović, 2016; Kursch, 2017; Wilkinson and Marrett, 1985).

Apart from the importance of forming a positive image (opinion) of themselves for the development of their identity, children also need to feel safe at an early age, they need to trust and develop positive feelings towards people around them. Such endeavours are also recognized and regulated by law, which is why children, as especially vulnerable category, are provided with special protection in the Republic of Serbia, regulated by legislation on various levels, starting with The Constitution of the Republic of Serbia (Ustav Republike Srbije, 2006), through Family Law (Porodični zakon, 2005), and all the way to the laws which regulate the fundamentals of preschool, primary school and secondary school education system (Zakon o predškolskom vaspitanju i obrazovanju, 2010; Zakon o osnovama sistema obrazovanja i vaspitanja, 2017). This is a form of legal protection also regulated at international level. One of the most important international treaties which regulates children's rights is The United Nations Convention on the Rights of the Child (The Convention on the Rights of the Child was adopted at the 44th UN General Assembly on 20th November, 1989.). Article 8 of the Convention states that States Parties undertake to "respect the right of the child to preserve his or her identity, including nationality, name and family relations as recognized by law without unlawful interference" (Zakon o ratifikaciji Konvencije Ujedinjenih nacija o pravima deteta, 1990). The Committee on the Rights of the Child monitors implementation of the Convention on the Rights of the Child by its State Parties. Based on the reports handed in by the State Parties, the Committee concluded that there is insufficient information regarding the child's rights implemented in early childhood, which is why General Comment no 7 (Opšti komentar br. 7, 2005). Article 4 of the General Comment no 7 defines early childhood as period before the age of 8, whereas Article 5 requires that young children be respected as persons in their own right and recognized as active members of society. In this regard, Martin Woodhead points out that we should not see early childhood as a period for investment opportunities in terms of exploiting human capital, because "the rights of the child are not fully realized if our understanding of children is based on the evaluation of the level that the child reached on his/her way to achieving the maturity, the rationality, the responsibility, the autonomy and the competence of an adult" (Vudhed, 2012. p. 59). On the same note, The Committee on the Rights of the Child recommends that State Parties include human rights education within early childhood education and within early childhood education programmes (see article 33, Opšti komentar br. 7).

At the Convention on the Rights of the Child in the Republic of Serbia, a new concept of The Fundamentals of the Preschool Education System Programme was created – Years of Ascent (Pravilnik o osnovama programa predškolskog vaspitanja i obrazovanja, 2018). It is a concept based on "contemporary theoretical knowledge of childhood, learning and development of children at an early age", which means that the child is seen as "a unique and whole being", "as a person with unique abilities and equal rights to have his/her uniqueness recognized and respected", and preschool is seen as a place of democratic and inclusive practice which "respects gender, cultural, health and any other kind of diversity and develops sensitivity to discrimination (gender, cultural, social, national origin discrimination...), where special attention is paid to the inclusion of children belonging to more vulnerable groups" (see Pravilnik o osnovama

[programa predškolskog vaspitanja i obrazovanja, 2018, p. 2, 6, and 9](#)). Such endeavour requires changes within educational paradigms, which is why the contemporary competences of preschool teachers are based on the values of respecting a democratic and an inclusive approach to preschool education which respects differences, the child's rights, develops social and cultural identity and the sense of belonging through participation within peer community, preschool and local community and promotes democracy, solidarity, activism, creativity, well-being and personal fulfilment of the child ([Pravilnik o Standardima kompetencija za profesiju vaspitača i njegovog profesionalnog razvoja, 2018, p. 46](#)). Therefore, we should work on these values in our daily educational practice. We have seen that they are based on respecting the rights of the child as a citizen, and one of the fundamental rights is, in fact, the right to identity. Jelena Vranješević, referring to [Derman-Spark \(2004\)](#), points out that respecting various aspects of identity makes it possible to view diversity as an opportunity to learn and develop, because in the environment in which diversity is respected "a) every child feels that they belong to the group, b) every child feels that their personality is respected, and finally c) children learn from each other with joy" ([Vranješević, 2019, p. 14](#)). It is the responsibility of the preschool teacher to create such a stimulating environment and to use every opportunity to encourage children to express their personality freely and without fear of ridicule. "It is important to appreciate the distinctive ways in which children express their identity through friendship, play and many forms of social interaction" ([Cooper, 2014, p. 281](#)), and one of the ways to implement this in practice is through the use of literary texts.

The Role and the Importance of Literary Texts in Relation to the Development and Respect of the Child's Identity

The use of literary texts as a language paradigm in relation to the development and respect of the child's identity originates from the fact that literary texts, apart from their aesthetic effect, also have "much broader significance within human experience, primarily as a catalyst for active support of the development and education" ([Petrović, 2011, pp. 157–158](#)). Jovan Ljuštanović points out that contemporary prose and poetry for children are inspired with the idea "of a free, self-aware child, of a child as an active participant, not only within his/her small child's world, but also within family, school, and even society itself" ([Ljuštanović, 2012, pp. 177](#)). Children's authors do not underestimate the child's personality, but rather address children as equals, not from the perspective of what the child will become but from the perspective of the child as a person that he/she is, and, at the same time, through the content of their literary work they reveal "the deepest meaning of life" to the child ([Smiljković, 2019, p. 101](#)). Therefore, it is necessary to make the most of the numerous potentials that children's literature possesses, such as "play, humour, silliness and the miraculous" because this is a form of artistic creation which "bursts with stimulative energy" ([Milinković, 2014, p. 529](#)). Apart from that, "literary texts for children have to be interesting and engaging, to motivate over and over again with their unexpected and dynamic action and to stir up the reader's curiosity by the principal of 'what happens next'" ([Stakić, 2014a, p. 247](#)). Literary works written for children incentivise imagination and creativity because children become engrossed in the created reality and they identify with the characters. This engrossment and this identification play an important role in the identity development process because the development and the strengthening of the identity must be rooted in the child's real life ([Warin, 2011](#)). All this, in fact, creates excellent grounds for preschool teachers/educators to initiate conversations about issues and problems which are related to different aspects of the child's identity.

It is the responsibility of preschool teachers/educators to select literary texts whose topics and motifs will initiate and motivate this interaction for the purpose of awakening children's potential to strengthen their personality and self-esteem. Apart from that, literary texts must match interests and abilities of the child in accordance with his/her age because, "the child's age is a critical criterion whether the literary text will be accepted or not" ([Stakić, 2014a, p. 244](#)). One of the characteristic of children age 5 to 7 is that they show interest for the imaginary and fantastic world of fairy tales. Experiences incentivised by literary texts are "naïve and stimulated by unconditional faith in what is being presented with the artistic world of the literary text" ([Stakić, 2014b, p. 147](#)). Children in this age group also like stories with animals, as well as humorous or silly lyric poems whose lyrical subjects are – children. An important advantage that lyric poems have is that they are short and they hold the child's attention, and at the same time, they transmit messages in a way that the child can understand them. One of the reasons for this may be the fact that poets neither underestimate nor overestimate the personality and the potential of the child, but rather accept the child as he/she is at a given moment of the development process. The perfect illustration of this are the following verses taken from Ljubivoje Ršumović's poem "The Message" ("Poruka"): "You

must observe a child / But don't stand in their way / The sooner you start treating them as a person / The sooner a person they'll become" (Ršumović, 2012, p. 14). Similar literary texts can be a starting point for conversations on various issues and problems related to the development and the respect of the child's identity. This requires great effort, hard work and expertise on the part of preschool teachers/educators due to the fact that it is crucially important to conduct a thorough research of the semantic layers of literary texts written for children for the purpose of finding those whose layers of meaning can incentivise conversations about different layers of identity, while respecting and taking into consideration age criteria.

Therefore, the first and probably the most important thing that a preschool teacher/educator must do is to identify and select literary texts which possess semantic potential as a means of learning about identity. We are going to illustrate this using the example of the right of the child to have a name which is a constituent part of personal identity. Children become aware of their name at an early age, but it is also important that they understand the importance of the very act of giving a name as something that singles out the individuality of what we really are. Ljubivoje Ršumović's poem "In the Field Where Jackdaws Live" (U polju gde čavke čavče) (Ršumović, 2012) is simply perfect for this because its poetic structure contains narrative elements of a story about a little ant who was born amidst millions of yellow ants: "In the field where jackdaws live/ Surrounded with thick grass / A little blue ant was born / Amidst millions of yellow ants" (Ršumović, 2012, p. 99). Children will understand the little ant's request which he made addressing the adults and demanding to be given a name, because the name denotes not only its right to exist, to live, but also a way in which it singles itself out as a person: "Ants have better things to do / You were born blue, so what? / But the little ant decisively replied / EXCUSE ME, BUT I WANT A NAME" (Ršumović, 2012, p. 99). The little ant in the poem also demands that its date of birth be recorded because it wants to celebrate its birthday. Birthdays are also an important topic for children because they represent a very special day when the child was born and the day when he/she is the centre of attention. Visible manifestations of attention and love that the child receives on this occasion – are important because they reinforce the feeling of self-esteem. Furthermore, "early friendships and positive relations with peer groups appear to protect children against later psychological problems" (Hay, 2005, p. 4).

Apart from this poem, many other Ljubivoje Ršumović's poems are excellent for initiating conversations on different layers of identity, such as gender, sense of belonging (to family, social group, nation), origin and the like. We have chosen this author as a perfect example because he is "among children, one of the most popular contemporary poets" (Stakić and Maričić, 2019, p. 478) and because there is literally no child in Serbia who cannot sing or recite verses from some of his poems ("Wolf, Wolf, You Lazybones" ("Vuče, vuče, bubo lenja"), "We Went to Africa" ("Išli smo u Afriku"), "The Bogeyman" ("Babaroga"), "Ten Angry Pirates" ("Deset ljutih gusara"), ("The Mouse Caught the Flu") ("Miš je dobio grip"), "The Stick Has It Easy" ("Lako je prutu") and many others). Apart from all that, literary theorists point out that his literary work "Bukvar, which teaches and nurtures, is an irreplaceable tool for developing humanism, veracity, solidarity, self-confidence, optimism, tolerance and self-criticism" (Petrović, 2019, 326). The results of previous studies of his literary work show that Ljubivoje Ršumović's literary creation makes it possible to focus on "diversity within the domains of gender and on finding ways to overcome gender stereotypes" (Purić and Čutović, 2019, p. 464).

Some of the verses from Ljubivoje Ršumović's collection of poetry are identified in Table 1: Let's Grow (Hajde da rastemo) (Ršumović, 1979) and Speak Your Mind (Što na umu to na drumu) (Ršumović, 2012). Those can be an excellent starting point for preschool teachers/educators to initiate conversations with children about different layers of identity.

Table 1
Semantic potentials of Ljubivoje Ršumović's poetry as motivators for learning about identity

Identity layers	Ljubivoje Ršumović's poetry	
	Poem	Verses
Giving a name	<i>In the Field Where Jackdaws Live</i>	"And they gave him a name / Without feast, without celebration / So the little ant cried again / I want this day to be a matter of (public) record, so write it down" (2012, p. 99).
	<i>Tell the Bird That It's a Bird</i>	"Tell the Bird That It's a Bird / Nightingale / Sparrow / Falcon / Woodpecker / Tell the river that it's a river / Danube / Sava / Tisa / Una" (1979, p. 117).
	<i>Announcement</i>	"I'm as handsome as my uncle / And as smart as my aunt / I wonder who created me like this / That's all they worry about" (2012, p. 31).
Gender	<i>Mom and Dad are Arguing</i>	"She is AS BEAUTIFUL AS HER MOM / But he is AS SMART AS HIS DAD / The voices are raised / And then the argument starts, even the war" (2012, p. 35).
	<i>Let it Rain</i>	"Let it rain, it'd be good for me / So that I can grow up by autumn / So that I can get married / Exclaimed this robust boy / Called Milan" (1979, p. 26).
	<i>Grandma and Grandpa Sitting on a Bench</i>	"Grandma and grandpa are sitting / On a bench in Kalemegdan park / And talking about dates and agreeing that / Dates are pretty silly" (1979, p. 90).
	<i>If Anyone Asks</i>	"If anyone asks / Why I'm on a diet / It's because I love this girl / More than anything in the whole wide world" (2012, p. 24).
	<i>Cows look after their calves</i>	"Cows look after their calves / protect them from anyone who wishes them harm / Goats protect their kids, hens protect their chicks / Everyone protects the ones they love" (1979, p. 77).
	<i>Announcement</i>	"I am my auntie's angel / My granny's pride and joy / My grandpa's colossus / the spitting image of my father" (2012, p. 31).
Family and family ties	<i>Storks don't deliver brothers</i>	"One beautiful day / Mommy came home with a big smile on her face / Straight from the maternity ward / As if it were nothing / And right away said my mother / I'VE BROUGHT YOU A BROTHER" (2012, p. 33).
	<i>Mother</i>	"We asked the doggy and the kitty / All of them said something pretty / Mother, that's love as gentle as a beautiful dove / Mother, that's light in the middle of the night" (2012, p. 40).
Belonging and unity (friendship)	<i>Song about Friendship</i>	"Our kingdom welcomes / Any royalty / Because, there's no crown or throne / More beautiful than friendship" (2012, p. 20).
	<i>Friendship</i>	"Everyone should know / What friendship means / Together, we're more beautiful / Together, we're much stronger" (2012, p. 18).
	<i>What is it</i>	"What is it that's pulling me back / To the place where I was born, to my hometown / To the place where my brothers live / To the land upon which my father walks" (2012, p. 138).
Origin and nationality	<i>Homeland is defended with beauty</i>	"Homeland is defended with rivers / and with fish in the water / And with a tall slender spruce / That grows in freedom" (1979, p. 124);
	<i>Elephant</i>	"His grandad is an elephant / His dad is an elephant / His uncle is an elephant / His cousin is an elephant / And his brother is an elephant / So, what is he then" (1979, p. 74).
Social position	<i>Wolf, Wolf, You Lazybones</i>	"In school he's never seen / He knows nothing about art or sculpture / In a museum, he's never been / He despises culture" (2012, p. 95).
	<i>This is a poem about a king</i>	"This is a poem about a king / Who fell in love with a laundress / At the time of the nights / When they loved until their last fights" (1979, p. 104).

Apart from poetry, as it has already been stated above, many other types of literary texts can initiate conversation about numerous issues related to growth and development, even identity problems which children normally face. In this way, these texts can raise awareness regarding the child's right to identity, which, in itself, represents a very good way of developing and strengthening personality. Moreover, the advantages of this kind of work are visible and are backed up by the fact that educational part of the work is integrated with the development of speech – reading and text analysis at preschool level contribute greatly to the expansion of the child's vocabulary, to morphological and syntax development, and they also incentivise aesthetic potentials in children, their future reading habits and affinity for their mother tongue and literature in general.

Conclusion

The significance of the results obtained through research, regarding early childhood development, has been recognised and the professional opinion of educators and experts who work on educating children about the importance of various types of influence on identity development is accepted and included within legislature which regulates preschool education not only in The Republic of Serbia but also worldwide. It has been acknowledged that the encouragement of self-confidence, self-esteem, talent, optimism and joy of living constitutes important segment of early childhood development, and it is now crucially important to put theoretical endeavours into practice and implement activities directed towards the strengthening of the identity in all aspects of educational activity within preschool institutions. Literary texts represent one way of achieving this because, their semantic potential can be a motivational factor when it comes to learning about identity and can be very important for the child's development and also for raising awareness, from an early age, about the importance of respecting the right to identity of every human being.

The advantages of this kind of work are reflected in the integration of identity development with other areas of educational work at the preschool level, especially with the speech and language development of the child. This is the reason why it is necessary to identify literary texts which, apart from satisfying age and aesthetic quality criteria, also possess the semantic potential as a tool for learning about identity. It is also necessary to provide teachers with support so that they can strengthen methodical competence and then continuously implement such integrative activities. That represents the main educational implication of this study. In conclusion, the strengthening of identity at preschool level influences the quality of life later on because "a sense of self is a resource for coping and managing our social experiences" (Warin, 2011, p. 20) and "early childhood program can foster children's self-esteem and build the foundation for future relationships with others" (Raburu, 2015, p. 95). Therefore, the importance of this topic prompts the need for further research in this area.

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Conflict of interests

The authors declare no conflict of interest

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Modus of Killer Profiling in Nordic Crime Series

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Abstract: Criminal investigators, scientists, mental health experts, and the media have always studied serial killings. Since Jack the Ripper in the late 1800s, and even today, attempts have been made to understand the complex issues surrounding the investigation of serial murders and the motives for these horrific acts. The topics of serial killings are attracting too much attention from the media, academia, and the general public. Nordic crime series make a special contribution to identifying and analyzing many issues related to serial killings including common myths, definitions, typologies, pathology and causality, media role, prosecution issues, organization of investigations, and especially through the affirmation of forensic psychology and criminal profiling. We believe that scientific papers dealing with this topic can be useful in generating an effective response in identifying, investigating, and reaching verdicts, and strengthening the collective ability to understand, respond and act preventively to prevent these violent and serious crimes.

Keywords: killers, crime investigators, crime series, profiling.

Introduction

“There are certain clues at a crime scene which by their very nature do not lend themselves to being collected or examined. How’s one collect love, rage, hatred, fear...? These are things that we’re trained to look for.”

-James Reese-

Smart people have always dealt with indicators of human mental and character traits. Criminals were studied individually, as patients, their physical characteristics were recorded, sensitivity and intelligence, habits, language, customs were studied, which significantly contributed to the perception of an individual case of criminal behavior. In 1841, Hubert Lauvergne published the work “Convicts: Seen from a Physiological, Moral and Intellectual Perspective, Observed in the Toulon Prison” (*Les forçats: Considéré sous le rapport physiologique, morale et intellectuel, obsevés au bagne de Toulon Paperback – December 3, 2002 - French Edition*). Italian criminologist, phrenologist, physician, anthropologist, one of the founders of the anthropological school of criminology, called by many “the father of criminology and / or the father of a born criminal”, created an anthropological theory of the delinquent. He presented it in his famous work “The Criminal Man” (*L’uomo delinquente, 1876*), which would later become a theory of the born criminal. Within the framework of anthropological theory, Lombroso performed a typology of criminals, on ([Lombroso, 1876](#)):

- **Born criminals**, who are the most represented among criminals, with the most pronounced anatomical, physiological and psychological anomalies. In his personality, he reproduces the wild instincts of primitive peoples and wild animals. They are insensitive, impulsive and have no sense of guilt. They are “born” for crime, and their antisocial tendency is an inevitable consequence of a series of hereditary influences that have accumulated over generations. Prison does not cause them suffering, so as soon as they get out of prison, they commit a crime. Psychologically, they are characterized by moral insensitivity, inattention and incorrigibility.

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- **Mentally ill criminals** have all the characteristics of born criminals, and they also suffer from mental illness. They are divided into moral lunatics (their moral senses are stunted and they commit crimes under the influence of impulses), mentally ill culprits (who commit crimes under the influence of the process of mental illness) and matoids (semi-lunatics who represent the mildest degree of the born culprit). They are hostile, vain and selfish.
- **Criminals out of habit** are people who have innate dispositions for committing crimes, are weakly resistant to occasions, are morally unbalanced. These characteristics, in the presence of favorable conditions, lead them to commit criminal acts, which later becomes a habit. These criminals mostly commit property crimes and often appear as returnees. They commit their first, most often property crime, in their youth due to moral weakness, and not exclusively innate traits. Prison, alcoholism, lack of social assistance when released, make them return to crime.
- **Criminals out of passion** are oversensitive people with unbalanced feelings, sanguine by temperament, nervous, get excited quickly and under the influence of excitement that can turn into affects, commit crimes. They usually commit crimes due to the strong pressure of some passions - love, hate, ambition, anger, feelings of honor; without prior preparation, suddenly, on the fly, carried away by the power of passion. They can be extremely kind and tend to feel extreme guilt after committing a crime. In essence, they have a beautiful and attractive physiognomy, which is anti-criminal.
- **Random criminals** do not have innate or acquired inclinations to commit crimes, but commit crimes under the influence of external reasons. They can be divided into three categories: pseudo-criminals (committing acts involuntarily, perversely (almost always motivated by necessity) and in self-defense; criminoloids (committing crimes due to circumstances) and professional criminals (committing certain crimes as a specific profession / occupation).

Lombroso's theory enjoyed great popularity at a time when it appeared in both scientific and secular public opinion. The research encouraged the establishment of an important discipline for criminology, forensic psychology, and thus drew the attention of science and practice to the perpetrator as a subject to influences, which is why it is necessary to study him in order to determine the causes that influenced his formation and orientation in direction of criminal activity.

Today, experts are trying to establish a pattern for detecting serial killers, following some early warning signs that need to be addressed. Growing up in dysfunctional families and having a difficult childhood are perhaps the prevailing similarities between convicted serial killers. Although there is still no simple thread of coincidence, it is surprising that serial killers mostly have a higher IQ, which is a significant problem in solving real-life crimes, much more than in, say, the specific Nordic crime series we are watching.

Why do we list Nordic crime series here? These are series with a characteristic original atmosphere that have gained popularity around the world, putting in the background the leading, typical American detective series. Unlike other crime series, which include stereotypical stories "good guys against bad guys", where fights and car chases dominate, in Scandinavian crime series we can follow dramatic investigations, intriguing social topics, social and emotional consequences of brutal crimes, as well as the impact politics and the media to justice. Above all, they affirm forensic psychology, which, among other things, deals with the motivation to commit criminal acts, and the psychological characteristics of the perpetrator and the victim.

Early signs of detection of the killer

It has been researched for decades what turns a man into a murderer. Research goes so far as to study the brains of the cruelest psychopaths and murderers with the help of magnetic resonance imaging (MRI). Scientists are trying to determine how their brain differs from the brain of a normal person. However, most eminent scientists are of the opinion that the decisive factor influencing a person to become a murderer is, in fact, psychological trauma with a background of childhood violence.

Statistics show that 20 percent of prisoners are psychopaths, who commit an average of four serious crimes by the age of 40, and 80 percent of prisoners become criminals again three years after their release. It is believed that the share of psychopaths in the human population is up to one percent, but the number of violent killers among them is much higher ([Sputnik Srbija, 2021](#)). There is no doubt that serial killers often have good mental abilities, but they are completely deprived of emotional connections with people. They often suffer from narcissistic personality disorder, they manipulate other people very

well. They are prone to sadism and kill because they like it, and after that they are deprived of feelings of guilt and remorse.

Enough serial killers have a history of arson, preteen bedwetting, and torturing small animals that the traits are considered signs that someone might be a serial killer. This trio, known as the Macdonald triad, is not without controversy. Some argue these traits are more likely an indicator of neglect or abuse than of future serial killing. At the same time, abuse and neglect are in and of themselves said to be indicators of serial killing. Many of them are so pleased with their crimes that they can't help but tell others. Some even get caught because they told the wrong person! And then, when in jail, some killers are known to take credit for crimes that weren't even their own just to heighten their reputation (Kharakh 2018). Some of the common features relate to:

- Emotional manipulation - many serial killers are superficially charming, trying to show enough understanding for human emotions in order to get closer to potential victims.

- Fantasies - they grow up dreaming of killing.

- Asociality - they show a lack of care for others so serious that it is pathological.

- Poor impulse control - many remember how serial killers had powerful outbursts of rage in their lives.

- History of abuse - not everyone has survived the abuse of a serial killer, but many serial killers have survived the abuse.

- Voyeurism - It makes sense that serial killers spent a lot of time watching others from afar, probably fantasizing about murders.

The criminal profiling process is defined by the FBI as a technique used to identify the perpetrator of a violent crime by identifying the personality and behavioral characteristics of the offender based upon an analysis of the crime committed. The process generally involves (1) evaluation of the criminal act itself, (2) comprehensive evaluation of the specifics of the crime scene(s), (3) comprehensive analysis of the victim, and (4) evaluation of preliminary police reports. Additional steps are (5) evaluation of the medical examiner's autopsy protocol, (6) development of a profile with critical offender characteristics, and (7) investigative suggestions predicated on construction of the profile. Criminal profiling is particularly useful in hostage negotiation, and identification of writers of threatening letters, rapists, arsonists, and sexual murderers. The FBI's profiling program has grown very rapidly since the 1970's and now consists of one program manager and seven criminal profilers and crime analysts. They are assisted by criminal profile coordinators located at the FBI's 59 field offices. Criminal profilers at the FBI may also provide interrogation and interview techniques, establish probable cause for search warrants, and provide testimony as expert witnesses. Criminal profiling is not a substitute for skilled detective work; but it is a tool that the detective can use to help solve a violent crime (Douglas and Burgess 1986: 9-13). Probably one of the most deserving for creating the first systematic profile of criminals in a criminal investigation is Dr. James A. Brussel. Therefore, many define him as a pioneer in the use of criminal profiling. Brussel managed to document his significant work in 1968 in his book "Casebook of a Crime Psychiatrist". This book intrigued FBI agent Howard Teten, who was dedicated to holding criminology courses at the time. The name of the course was "Applied Criminology", although several instructors later started calling it "Psychcrim". The course was based on a concept he had originally developed while working in the police as a crime investigation specialist. Teten has tested the approach using solved cases in the last seven years, paying attention to the mental structure of the perpetrators. He crossed these data with the opinion of several reputable psychiatrists, considering the characteristics of different areas of mental problems. He later expanded the course to include unsolved cases as an example. All this resulted in the development of a perpetrator profile, the opening of an expanded FBI academy in 1972, the formation of new units to provide the necessary oversight and organization. One of the units formed was the Behavior Science Unit.

Although the series "Mindhunter", a cult series that completely delighted both the audience and critics, never explicitly emphasizes the historical premise on which the entire project was based, it is quite clear that it is the formation of the so-called Behavior Science Unit within the Federal Bureau of Investigation (FBI). We would say that in the background of its establishment, there are interventions in relation to the expansion of serious crimes, and especially the high rate of sexual crimes and murders in the seventies.

The series "Mindhunter" by David Fincher is based on the book "Mindhunter: Inside the FBI's Elite Serial Crime Unit" by John E. Douglas. He, along with Robert Resler, working as an FBI agent introduced a revolutionary approach to solving crimes, creating a huge database based on the psychological profiling of psychopaths and sociopaths through direct interviews with criminals they visited in prisons across the United States. They researched the minds of criminals, looking for motivation and logic, the approach

to preparing crimes, how the bodies of victims were dealt with and the like. With this approach, a new approach began, which enabled a higher success rate of the FBI in catching serial killers, but also the prevention of new crimes. By the way, Agent Robert Resler coined the term “serial killer” and wrote several books in the field of criminology in which he shared his experience working within the Behavioral Science Unit.

How do Nordic crime series guide us in crime analysis?

Nordic noir is a dark subset of the crime fiction genre. It is usually defined by some or all of the following: Brutal crimes, often in quiet and/or safe communities; A bleak setting, whether on city streets or a remote fjord; A tortured protagonist, typically a detective with a mysterious or painful past; A strong plot, with multiple complex threads and a few twists. And of course, the setting is always somewhere in Scandinavia or the Nordic region. While they don't necessarily have to be, most Nordic noir authors are also from the region. Stieg Larsson's international bestseller *The Girl with The Dragon Tattoo* and the other books of the Millennium series drew many people into the world of Scandinavian crime fiction, and the subsequent movies just added fuel to the fire (Nikel, 2021). The protagonists / criminal investigators in these dramatic works, which we cite, are not heroes with superhuman abilities, but obese, somewhat messy guys with confusing personal and family situations, which is why they often get drunk and take medication in stressful circumstances. They rely on instincts and experience, and often use unconventional and even illegal means to solve the case. With such a character, they are suitable so that most viewers can identify with them.

The special charm of these realistic series, as stated, is the affirmation of forensic psychology. In them, we look at profiles as they develop typologies, connect the crime scene with the characteristics of the perpetrators, and develop information that is useful in investigating violent crimes. In the given context, for reasons of expediency, we have summarized several series specific in the mode of operandi, the background of the crime and the work of the investigation teams through a series of systematic phases.

Swedish-Danish crime series **The Bridge** (2011) is an extremely exciting thriller in which criminal investigators are desperately trying to find a murderer who crosses all boundaries of crime to convey his message. The killer turned out to be a former Danish police officer who was believed to have allegedly killed himself. In an ingeniously devised plan for revenge for the deaths of his wife and son, he appears under the pseudonym “Terrorist of Truth”. He uses a British journalist from a tabloid to communicate with the world as a mediator in communication. It turns out that the murder on the bridge was just the beginning and that the purpose of this cruel act was to draw attention to unpleasant truths and problems that society decided to turn a blind eye to; the first problem is that **“we are not all equal before the law.”** Through several poisoned homeless people in Copenhagen, the perpetrator wants to point out the problem of a large increase in the number of people left without anything, for whom society has no ear. The outcome is uncertain. One homeless man has been kidnapped, and only four rental property owners can save him if they pay a large sum of money. The question arises: **What is the cost of human life?** Saving the life of a kidnapped homeless man turns into a race against time and depends entirely on whether property owners are willing to pay the amount the killer demands. Following specific requests, the killer trained a group of mentally ill people for a long time. He assured them that they should commit violent crimes in Malmö and Copenhagen at the same time. **The third truth that the killer reveals is the reduction of funds for the care of the mentally ill; caring for the mentally ill was reduced to “patting on the back and a handful of pills.”** In Copenhagen, passions erupted after several police officers who beat an immigrant to death were released in court. One of the accused police officers was abducted from his home. The brother of the murdered immigrant finds him tied up in his basement. Will he forgive or take revenge? **This time, the killer draws attention to the fourth truth: the failure of integration policy. The fifth and final truth that the killer reveals is the insensitivity of society to the exploitation of children as labor. Every day, millions of children are exploited as cheap labor.** We don't care because it's not about our children. But when the bus full of school children disappears, we all suddenly care. In order to save the lives of children, the killer demands that the citizens set fire to the buildings of five large companies that indirectly earn money from the exploitation of children's labor.

While all the pieces of the intricate puzzle are gradually falling into place - according to the discovered clues and evidence, the police very likely found the killer. It is noticed that the killer carefully elaborated and planned his crimes down to the smallest detail. As can be seen, he succeeded in his goal: he pointed out social problems to the public and opened everyone's eyes...

In season 4 (2018), criminal investigators discover that the victims were killed by one of the

methods of executing prisoners sentenced to death. Victims are chosen not because of their actions, but because of something their loved ones did. As more and more people are killed, it is understood that there is a common connection between the victims and people connected to the gangster and the police informant who reported when and where his gang would raid another gang, but the prosecutor refused to deal with the report. The raid led to bloodshed and numerous deaths, resulting in the execution of a police informant, a fact inadvertently revealed by a journalist whose brother was one of the victims. The involvement of individuals in this case makes their loved ones potential victims of future murders because they are believed to have betrayed a police informant ...

Background: In both cases, the killers were driven by a strong motive for revenge, which was deliberately planned. Although blood revenge is a rare occurrence nowadays, in everyday life people often have the urge to take revenge on someone. Revenge or retaliation is the conscious doing of harm to another individual or group that occurs in response to an harmful act - actual or perceived - for which that same individual or group is held responsible. In this series, we follow the killers whose revenge stems from feelings of hatred. That is why the hater thinks that the other is so evil and harmful, that he did not deserve to live, that is, that if he is alive, he must suffer because of his evil. Although hatred is the main reason for murders, most of those who hate and revenge themselves by trying to make others suffer. As revenge is associated with various destructive behaviors aimed at suffering or destroying others, killers exhibit various destructive and psychopathological symptoms, lack of ability to: empathy, lead a social life, ethics, morals, decision making, control of impulsivity and aggression... The murderers in this series are motivated by their own understanding of justice, ie the feeling of anger and sadness caused by the part they are trying to avenge, which they believe will disappear if a balance is established, ie the perpetrator is punished in the same or worse way. The expression "eye for an eye, tooth for a tooth" is often identified with this act. After all, revenge is believed to be as old as humanity. Let us also mention some literary works in which revenge appears as a motif: Titus Andronicus - William Shakespeare; Hamlet - William Shakespeare; Othello - William Shakespeare; Count of Monte Cristo - Alexander Dima Father...

Through the background of these crimes, it can be realized that "alienation of man from man", in the end, is one of the leading reasons why people commit various crimes. Some people simply do not have the ability to restrain themselves from doing evil. It often happens that the seemingly ordinary, peaceful people we see in our midst every day commit horrific crimes. Why is this happening? Why do people do evil and hurt others? In fact, by alienating themselves from each other, people have distanced themselves from the very essence of their existence. That is why eminent philosophers and sociologists are inclined to say that modern human alienation is not only inhumane, but also destructive (Bjelajac, 2014a). As a product of this virulence, sadists and psychopaths commit various atrocities, exceeding the limits of understanding a "normal" human being.

The Killing (2011) is a cult Danish crime series set in Copenhagen and revolves around a crime investigator. The series is known for plot twists, seasonal stories, dark tones and for giving equal emphasis to stories about the family of the murdered victim and the effect in political circles with a police investigation. Season 1 is particularly notable, in which the brutal murder of a young girl triggers an extensive police investigation, which will ultimately result in the discovery of the killer from the immediate environment of the victim and her family.

Background: Many bullies do not look like abusers. The worst abusers in the rest of the world usually look like super guys. The worst bullies are those who, when you hear someone say, "This is an abuser," you would usually say, "No, not to mention, he's a good guy." The killer, who developed a strong sense of pathological jealousy, lived in the victim's environment. We have seen how the jealousy of the perpetrator resulted in some other low motivation, which consisted of hatred, envy, malice, malice - in the simple reconciliation of the perpetrator with the fact that his love was not returned. Pathological jealousy is unusual - abnormal. It has no foundation in real life. It is about crazy jealousy because there is a tendency to appropriate and possess another human being in a forced way. The killer lives in an illusion, so when he was confronted with the fact that something was not as he thought it was, he simply "cracked". in a very striking way it is shown how femicide, as an extreme form of violence, developed. The killer controls and stalks the victim and learns that the victim is moving and starting a life together with a "Muslim". It was a kind of "trigger", when he realizes rejection, unrequited love, feelings of emptiness, despair, anxiety, anger, hopelessness. Hurt pride or hurt vanity is usually the main motive for "crimes of passion", and emotional disorders or affective disorders appear as a product of a long-term psychopathological process. The problem with understanding passion-based murder is that these acts are not based on common sense but on a deviant pseudo-logic. That is why the largest number of psychopaths is registered among sexual serial killers. They are also fully aware of what they are doing and clearly see the reality. Some of them act impulsively when the opportunity arises, while others plan crimes, follow the victims,

skillfully hide clues. The factor of deficiency of the complex of personal structures, inhibiting aggressive and sexual urges, determines the peculiarity of the motivational sphere, associated with violations of socially determined ways of fulfilling needs. Realization of uncontrolled sexual and aggressive arousals is manifested in mechanisms related to the pursuit of "direct satisfaction of sexual needs" and to "redirection of aggression", as well as to increase the influence of situational factors on the initiation, regulation and control of criminal behavior. The offender uses the existing situation (Logunova and Dvoryanichkov, 2019). In the environment, they look like normal members of the community, sometimes they have a family, children. In practice it is the most difficult to establish representatives of this type through traditional operational-search and investigative measures (Dvoryanichkov and Zhuravleva, 2020). As an example of such a person, we can mention Andrei Chikatilo, one of the most cruel serial killers in the world.

Modus (2015) is a popular Swedish psychological crime series based on the success of the series "The Killing" and "The Bridge". It is an exciting modern story that argues about hatred, intolerance, gay marriage, adoption of children by same-sex couples, gay prostitution, (non) acceptance of homosexuals by their families, including state institutions, religion, human rights and the very nature of love. As the number of corpses grows, investigators realize that these killings are related despite the fact that there is no obvious connection between the victims and the method of killing. Common to these crimes is that all the victims are lesbian and gay men.

Background: The killer with tattooed angel wings covering his entire back is associated with the Christian religious cult of America and their strange way of dealing with those who, according to their understanding, were rejected by God. His passion is abused by others, because behind everything there are actually some much less divine, and more material motives. He lives in a camper deep in the woods, is lonely and seems inconspicuous. Through video conversations with the American pastor, he received guidance and advice. He has the characteristics of psychopaths: selfishness, heartlessness, cruelty, and lack of empathy. He grew up in a frustrating cultist environment, from where he draws psychological traumas and predispositions for aggression. The killer and his mentor from the cult do not want to accept the fact that differences between people are necessary and good, but recognize them as a danger. The hatred that emanates from this character, as opposed to love, not only despises the human being who belongs to the LGBT population, but also wants to harm, injure and deprive him of life.

The promulgation that the action of this series brings us is, among other things, the abuse of freedom of consciousness, which is undoubtedly an inalienable element of a democratic society. Thus we see how totalitarian and destructive sects, inadmissibly and illegally, engage in indoctrination, ie the process of forcible implantation of ideas, attitudes, cognitive strategies or professional methodologies, using complex psychological manipulations for different degrees of initiation to become members. At the same time, they usually advocate three levels of truth: one for external use, one for internal use and the third "hidden" which camouflages the true goals of a group of fanatics, psychopaths and sociopaths and their seduced followers. Totalitarian sects, or destructive cults, nowadays greatly violate the rights of their members and inflict great mental and physical suffering by using certain methods, which are called "consciousness control". It is actually a systematic use of modern psychological processes which are aimed at blocking and neutralizing the human will and channeling control of thoughts, feelings and behavior (Bjelajac, 2017a). Destructive cults, not only violate the civil rights of those persons who try and succeed in conversion in a more disgusting way, but they are becoming more and more pronounced latent carriers of endangering security in society.

Darkness: Those Who Kill is an interesting Danish crime series, which follows a moody crime investigator and a profiler who, after an initial reservation, form a good team together. In the search for the missing girl, along with the occasional loss of hope that she will ever be found, they do not give up, but turn to the thought that she is alive and that they can save her. Left without a trace, the detective begins to search old files that reveal another case of missing persons from the same suburb. Namely, a 17-year-old named Natasha disappeared there 10 years ago. When her remains are found at the bottom of a calm lake, the question arises: Can the cases be connected? While the police are investigating, we can witness scenes from the perspective of a criminal. His behavior is becoming more and more erratic, he has something he wants from his victims. While the patterns and meanings in the killer's behavior are matched, the character of the suspect slowly emerges...

Background: The identity revealed to viewers is an antisocial person with a record of assault, rape and imprisonment. His unarticulated anger is a product of childhood trauma. He was born into a dysfunctional family. As a boy, he was locked in the basement by his mother, exhausted by hunger and thirst. He was permanently exposed to psychological pressure and aggression. He locks young girls in the basement, deprives them of their liberty, rapes them and psychophysically abuses them. He is especially obsessed with Natasha, keeps her yellow dress and puts it on the next victim. That obsession is actually

the answer to why he kidnaps young blonde girls. The basement belongs to his partner in crime, who leads the seemingly inconspicuous life of a car rental officer. She has a strange, perhaps even sick, attachment to the killer. Behind everything is severe psychopathology, incest in the family environment, rejection by loved ones and life at home outside the family environment. These two characters actually reproduce their own lives in their own way. Namely, it is known that children interpret traumatic situations with scarce resources that they currently have at their disposal and based on them create patterns (mostly unhealthy ones) for functioning in the world: how to treat the opposite sex, how to play different social roles, (in) appropriate ways of expressing feelings, how to get what they want, etc. One example of such a pattern that we often see is the repeated pattern of behavior of children of bullies and sexual predators. These patterns are strongly embedded in the child's mind and change, although possible, is quite difficult.

In dysfunctional families, the elementary patterns of civilized interpersonal communication are also disturbed, with the exclusion of emotional connections and mutual attachment. Confusion and disorganization reign in such families, and the basic value systems are inconsistent and lose their significance. Mutual conflicts are so pronounced that they become chronic forms with which one lives and functions in a specific pathological balance (Bjelajac, 2017b). From such determinations of the family, it logically follows that a healthy and functional family prevents the emergence of preconditions that lead individual members to deviant or, in the last resort, risky behavior.

The Valhalla Murders, is a series that critics call a hidden gem in Icelandic crime series. The series follows two detectives (who also have personal traumas) while following the gruesome series of murders in which older men are abused and butchered in a horrible way. The deeper you dig, the more obvious it becomes that the murder case is related to things that have happened in the past. As a link emerges to an old case of child abuse from the early 1980s, they find new evidence leading them to continued child abuse at Valhalla, a state institution for troubled boys. The wards aged seven to fourteen were beaten, raped and branded by staff members who managed to silence everyone. Unfortunately, the perpetrators were members of the upper classes, a high profile of Icelandic society. The series is inspired by a true story from the late 1940s, about a state institution for troubled boys, in a remote place in Iceland, where children between the ages of 7-14 were horribly beaten and abused by staff members. This is a story about the sins of our past and how we can never escape from them.

Background: Pedophilia, alternatively referred to as a pedophile disorder, is a psychosexual defect that mainly affects adults in a way that they are obsessed with sexual fantasies or attempts to have sex with children of the same or opposite sex. It is a very complex disorder, which requires a sociological, criminological, and especially psychopathological approach that would systematically investigate the symptoms, nature and factors (hereditary, organic and social) of pathological conditions and processes in the mental life of these individuals (Bjelajac, 2020). Raising awareness of the hidden horrors of state homes was important for the series, as was exploring how the past can "revive" and persist in the future. On the one hand, there are pedophiles, people who achieve sexual arousal through physical and / or sexual contact with pre-adolescent children and abuse them in order to satisfy lust and sexual urges. These are deviant, socially immature and irresponsible people who do not control their urge, despite being respected members of the community and members of respectable professions behind which they hide. On the other hand, traumatized victims of pedophiles are shown who have a hard time deciding to talk about their horrors. Their testimonies give a special note to this series.

The humiliation and pain inflicted by another human being creates an intense feeling of fear and distrust of others. This contributes to the process of alienation, powerlessness and isolation, and withdrawal from social relations. A violent crime so physically and mentally injures the victim that he becomes alienated from his own emotions and thoughts. This numbness increases the confusion and leads to the loss of the victim's orientation. In fact, the victim surrenders more and more and loses himself, because after physical damage and bodily injuries due to rape, the child can suffer multiple psychological consequences (Bjelajac, 2014b). What is imprinted as a mark on the child's psyche is the impossibility of suppressing the memory of what happened and avoiding talking about it. A constant state of excitement and tension often accompanies the victims of this crime in various ways, throughout their lives.

Finally, the series raises a number of questions, which come down to one thing: How to protect children? In principle, there are two fronts on which children should be protected. The first is protection against classical, contact pedophilia, that is, protection of children from physical contact with a predator. Although this type of danger to the child is greater, it is easier to defend against it. Today, protection from sexual predators on the web and on the Internet is a far greater challenge (Bjelajac and Filipović, 2020). The Internet now provides pedophiles with unhindered and carefree monitoring of children, involvement in their activities, play and entertainment. At the same time, it provides a way out, ie the possibility of escaping into anonymity whenever there is a danger of disclosure.

Of course, with the subject series, the catalog of Nordic crime achievements is not exhausted. There are many interesting films from that region, we will mention some: Case, Karppi, Wallander, Bordertown, Bullets, Caliphate, The Chestnut Man, Wisting, Quicksand, The Trapped, Borderliner, Fallet, Equinox,...

Discussion

According to the Global Homicide Study by the [United Nations Office on Drugs and Crime \(2019\)](#), 464,000 people estimated to have been victims of intentional homicide in 2017; an average global homicide rate of 6.1 victims per 100,000 population was estimated in 2017; about 90 percent of all homicides recorded worldwide were committed by male perpetrators; men make up almost 80 percent of all homicide victims recorded worldwide. These startling data warn that there are more and more criminals, and less and less preventive solutions and answers to the question, what is it that drives them? What is certain is that this phenomenon cannot be described by a single factor. It is not clear what is the cause and what is the consequence - whether brain development disorders lead to antisocial behavior or whether social and family factors negatively affect the formation of parts of the brain. Further research will certainly help to identify individuals who have a predisposition to become serial killers, as well as to prevent it in time. So prevention is the answer to be given before a crime happens. Film works (not only those presented here), after all, as well as literary works on similar topics, are of educational and preventive character. They can draw attention to the indicators of early detection of killers, the safety culture of people / potential victims, the work of community policing, and the very important issue of profiling in criminal investigations, to which we rightly pay attention in this paper.

The issue of profiling in criminal investigations is quite complex and not easy to define, which is why it contains a lot of ambiguities but also underestimations. It is not enough to say that in addition to the lie detector, there is also a profiler that can distinguish a lie from the truth. Describing, analyzing and organizing the answer to this question requires a certain amount of effort. Profilers are individuals / experts who are able to construct the psychological profile of the perpetrator but also the victim. They strive to be close and / or identical to their characteristics in real terms. In fact, one should look at the above-mentioned Mindhunter crime series, in order to see how much effort and skills are needed to establish the practice of criminal profiling; what it was like to submerge himself mentally in the world of serial killers to the point of 'becoming' both perpetrator and victim; and individual case histories including those of Jeffrey Dahmer, Charles Manson, Ted Bundy and the Atlanta child murders. Profilers are a benefit to the law-enforcement agencies they work for. The characteristics that a profiler gets from the evidence and crime scene with very specific evidence will help apprehend the offender quicker. The file will also aid the investigators when the serial killer is caught during the interrogation process ([Polen, 2015](#)). Having in mind the above, modern criminal investigation units must have individuals trained in criminal disciplines: tactics, technique, methodology and operations. It is necessary for them to be acquainted with the principles and techniques of criminal psychology as well as their application in various security spheres. In addition, the prerequisite is that they possess pronounced moral, intellectual and intuitive abilities.

Conclusion

Beasts lurk and plunder their prey solely because they are hungry and because the instinct for survival has "worked" in them. Beastly people are hunters who seek the "taste" of human blood and suffering for sheer pleasure. These are people who live among us, seemingly respectable members of the community, fathers, husbands, who perform daily activities. The Big Book of Serial Killers: 150 Serial Killer Files of the World's Worst Murderers ([Rosewood and Lo, 2017](#)) is the ideal reference book. Included are the most famous true crime serial killers, like Jeffrey Dahmer, John Wayne Gacy, and Richard Ramirez, and not to mention the women who kill, such as Aileen Wuornos and Martha Rendell. There are also lesser known serial killers, covering many countries around the world, so the range is broad. The Big Book of Serial Killers is a compendium of information on the most heinous killers in the world with plenty of information.

We would say that the study of serial killers is still in the initial phase, but the facts are gathering quickly. The authors of numerous studies agree that certain factors probably play a role in the formation of criminals, but only in combination with social and biological factors. Through years of profiling serial killers, experts have begun to identify key traits that many have in common. Some of them are: smooth and helpful in conversation, but also insincere; egocentric and grandiose; lack of remorse or guilt; lack of empathy; fraudulent and manipulative behavior; shallow emotions; impulsive; poor behavioral controls;

the need for excitement; lack of responsibility; behavioral problems in puberty and adolescence; antisocial behavior in adulthood, etc...

Profiling begins on a solid scientific basis, but during this process intuition and imagination begin to prevail. An experienced criminal investigator thinks about the perpetrator of a crime permanently, and when he gathers all the facts about him, he selects them in his mind in different ways. After that, he begins to imagine a person, sees him more and more clearly and forms an image of him, making reasonable predictions about how that person will react in certain specific situations (See: Bordertown series). Such an approach has been credibly presented through the aforementioned Nordic crime series, which have been praised by audiences and critics. The reasons for this popularity can be found in the specific form of narration and aesthetics of the series. Viewers around the world emphasize the importance of authenticity, the main characters and the narration that gives the characters time and space to develop in the background of the presentation of real topics and concerns.

Finally, it would be utterly inappropriate not to mention some important profilers: Roy Hazelwood, who profiled sexual predators; Ernst Gennat, a German criminologist, who developed an early profiling scheme for the Berlin police; Walter Charles Langer, who predicted Hitler's behavior and eventual suicide; Howard Teten, who worked on the assassination case of Martin Luther King Jr.; and John E. Douglas, who worked on the wave of child murders in Atlanta in the 1980s.

Conflict of interests

The authors declare no conflict of interest.

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Case Study

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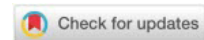
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Encouraging the Motivation of Students in Primary School - A Case Study

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Abstract: The aim of the research is to examine the current practice of encouraging motivation for learning in the teaching process in the elementary school "Dr Boško Vrebalov" in Melenci from the perspective of teachers and students. The sample of students consisted of 22 teachers and 159 students. Two instruments, constructed in the form of a five-point Likert-type scale, were used in the research: the Instrument for Teachers and the Instrument for Students. The applied instruments collected data on the prevalence of procedures for stimulating students' motivation to learn from the perspective of teachers and students. Also, the opinion of students on the motivational role of the observed procedures of the teaching process on the motivation to learn was examined. Motivational procedures included three segments: preparation and planning of the teaching process, activities of teachers during the teaching process and the use of information and communication technology (ICT) in teaching. The results presented in this paper showed that all the observed procedures during the planning of teaching and learning, as well as the procedures related to the application of ICT, are very common in the teaching process. With minor deviations, there is agreement between teachers and students on their representation. The lowest prevalence and the greatest disagreement in the opinion of teachers and students concern the application of ICT in teaching. Teachers notice that students use ICT to a lesser extent in teaching in relation to students' opinions. The obtained results showed that students assigned a high motivational role to all examined procedures, which suggests that students should be more stimulated to use computers in teaching and extracurricular activities for educational purposes.

Keywords: motivation for learning, preparation of the teaching process, effective teaching, application of ICT in teaching.

Introduction

Teachers are key actors shaping the learning environment and one of their main tasks is to provide a learning environment that will increase and maintain student motivation and engage students in learning (Eccles and Roeser, 2011). Research has shown that teachers have a critical role in creating a positive learning environment that increases students' interest and motivation for learning (Tambunan, 2018). By planning and making decisions in the teaching process, the teacher influences students' motivation to learn, but also vice versa, students' reactions to teaching cause changes in teachers' behavior and the application of strategies that teachers believe will have better effects on learning and motivation (Schunk, Pintrich and Meece, 2013). Research has shown that teachers, by creating a learning environment, form and change the motivational orientations of students. Motivation permeates all aspects of teaching and learning (Schunk, Pintrich and Meece, 2013) and represents an important factor of success in learning (Boiché and Stephan, 2014). One of the goals of teachers is to find the most effective strategies to motivate students to learn and improve learning effects (Morgan, 2006; Radulović, 2021; Županec et al., 2018). In this paper, the theoretical framework is a model of motivation, which aims to encourage students to learn and master the provided material, while respecting various factors of the school environment. This model is called the TARGET (Ames, 1992) and includes six elements of the teaching process. TARGET is an acronym that contains six key terms: Task - planning teaching activities; Authority - procedures to support student autonomy, Recognition - procedures of praise and reward, Grouping - forms of group interaction in the teaching process, Evaluation - evaluation procedures and Time - time limits of classes.

1. Planning of teaching (Task) refers to the process of designing teaching activities and tasks (Epstein, 1983) with the aim of increasing student participation in the teaching process, the quality of

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their engagement and developing their interests. When creating activities, teachers should choose those activities that are interesting to students, that are diverse and represent personal challenges for students. Students need to understand the reasons why they participate in certain activities in class (Brophy, 2010).

2. Authority support procedures (Authority) provide opportunities for students to achieve leadership roles, develop a sense of personal control and independence in the learning process (Ames, 1992). Motivational strategies should encourage active student participation and a sense of independence in the learning process. Teachers who support student autonomy promote the importance of school to students, provide more choices for students, ask what they want to do, and praise them as they progress (Reeve, 2006).

3. Recognition procedures refer to the formal and informal use of rewards, incentives, and praise in the teaching process (Epstein, 1983). The type of rewards, the reasons for rewarding and the distribution of rewards have a significant impact on the development of students' interest, self-esteem and learning satisfaction. Brophy (2010) points out that students should be commended for a wide range of achievements, and the highest recognition should take the form of appreciation of effort and progress.

4. Forms of group interaction in the teaching process (Grouping) are based on the ability of students to work effectively with others on a common task (Ames, 1992). The goal is to establish an environment in which individual differences are accepted and students develop a sense of belonging to a group.

5. Evaluation procedures include methods used to assess and monitor the learning process (Epstein, 1983). Evaluation is one of the most important elements of the teaching process. In schools, normative evaluation is a ubiquitous phenomenon and children conclude that only those activities that are assessed are important, which can result in a decrease in students' motivation to learn (Covington and Beery, 1976).

6. Time limits of classes (Time) refers to the time organization of the teaching process and the time provided for the completion of teaching activities and tasks (Epstein, 1983). This dimension is closely related to the design and structure of teaching activities. The time provided for the completion of the activity must be adjusted to the interests and abilities of the students.

Numerous studies within school-based education contexts have shown associations procedures included in the TARGET framework with student behavioral, cognitive, and affective outcomes (Braithwaite, Spray and Warburton, 2011). Manipulation of the procedures covered by this model leads to the creation of an optimal motivational climate that has lasting effects on learning (Digelidis et al., 2003). The results of foreign research (Almolda-Tomás et al., 2014; Braithwaite, Spray and Warburton, 2011) and reasearch conducted in Serbia (Bojović, 2017) that find theoretical foundation in the TARGET model show that there is a strong correlation between the prevalence of different characteristics of the teaching process and their impact on student motivation to learn.

The purpose of the research study

What procedures do teachers apply in current practice? What motivational role do students assign to teaching procedures? These are issues that we consider very important for student learning motivation and achievement. No matter what subject is taught, the teacher is a powerful factor whose adequate motivation strategies increase student motivation to learn (Bernaus and Gardner, 2008; Moskovsky et al., 2013; Papi and Abdollahzadeh, 2012) and can strongly influence student achievement (Drakulić, 2019). Thus, the teacher has a very important role "as a motivator to increase students' interest and motivation to achieve" (Tambunan, 2018, p.148). However, previous research has tended to focus on teacher perspectives. To fill the gap in the literature, the present research focuses on both teacher and student perceptions of different motivational procedures that teachers use. Thus, we formulated the following research questions: 1. Do teachers and students similarly perceive the representation of teaching procedures? 2. How much do the different teaching procedures motivate students to learn?

Materials and Methods

The aim of the research is to examine the current practice of encouraging motivation for learning in the teaching process in the elementary school "Dr Boško Vrebalov" in Melenci from the perspective of teachers and students. Motivation is seen as a multidimensional concept that includes planning of the teaching process, the teaching itself and the application of information and communication technologies (ICT).

The sample of students consisted of 22 teachers and 159 students of the elementary school "Dr Bosko Vrebalov" from Melenci. The subsample of students consisted of 48% males and 52% females who

in 2020/2021 were students in the fifth to eighth grade of elementary school. In terms of school success at the end of the previous school year, 44.7% of students had outstanding records, 39.6% were above average and the remaining 15.7% had average grades. The teachers included in this research had an average work experience of 15.9 years and are members of seven professional councils in the school: the Serbian language council, the council for mathematics, the council for foreign languages, the council for natural sciences, the council for history and geography, the council for art and culture, and the council for sports.

Two instruments, constructed in the form of a five-point Likert-type scale, were used in the research: Instrument for teachers and Instrument for students, which represent a revised and adapted version of the instruments of the same name (Bojović, 2017). The Instrument for Teachers contained 20 claims related to the representation of procedures for stimulating students' motivation to learn: preparation and planning of the teaching process, teachers' activities during the teaching process and the use of information and communication technology (ICT) in teaching. Teachers answered by selecting a number from 1 to 5 (1 - I do not apply at all to 5 - I fully apply).

The statements in the Instrument for Students are formulated based on the statements in the Instrument for Teachers. For example, the statement intended for teachers is "You choose or create tasks according to the student's abilities" in the Student Instrument reads "The tasks we solve in class correspond to the individual abilities of each student." The instrument for students consisted of two parts. The first part contained statements that examine the opinion of students about the representation of certain procedures in the teaching process. For each statement, the students expressed their opinion on the extent to which these procedures are represented in the teaching process (1 - not represented at all to 5 - fully represented). In the second part of the questionnaire, the students expressed their opinion on the impact of the mentioned teaching procedures on the motivation for learning (A - completely demotivates to E - fully motivates).

Research procedure and course. The research was conducted online using the Google questionnaire during December 2020. Respondents participated in the study voluntarily and anonymously. At the beginning of the questionnaire, they were informed about the purpose of the research and the use of the results exclusively for scientific purposes. Also, the respondents were informed about the possibility of giving up further participation in the research at any time.

Results and Discussions

The research collected data on the prevalence of certain procedures to encourage student motivation to learn from the perspective of teachers and students. The applied instrument consisted of statements that made up three subscales: 1) preparation and planning of the teaching process; 2) effective teaching and 3) use of information and communication technologies. In addition, students assessed how much the observed procedures of the teaching process motivated them to learn. The obtained results show how teachers and students perceive the presence of observed procedures and the extent to which these procedures motivate students to learn from their perspective.

The arithmetic means for each subscale are shown in Figure 1. The results showed that in all three observed dimensions of the educational process, the arithmetic mean is higher than the theoretical arithmetic mean (2.5), whether viewed from the perspective of teachers or students. Also, teachers and students assessed the activities in the phase of preparation and planning of the teaching process and teaching as highly represented. There are differences in the perception of the application of ICT in teaching from the perception of students and teachers. Students believe that ICT is used to a greater extent than teachers say. The existence of disparity in the perception of teachers and students has been observed in previous research (Drakulić, 2019; Bernaus and Gardner, 2008). The students assessed that all activities on all three dimensions were highly motivating for them. The results of previous research have determined that the more represented certain actions are, the greater their motivational role (Bojović, 2017).

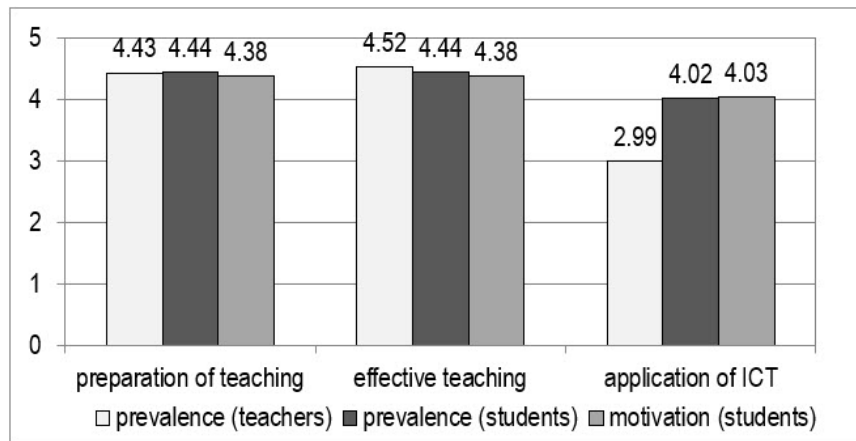


Figure 1. Characteristics of the teaching process from the perspective of teachers and students

Details on all three observed dimensions of the teaching process (preparation and planning of the teaching process, efficient teaching and use of ICT) from the perspective of teachers and students are given in the following text.

Preparation of the teaching process

The subscale Preparation of the teaching process contained items related to the process of preparation of tasks for students, designing procedures to support student autonomy, awarding student recognition, and encouraging group interaction. The arithmetic means for each of the examined segments within this subscale are shown in Table 1.

Table 1

Descriptive statistics of evaluation of items in Preparation of the teaching process segment

items	teachers		students			
	prevalence		prevalence		motivation	
	M	SD	M	SD	M	SD
1. Preparation of assignments for students	4.43	0.67	4.36	0.79	4.28	0.82
2. Support for student autonomy	4.50	0.58	4.48	0.76	4.45	0.81
3. Recognition	4.68	0.53	4.57	0.72	4.49	0.80
4. Forms of group interaction	4.11	0.82	4.35	0.93	4.29	0.91

Teachers are key actors in shaping the learning environment and one of their main tasks is to create a learning environment that improves and maintains student motivation and engages students in learning (Eccles and Roeser, 2011; Tambunan, 2018). Students are motivated or demotivated by school situations such as teaching content, work organization, method of processing materials, requirements for students, ways of monitoring their work, success criteria and school grades (Havelka, 2000). Table 1 shows that teachers and students consider all the observed procedures arising from the phase of preparation and planning of the teaching process to be highly represented in the teaching process. Also, students perceive them as highly motivating for learning. Arithmetic means and standard deviations for each observed statement are shown in Table 2.

Table 2

Descriptive statistics of evaluation of items in Preparation of the teaching process segment (1 - Preparation of assignments for students; 2 - Support for student autonomy; 3 - Recognition; 4 - Forms of group interaction)

items	teachers		students			
	prevalence		prevalence		motivation	
	M	SD	M	SD	M	SD
1. The tasks we solve in class correspond to the individual abilities of each student.	4.41	0.67	4.41	0.74	4.31	0.79
The tasks we solve in class are related to our previous knowledge from various school subjects and experience from everyday life.	4.45	0.67	4.30	0.84	4.24	0.86
2. The teacher monitors what we do in class, listens to us carefully and tries to understand our behavior.	4.36	0.66	4.48	0.76	4.37	0.88
Each student is given the opportunity to show independence in the learning process.	4.64	0.49	4.48	0.75	4.53	0.74
3. The teacher clearly expresses the way in which he will monitor our success and progress in learning.	4.55	0.67	4.52	0.74	4.42	0.80
The teacher monitors and praises the work of each student when he notices that he has progressed in learning and when the student tries to do the task as well as possible.	4.82	0.39	4.62	0.70	4.55	0.79
4. The teacher encourages us to cooperate with each other in class. to set and achieve a common goal of learning, not to compete.	4.36	0.66	4.45	0.85	4.36	0.90
When we do tasks in a group, the teacher forms groups so that the members have different characteristics (they are of different genders, different interests ...)	3.86	0.99	4.26	1.02	4.22	0.93

Note: The statements are given from the Student Questionnaire; teachers answered corresponding questions in the Teachers Questionnaire.

Cooperation is a common form of learning in primary schools. However, in this research it has been found that teachers use the least of the technique of cooperative learning with heterogeneous groups of students. In addition, this result contradicts the findings of previous research. Some researchers (Saleh, Lazonder and de Jong, 2007) found that grouping students of different abilities is more often used probably because teachers assume the higher achieving students will help their less able peers. Our results also revealed that students assigned a smaller motivational role to working in heterogeneous groups. This suggests that additional support is needed in order to strengthen collaborative learning in heterogeneous groups of students. Learning that occurs in heterogeneous groups depends on providing guidance and explanation, which is positively related to learning outcomes (Saleh, Lazonder and de Jong, 2007).

Our results pointed out that teachers and students similarly perceive teacher practice that supports autonomy in the classroom. In order to support autonomy in learning, it is important that teachers appreciate perspectives and feelings of students and to simultaneously show high expectations. Some previous studies (Hall and Webb, 2014) have also showed that autonomy supportive teacher practice is positively related to student motivation.

Effective teaching

The methodological literature abounds in guidelines for effective teaching. According to some authors (Bojović, 2017), in order for teaching to be effective, it is necessary to start the lesson with a brief overview of previously learned material; explain the objectives of the class; present new material in small chunks, where students should practice each step; provide clear and detailed instructions and explanations; provide a high level of activities and exercises for all students. Questions can stimulate student thinking and provide the teacher with feedback regarding students' knowledge and understanding (Dohrn and Dohn, 2018).

The results shown in Figure 1 show that the activities that characterize effective teaching are highly represented in the teaching process. Table 3 shows the arithmetic means of the evaluation of individual claims of effective teaching.

Table 3
Descriptive statistics of evaluation of items in Effective teaching segment

items	teachers		students			
	prevalence		prevalence		motivation	
	M	SD	M	SD	M	SD
1. Teachers explain the importance of the topic covered in class, as well as the goals of class work.	4.52	0.68	4.55	0.73	4.50	0.75
2. Teachers ask questions about the material we learned in previous lessons.	4.55	0.67	4.57	0.73	4.50	0.75
3. Teachers give examples of life situations in which the material we process can serve us.	4.59	0.59	4.42	0.75	4.28	0.87
4. Teachers present the material in small chunks, give detailed explanations and instructions for work.	4.50	0.51	4.30	0.82	4.31	0.89
5. Teachers give us the opportunity to practice everything we learn in class.	4.23	0.75	4.56	0.72	4.49	0.83
6. Teachers ask a lot of questions to check how much we really understand the material.	4.57	0.60	4.20	0.92	4.09	0.92
7. When evaluating the success in the work, the teachers consider the final products of our work (the answers we give, the drawings we made, the speed with which we solve the task, etc.), as well as the effort we invest.	4.68	0.57	4.46	0.77	4.46	0.81

Note: The statements are given from the Student Questionnaire; teachers answered corresponding questions in the Teachers Questionnaire.

The results presented in Table 3 showed that all examined procedures of effective teaching are highly represented in the teaching process both from the perspective of teachers and from the perspective of students. Also, they are assigned a great motivational role for learning. Minor discrepancies in the responses of teachers and students were noted on several statements. The biggest difference relates to the extent to which teachers explain the importance of the topic being covered in class, as well as the goals of class work. Teachers assessed this activity as less representative in relation to its representation from the perspective of students.

Differences in perception can be explained by the fact that teachers know how important it is for students to understand the goal and importance of the material studied, because if students perceive activities as valuable and meaningful, they will engage and make more efforts to reach the goal (Pintrich and Schunk, 1996). Therefore, they perceive this activity as an activity that should be applied to a greater extent in the teaching process.

The statements that refer to the activities that indicate the application of scientific knowledge in everyday life were also assessed by the students as highly motivating. The results of foreign research have shown that students were motivated to learn activities that are interesting and applicable in everyday life (Glynn, Taasobshirazi and Brickman, 2007).

In the segment of effective teaching, the lowest average value (but still high compared to the theoretical average, i.e., $M = 4.20$) was reached by the statement about teachers asking many questions, in order to check how well students understand the material. One possible reason is the fact that teachers have a limited time to teach within the curriculum. In terms of motivation, students estimated that this activity has the least motivational role of all observed in relation to the teaching process. The results of the research have showed that the use of well-formulated questions contributes to increasing student activity (Hrastinski et al., 2021) and stimulates students to think (Dohrn and Dohn, 2018). However, it should be borne in mind that there are different types of questions with respect to the type of answer that is expected. It would be beneficial for future research to examine the effects of different types of questions on student learning. More recent evidence suggests that it is possible to coach teachers to be focused on asking questions rather than on the transmission of information (Hrastinski et al., 2021).

Use of information and communication technology

One of the tasks of the research was to examine the representation and motivational role of the application of information and communication technologies in the teaching process. The results of previous research have shown that the use of ICT encourages motivation to learn, encourages cooperation between students and teachers, as well as interactivity (Radulović, 2021; Sabzian, Gilakjani

and Sodouri, 2013), and contributes to higher student achievement (Knežević, Županec and Radulović, 2020; Radulović, Stojanović and Županec, 2016; Radulović and Stojanović, 2019; Shapely, Maloney and Caranikas-Walker, 2010).

Application of ICT during the preparation of teachers for teaching and during assessment as well as the extent to which students apply technology were examined in this research. Arithmetic means for the observed segments that indicate the application of ICT in teaching by teachers and students and their motivational role are shown in Figure 2.

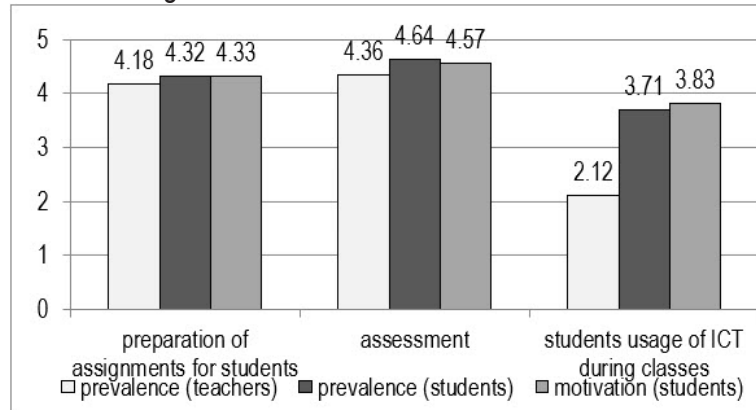


Figure 2. Arithmetic means of the subscale Use of information and communication technology

The results presented in Figure 2 show that teachers and students agree that teachers largely use ICT during the preparation of materials for students as well as during grading process to record grades and achievements. The students rated the above as highly motivating for learning. However, they assessed differently the prevalence of activities related to the use of computers by students during classes. While teachers rated it as very low ($M = 2.12$), students rated it as moderate ($M = 3.71$). This primarily refers to the use of computers during the presentation of information, work on computers during class and the creation of images, presentations, and other multimedia projects (Table 4). One possible explanation for the different perceptions of ICT use by students is the fact that the research was conducted during the coronavirus pandemic when much of the teaching was conducted online, and students assessed their current use of computers. The obtained result suggests that students should be stimulated to a greater extent to use computers during classes and extracurricular activities.

Table 4

Descriptive statistics of evaluation of items in Use of information and communication technology (1 - Preparation of assignments for students; 2 - Assessment; 3 – Students usage of ICT during classes;)

items	teachers		students			
	prevalence		prevalence		motivation	
	M	SD	M	SD	M	SD
1. Teachers use a computer in order to prepare learning materials for students.	4.18	1.01	4.32	0.95	4.33	0.93
2. During a lesson, students work individually or in groups using a computer.	1.86	0.96	3.61	1.24	3.55	1.28
3. Using a computer students present information to peers.	1.76	0.94	3.55	1.37	3.65	1.30
4. Students create images/presentations/multimedia projects using ICT.	2.76	1.26	3.99	1.19	4.06	1.07
5. Teachers record grades and students' achievements using a computer.	4.36	1.26	4.64	0.66	4.57	0.78

The interesting result is that the students assigned a smaller motivational role to their own use of ICT than the use of ICT by their teachers. The obtained result is in contradiction with several previous researches which have recorded that the use of technology in teaching encourages the development of students' interests (Brophy, 2010; Nikou and Economides, 2016). Namely, the school provided computers to students who, due to poor material conditions, do not have their own computers. Therefore, it can be assumed that students have not yet fully mastered computer skills and do not have a developed sense of self-efficacy associated with goal setting, selection and implementation of effective learning strategies,

understanding, and evaluating their own progress (Schunk and Pajares, 2009). Ryan and Deci (2000) confirm this, by stating that self-efficacy is one of the most important motivational beliefs.

Based on these results, it can be concluded that the actions that the students marked as highly represented in the teaching process were also marked as highly motivating. Thus, the more represented certain actions are, the greater their motivational role.

Conclusions

The aim of the research was to examine the practices of encouraging student motivation for learning from the perspective of teachers and students. Those motivational procedures were planning of the teaching process, effective teaching, and the use of ICT. The sample included students from fifth to eighth grade and their teachers.

The results presented in this paper showed that all the observed procedures during the planning of teaching and learning, as well as procedures related to the application of ICT, are very common in the teaching process. With minor deviations, there is the agreement between teachers and students on their prevalence. By linking the current teaching practice with the opinion of students to what extent the examined procedures stimulate their motivation to learn, it is noticed that the more prevalent a procedure is, the greater is its motivational role. Therefore, all examined procedures were assigned a high motivational role.

In general, the obtained results show that teachers frequently apply different motivational procedures and strive to create a positive motivational climate in the classroom. This result has a significant practical contribution because it indicates the actions that students perceive as motivating factors and leave room for further improvement of teaching practice - specifically: interaction between students, greater use of digital textbooks, use of audio and video recordings of teachers for teaching purposes, use of applications and tools to increase student motivation.

Finally, it is necessary to mention the limitations of the present research. To obtain the reliable assessment of teachers' actions, the research included both teachers and students. However, the examination of the current teaching practice was conducted in one school and the obtained results cannot be generalized for all schools. In future research, it would be desirable to include larger and more heterogeneous samples of students. In addition, a descriptive statistical analysis was performed on the collected data, and in further work it is possible to conduct more complex statistical analyses on the collected data in order to examine statistically significant differences in the perception of motivational procedures between students of different classes, different genders, school success, etc.

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Conflict of interests

The authors declare no conflict of interest.

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Dennis, TA, Cole, PM, Wiggins, CN, Cohen, LH & Zalewsky, M. (2009). The functional organization of preschool-age children's emotion expressions and actions in challenging situations. *Emotion*, 9, 520-530.

- Form quoting the works of authors of books is as follows:

The author's name [comma], initial / names [point], [open small brackets] year of publication [close little brackets] [point] title deeds - in italics [point], the city (and state) [two counts], the publisher [Point].

Hirsch, Jr., E. D. (1996). *The schools we need and why we do not have them*. New York: Doubleday.

- When you mention a paper published in a journal or as part of a book as a chapter, then applies the following form:

The author's name [comma], initial / names [point], [open small brackets] year of publication [close little brackets] [point] title of the paper [point], In Proceedings ... (note that the work was published in a journal or book ...) The name of the publisher [open small brackets] Issue. (Note that this is a publisher) [Close little brackets] [comma] title of the collection - in italics [open small brackets] page starting work [line] Page completing work [point], the city (and state) [two counts], publisher [point].

Barrett, KC, & Campos, JJ (1987). Perspectives on emotional development: II. A functionalist approaches to emotions. In Osofsky JD (Ed.), *Handbook of Infant Development* (2nd ed., Pp. 555-578). Oxford, England: Wiley.

- If seven or more authors, then we will list the names of the six authors, and the seventh and the rest fall into the category of " and associates " .

Adam, JJ, Paas, F. Teeken, JC van Loon, EM, Van Boxtel, MPJ, Houx, PJ, et al. (1998). Effects of age on performance and a finger-precuing task. *Journal of Experimental Psychology: Human Perception and Performance*, 24, pp. 870-883.

Second and last author in a list of references are always stating afterward conjunctions & English.

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the author's name [comma], initial / names [point], [open small brackets] day, month and year of publication [close little brackets] and the title [point], the name of the magazine or newspaper - italics [comma], number of journals or Newspapers - italics [comma], page beginning of the text [line] Page completing the text [point].

Henry, W. A., III. (1990, April 9). Beyond the Melting Pot. *Time*, 135, 28-31.

- When we need to with the title of the article mention what kind of material it is then enclosed in square brackets after the title of the paper is printed by it is a brochure, video recording and the like.

Research and Training Center on Independent Living. (1993). Guidelines for reporting and writing about people with disabilities (4th ed.) [Brochure]. Lawrence, KS: Author.

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Schwarzer, R. (1989). Statistics software for meta-analysis [Computer software and manual]. Retrieved March 23, 2001, http://www.yorku.ca/faculty/academic/schwarze/meta_e.htm

- When the list reference is made to the work that is being prepared for the press, after the authors' names, in parentheses, listed in the press in English.

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- When the list of references cites a newspaper article without the author prints the name of the article, then the time of publication, then the title and number - in italics, and at the end of the page on which the article was published. If the title is long, we can shorten the optimum number of words by taking the first few words.

The new health-care lexicon. (1983, August / September). *Copy Editor*, 4, 1-2.

- If within the journal as publisher publishes a special issue as a monograph, it is necessary after heading indicate that it is a monograph.

Ganster, DC, Schaubroeck, J. Sime, WE, & Myers, BT (1991). The nomological validity of the Type A personality among employed adults [Monograph]. *Journal of Applied Psychology*, 76, 143-168.

- When an abstract or summary of the quote as the original source, after the title should be in parentheses to indicate that it is abstract.

Wolf, NJ, Young, SL, Famselow, MS, & Butcher, LL (1991). Map-2 expression in cholinceptive pyramidal cells of rodent cortex and hippocampus is altered by Pavlovian conditioning [Abstract]. *Society for Neuroscience Abstracts*, 17, 480 harvesters.

- Titles that are not in English, and we want them to be published in the journal in English, listed in their native language, and then in the square brackets give the title translation into English. In addition to the title, everything else remains the mother tongue.

Ising, M. (2000). Intensitätsabhängigkeit evozierter Potenzial their EEG: Sindh impulsive persons Augmenter stage Reducer? [Intensuty dependence and event related EEG potentials: Are impulsive individuals augmenters or reducers?]. *Zeitschrift für Differentiel und diagnostisch Psychology*, 21, 208-217.

- In the list of literature translated work following a text that we have a year of the original edition listed in parentheses at the end behind the publisher. When we quote in plain text, year of first publication and translation writing along with a slash between (eg. Laplace, 1814/1951).

Laplace, P. S. (1951). A philosophical essay on probabilities (FW Troscott & FL Emory, Trans.). New York: Dover. (Original work published 1814)

- When the list of references cites a paper published in the Proceedings of the translated, italics will print the name of the collection at the end to add when it published the original.

Freud, S. (1961). The ego and the id. In J. Strachey (Ed. & Trans.), The standard edition of the complete psychological works of Sigmund Freud (Vol. 19, pp. 3-66). London: Hogarth Press. (Original work published 1923).

- When you cite articles published on the university or one of the official institutions, universities, publishers listed as the first name of the university and then university.

Broadhurst, RG, & Maller, RA (1991). Sex offending and recidivism (Tech. Rep. No. 3). Nedlands: University of Western Australia, Crime Research Center.

- When the list of sources cites a report of an organization or institution that has no author, it is best to nominate as the author of this organization, which is also the publisher.

Employee Benefit Research Institute. (1992, February). Sources of health insurance and characteristics of the uninsured (Issue Brief No. 123). Washington, DC: Author.

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Vandenbos, G. Knapp, S., & Doe, J. (2001). The role of reference elements in the selection of resources by psychology undergraduates [Electronic version]. *Journal of Bibliographic Research*, 5, 117-123.

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Vandenbos, G. Knapp, S., & Doe, J. (2001). The role of reference elements in the selection of resources by psychology undergraduates [Electronic version]. *Journal of Bibliographic Research*, 5, 117-123. Retrieved October 13, 2001, from <http://jbr.org/articles.html>

- When you download from the Internet a document which has no date or author, then the document name takes the place of the author or the first place.

8th GVU's WWW User Survey. (Od). Retrieved August 8, 2000, from http://www.cc.gatech.edu/gvu/user_surveys/survey-1997-10/

- Material from the symposium or a scientific paper which was only exposed, but not published, listed with the note on which the scientific or professional meeting is material exposed. If the author has presented on the site, it is desirable to name and web page.

Cuter, LD, Frölich, B., & Hanrahan, P. (1997, January 16). Twohanded direct manipulation on the responsive workbench. Paper presented at the 1997 Symposium on Interactive 3D Graphics. Abstract retrieved June 12, 2000, from <http://www.graphics.standard.edu/papers/twohanded/>

- Computer software listed noting computer software. Name of the software we write italics.

Miller, M. E. (1993). *The Interactive Tester (Version 4.0)* [Computer software]. Weastminster, CA: Psytek Service.

- Data downloaded from the website of the government or other official organization listed noting data file. The filename of the data listed in italics.

Department of Health and Human Services, National Center for Health Statistics. (1991). *National Health Provider Inventory: Home health agencies and hospices, 1991*. [Data file]. Available from the National Technical Information Service Web site, <http://www.ntis.gov>

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Thank you Reviewers!

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