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# Issue, No. 23/2022

# **Contents**

Authors	Article Title	Page
Elena Marin	A glimpse into student learning – factors that stimulate learning efficiency and academic performance	
Otilia Ștefania Damian	Cooperative Learning of Italian Literature in the Post-Pandemic Era	
Monica-Iuliana Anca	The Role of Metacognition in Strategic Learning. Critical Analysis and Exemplifications	
Tal Kazarnovski, Constantin Cucoș	Mapping the Needs? Analysis of the Emotional and Pedagogical Abilities for New Teachers in their First Year of Teaching	
Luiza Elena Mureșan, Emanuel Sebastian Turda	The Importance of Role Play and Artistic-Plastic Activities in the Preschoolers Self-Knowledge and Emotional Expressivity Development	
Andrei G. Stupu, Alina S. Rusu	Integrative Analysis of Ethical Intelligence and Moral Intelligence: New Conceptual Models and Developments in Education	
Sebastian Vaida, Gabriel- Alexandru Pongracz	Mobile Augmented Reality Applications in Higher Education	
Dorin Opriș, Irina Acatrinei	Aspects Regarding the Formative-Informative Relationship in the "Pedagogue" by Clement of Alexandria	77
Roland H. Gergely, Alina S. Rusu	Linguistic Validation of the Romanian and Hungarian Translations of the Attitudes About Sexuality for People with Disabilities Questionnaire	
Cristina Bălaș-Baconschi, Andrada Bărbulescu	Reducing Inappropriate Behaviors and Enhancing Social Skills in Children with ASD Through Social Stories	
Camelia Augusta Roșu	Integrative Psychotherapy - An Important Resource for the Psychophysical Wellbeing of the Person in the 21st Century Society	
Monica Levy, Nicoleta Laura Popa	Factors of Pre-service English as Foreign Language (EFL) Teachers' Choices to Pursue a Teaching Career	121
Glava Cătălin Cosmin	Mechanisms for Objectivity Ensuring and Fraud Prevention in the Online Academic Assessment	136
Dragoş Grigoriu, Luana David, Muşata Bocoş, Diana-Crina Marin, Cristian Dan Opariuc, Ciprian Baciu	The parents' Opinions regarding the Usefulness of Establishing the Configuration of the Profile of Intelligence of the Pupils, Using a Digital Application based on the Content of the Theory of Multiple Intelligences	143

A glimpse into student learning – factors that stimulate learning efficiency and academic performance

Elena Marin

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Research article

# A glimpse into student learning – factors that stimulate learning efficiency and academic performance

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#### **Abstract**

Keywords: academic; learning; student-teacher relationship The study aims to examine to which extend do university teachers influences the learning effectiveness and academic performance of third-year pedagogy and special education students. The main hypothesis of the experimental paper refers to the increase of learning efficiency and academic performance of students through specific interventions to positive influence student learning. The quantitative study was conducted through a questionnaire, on a sample of 105 participants. The results show that regulatory interventions by teachers have a positive impact on students' university trail, through them effective learning is stimulated and academic performance is improved.

## Zusammenfasung

Schlüsselworte: akademisch; lernen; schülerlehrer-beziehung Studie ist es zu untersuchen, inwieweit Hochschullehrer die Lerneffektivität und schulischen Leistungen von Studierenden der Pädagogik und der Sonderpädagogik im dritten Studienjahr beeinflussen. Die Haupthypothese der experimentellen Arbeit bezieht sich auf die Steigerung der Lerneffizienz und der akademischen Leistung von Schülern durch spezifische Interventionen zur positiven Beeinflussung des Schülerlernens. Die quantitative Studie wurde anhand eines Fragebogens an einer Stichprobe von 105 Teilnehmern durchgeführt. Die Ergebnisse zeigen, dass sich regulatorische Eingriffe der Lehrkräfte positiv auf den Studienverlauf der Studierenden auswirken, durch sie effektives Lernen stimuliert und die schulischen Leistungen verbessert werden.

## 1. Introduction

Teachers are responsible of stimulating students learning, making it more efficient, and thus leading to learning outcomes and even increased academic performance. Such types of mechanisms are essential and used in a form of collaboration teaching where students interact with teachers constantly, receive feedback and individual discussion sessions. Students can also work together in teams under the guidance of a teacher who guides them through the steps to achieve the initial goal.

Teamwork is defined as the instructional use of small groups of students so that they maximize their own learning and also enhance the learning of others (Wehrs, 2020). Students who learn together perform much better than those who work alone, individually, and who have the same material to study (Gabbert et al, 1986). According to Curşeu et al, (2018) collaborative learning is the most common educational technique that helps students to develop their teamwork skills and, in addition, it is a method that facilitates the transfer and acquisition of curricular

knowledge through social interaction because it thus reduces the cognitive load that is placed on an individual.

This type of teacher regulation intervention is composed of 5 basic elements (Tran, 2014):

- positive interdependence = students are made to work together as a cohesive group to achieve common learning goals;
- Promotive interaction = mutual encouragement of efforts to achieve goals;
- Individual responsibility = students should ask for assistance, do their best work, present their ideas, learn as much as possible, take their tasks seriously and help the group;
  - Teaching interpersonal and social skills;
- Qualitative group processing = effective clarification and improvement of members.

Corrective feedback takes the form of a response to a text containing errors, and these responses come in the form of indicators that an error has occurred, the provision of the correct form or meta-linguistic information about the error. This is an important task for both teachers and students in many contexts (Yeh & Lo, 2008) to facilitate better learning. It is a type of implicit and explicit negative feedback that occurs in natural instructional situations (Sheen, 2004). In addition, Lyster el al (2013), in addition to the definitions stated above, characterizes it as a complex phenomenon containing a multitude of functions.

An important point to note about this type of feedback is that student engagement is a multifaceted construct consisting of cognitive (how deeply the student processes the feedback and what cognitive and metacognitive processes are used), behavioral (consulting others or the online environment about errors and internalizing the target structure), and affective (attitudinal responses to feedback and the emotions that arise develop in accordance with receiving, processing, and utilizing written corrective feedback) dimensions (Han, 2017).

Another intervention to influence learning on the part of teachers is 1:1 tutoring. Tutoring is the process by which students learn about a subject with a good tutor, this process is carried out as a one-to-one activity between student and teacher or with two or three students simultaneously, and in addition, this tutoring interaction is periodically followed by formative testing and corrective feedback (Bloom, 1984). It plays an important role in enhancing students' learning experience and, in the best cases, has the potential to enable them to devise connections between different elements of that experience (McFarlane, 2016).

It is interesting to note that an institutional analysis of Romanian higher education by Ciotlăuş et al (2011) suggests aspects of the teacher-student relationship. Students express a strong need not to acquire information but to have experiences related to training, counselling and guidance with the help of the teachers in their year of study. The teacher-student relationship, in order to acquire the beneficial quality of the learning process, is based on three aspects: knowledge, mutual recognition and communication. An interesting idea found in the analysis is that theory takes on the function of usefulness, for students, in the approach of through the beginning the final years specializations, thus the university experience is consolidated. Thus, there is a strong desire on the part

of students to benefit from experiences carried out by teachers, with the aim of optimal development.

# 2. Effective learning

Learning is the process by which information and knowledge is acquired, takes place in a social environment, and through this process, the learner develops his/her personality. In Hilgard et al., (1974) conception, learning is defined as a process, in which action occurs or changes structurally in response to a given situation. Evolution is not influenced by the growth of the individual; it occurs without taking into account temporal changes and innate psychological traits.

Neveanu (1978) specifies the learning process as an essential activity in the development of the individual, both socially, creating an integration in the environment, and mentally, developing skills and abilities as a result of the process. By combining two elements: the retention of information and the acquisition of new skills or abilities, the learning process is achieved. In addition, learning is the acquisition of new information, knowledge and skills, which are designed to increase adaptability to the environment. The learning process is seen as a restructuring of the individual's perception of the world, it supports an informational proportion, which provides the plan of notions and an operational proportion in which the plan of notions is applied in new situations (Stănculescu, 2008).

Effective learning is achieved by attaining information and knowledge with a minimum of resources in a limited time. Training acquires effective value when it is closely related to human learning processes, effective learning environments are appropriate to the characteristics of working memory and long-term memory. The benefits of effective learning are characterized by: attainment of a body of new knowledge and skills in a short time claim (Clark et al, 2006).

According to Curşeu et al (2018), collaborative learning is the most common educational practice used in the university environment that facilitates the transfer and acquisition of knowledge through social interaction and, therefore, reduces the cognitive load for each individual student. In this type of learning, people work in more complex settings where roles are distributed, ideas are shared, each other's work is critiqued, and broad aspects of problems are solved

together, all leading to promising outcomes (Looi et al, 2010).

One of the most important variables that can positively influence learning is student motivation. The most important goal is to increase students' independence and interest in learning, thus, they increase their effectiveness through self-determination and intrinsic motivation (Wery & Thomson, 2013)

In the remainder of this paper, self-efficacy, as mentioned above, helps students in increasing their independence in learning and, automatically, their academic performance. Self-efficacy is the key concept in Albert Bandura's (1977a) social learning theory, it assumes that psychological procedures, regardless of their form, serve as a means of creating and reinforcing expectations of personal efficacy and is influenced by personal factors (cognitive, emotional and biological), environmental forces and behaviour.

According to Bandura (1977b) self-efficacy represents people's beliefs about their personal capabilities to produce levels of performance, influencing the events that occur in their lives. Self-efficacy determines how people feel, think, motivate and behave in society. People with high confidence in their abilities tackle difficult tasks, challenges to be mastered, rather than threats to be avoided. These people set goals they want to achieve and maintain a strong commitment to achieving them. Such an effective outlook produces personal achievement, reduces stress and decreases vulnerability to depression.

The task of creating learning environments conducive to the development of cognitive skills relies heavily on the talents and self-efficacy of teachers. Those who have a high sense of efficacy about their teaching abilities can motivate their students and develop their cognitive function. Students' belief in their abilities to achieve success in academic activities affects their aspirations, their level of interest in academic activities and their academic achievements according to Bandura (1977a). Those who have a high level of self-efficacy have the ability to visualize scenarios with positive outcomes (successes) in the problems they manage but those who lack confidence in their self-efficacy create scenarios representing failures with no possibility of solving or overcoming the present difficulty.

Expectations of efficacy are assumed to influence the level of performance by altering the intensity and persistence of effort. Bandura (1977b) states from previous experiments that: behavioral tasks were ordered by difficulty level, and subjects persisted in their efforts until they completed all tasks or gave up at various points along the way. The number of successfully completed tasks reflects the degree of persistence. Collaborative learning increases its effectiveness and thus the self-efficacy of each individual through teamwork, thus maximizing mutual learning (Wehrs, 2020).

# 3. Academic performance

Performance is an important variable in our lives. It helps us grow, achieve our goals and become better at what we do. Goals set the gold standard for the relationship between self-satisfaction and performance. High goals are made up of several easily attainable goals that satisfy motivation, but the general proposition of relatively low or easy goals do not have the same ability to increase motivation. Feelings of success in working life arise to the extent that people observe their personal ability to overcome challenges encountered and achieve goals that are important and meaningful (Locke and Latham, 2006).

According to Locke and Latham (2006), creators of the practical theory of goal setting, there are four mechanisms in producing the relationship between goals and performance, such as:

- High goals lead to greater effort and create perseverance compared to goals that are of moderate intensity or loosely constructed;
- objectives direct attention, effort and action towards the relevant situations;
- because performance is a function of both competence and motivation, the effects of objectives depend on having the necessary knowledge and skills;
- objectives are designed to use knowledge to its maximum capacity to achieve the proposed task and there is a motivation to seek new knowledge when faced with complex new tasks.

Education is the main source of people's activities and plays an important role in our growth as individuals who will perform in society. Students, as growing human beings, draw this source from their parents and later from the educational environment they are a part of, thus, ensuring the acquisition of knowledge and skills that help them to increase their performance and thus improve their quality of life (Farooq et al, 2011). According to Helou & Rahim

(2014), students' academic performance is defined in the form of their ability to cope with lectures and how they adapt to or achieve tasks given by their teachers.

Performance assessment is the main basis of student performance progress in higher education institutions (Oyelade et al, 2010). It represents the body of knowledge acquired by the student, assimilated through learning, and is an assessment criterion (final grades obtained in tests, exams or projects) of the student's performance in the university environment. This criterion of academic performance varies from student to student (Schulz, 2001).

In Călin's (1995) view, academic performance includes the following values: type of expression of attitude towards the instructional process, means of personality formation, indicator of intelligence, but also reaching this threshold requires a motivational element. Thus, several elements are observed, which constitute academic performance, but also a way by which it can be achieved. The author, argues for a causality of performance taking place in both external and internal environments, comprising: the need for a pre-existing level of instruction, optimal development of the student, the health and rest of the subject, pedagogical influences of teachers and influences from the family environment. The fundamentals outlined above are interchangeable and work closely together.

According to MacKenzie et al (2001), there are 2 significant predictors of academic performance: prior academic performance and learning skills. Also, in their study, they mentioned (as predictors of academic performance) psychosocial predictors, cognitive assessment and demographic factors. In support of the theory that prior academic performance is an important predictor of current academic performance, Li et al (2010) reveal the idea that prior academic performance is a key factor for future achievement at higher levels of education. An interesting idea to mention in this study is based on self-concept and how it can influence or is influenced by academic performance.

Education is seen globally as a basic human right, a key to culturalization, and a source of empowerment and health (Kosgei et al, 2013). Implicit with this, the academic performance that arises from education, is essential and determined by student engagement because, thus, students pay attention and participate in classroom discussions, exert effort, and exhibit

interest and motivation for learning (Reyes et al, 2012).

# 4. The relationship between learning regulation interventions and academic performance, and thus academic learning

Teams are identified as a set of 2 or more individuals interacting in an organizational or educational context to achieve a common goal through interdependent roles and tasks (Weaver et al, 2010). The interdependent nature of the tasks in which teams engage requires members, individually, to tailor their own contributions and efforts for their teammates to achieve common goals (Weaver at el, 2010). In essence, teams are composed of individuals who share certain defining characteristics: common collective identity, common goals, interdependence on their own tasks or outcomes, distinct roles within the team, and are part of an organizational or educational context that influences their work and, in turn, what they can influence (Hughes & Jones, 2011).

According to Weaver et al (2010), teamwork is defined in terms of behaviours, cognitions and attitudes and thus interdependent performance is made possible. Also, studies in education support that student who actively engage in collaborative activities tend to learn better and increase their academic performance (Kyprianidou, 2012). In addition, teambased learning increases student satisfaction and engagement in the educational environment and improves academic performance, especially for those who are at academic risk (Park et al, 2015).

Student engagement has been shown to be an important component of teamwork, and because of this, students engaging with content and peers has been shown to increase student performance and satisfaction (Mennenga, 2013). Thus, these types of strategies (of teamwork) force students to keep up with the course material and improve their academic performance (Nieder et al, 2005), facilitate improvements in the grades students earn, new and lasting knowledge is gained, and skills are developed (Gil et al, 2017).

Teamwork is an important factor in increasing student performance and one of the main interventions to improve learning. Alongside this are tutoring sessions that not only enhance student performance, but also guide them in their learning process by providing constant support, feedback and adopting social integration by creating a supportive relationship

where the tutor not only provides academic assistance, but also builds a community of relationships and connections for students (Schmidt, 2011). Bloom (1984) defines tutoring as the process by which students learn about a subject with a good tutor, with this process occurring as a one-on-one activity between student and teacher or with two or three students simultaneously.

Studies in this area have shown positive influences of tutoring on academic performance. According to Rheinheimer et al (2010), tutoring sessions significantly improve student performance and students are more likely to graduate from college than those who do not have tutoring sessions. In addition, tutoring increases persistence and engages students to attend tutoring sessions to further promote academic success (Rheinheimer, 2010).

Every student in a tutoring situation achieves above and beyond that of a normal student in a classroom environment and this is due to the tutor pushing a topic or issue until the students master it (Chi et al, 2001). Collaboration is vital to a tutoring program for it to lead to success because it facilitates communication and performance (Rothman, 2011).

In a study by Chi et al (2001), they examined students' performance on a given task when a tutor tells them how to complete the task. Thus, the group of students who participated in coversation with the tutor while completing the task performed significantly better than those who focused only on completing the task. In line with the above, tutoring plays an important role in enhancing students' learning experience and, in the best cases, has the potential to enable students to design connections between different elements of that experience (McFarlane, 2016).

It has been shown that there is no significant negative impact of tutoring sessions on the academic performance of tutees (Hof, 2014). It increases the performance on analytical skills and also the expenses incurred due to such a process implicitly leads to academic performance (Zhan et al, 2013).

Further to the study, it was also interesting to address the relationship between corrective feedback and academic performance, how this regulatory intervention influences how students can learn more effectively. Corrective feedback is a type of negative feedback, defined as an indication to the student who makes an erroneous utterance or being any behavior of

the teacher following an error where an attempt is made to inform them of making an error (Zhang et al, 2010). It is found in many fields, such as organizational or educational, and its main purpose is to close the gap between an individual's current performance and their good, desired performance (Nicol & Macfarlane-Dick, 2006). In addition, student perception is very important when receiving feedback from teachers, as a primary assumption of studies in this field shows that providing feedback can enhance learning (El Ebyary & Windeatt, 2010).

Seen from a socio-cultural perspective, language production can be used as a means of reflecting on structures that have not yet been acquired and thus, one's own performance is used (Rassaei, 2005). In this sense, metalinguistic feedback, which is a type of corrective feedback, can provoke performance between teacher and receiver feedback so that this type of problem can be solved by giving hints or assistance but retaining, by the teacher, the correct form (Rassaei, 2005).

Written corrective feedback, another type, refers to feedback that is written by a teacher on a student's work in order to improve subsequent work and is shown as information provided that increases the student's performance and knowledge (Mao & Crosthwaite, 2019). Also on this idea, Yeh & Lo (2008) suggest that the performance of learners who manage to self-correct will help teachers to formulate how they will correct errors, thus choosing the best and most useful option to increase effective learning and thus academic performance. In addition, it is recommended to use a student notebook where errors are marked and where they occur naturally so that students' performance in correcting errors can be examined (Yeh & Lo, 2008).

# 5. Research Methodology

This research aims to investigate the extent to which university teachers influences the learning effectiveness and academic performance of third-year pedagogy and psychology students. Starting from the assumption that students make their learning more effective based on the teachers' interventions, the aim was to document how teachers' interventions influence learning and what is the impact on learning and academic performance focusing on:

O1. Identify perceptions of the importance of collaborative and cooperative learning to achieve academic achievement and effective learning.

O2. Analysis of students' perceptions of the relationship between teamwork and academic performance.

# 5.1. Participants

The sample consist of 105 students enrolled in a final year undergraduate program in the Faculty of Psychology and Educational Sciences at the University of Bucharest majoring in pedagogy and majoring in special education.

# 5.2. Research design

This study has an explorative, case study design, the data of this paper being collected at a single point in time and without manipulating the independent variable. This design was chosen due to the specificity of the sample and the limited resources that arose. The present paper is written following the requirement of qualitative research and the data was analyses using frequency analysis. The instruments needed to collect the results were transcribed in the form of questions in a questionnaire that was created in Google Forms. This questionnaire was distributed online on different social networks. Several variables were taken into consideration such as: 1) corrective feedback and teamwork are independent variables, the predictor, showing influence in effective learning and academic achievement; 2) learning effectiveness: is dependent variable, the criterion, which describes the score participants obtained on the scale for assessing effective learning; and 3) academic performance is the dependent variable, the criterion, describing the score

that participants obtained on the scale for assessing subjective performance where a high score suggests higher performance.

# 5.3. Research limits

Some limitations of the present study have to be taken into account. The first limit to be mentioned is the number of participants which leads to the limitation of the generalizability of the results. The second limitation refers to poor generalization. In the present study, participants were chosen who are studying undergraduate studies, specializing in pedagogy year III and specializing in special education, at the Faculty of Psychology and Educational Sciences, University of Bucharest, and the present work did not focus on several faculties in Bucharest or Romania that could lead to influence the results. Another limitation refers to the investigation of dependent variables such as academic performance and effective learning in a general context in quantitative research, which leads to limitations in the generalizability of the results.

## 6. Results

The questionnaire was administered to 105 people who met the eligibility requirements, namely: enrolment in a Bachelor's degree programme, in the final year of their university studies, third year, specializing in pedagogy and third year specializing in special education at the Faculty of Psychology and Educational Sciences. Respondents had to fill in for identification data, gender and age.

Specialization Female Male Gender 19-25 26-30 31-45 19-25 26-30 31-45 Total Age Pedagogy 3 2 0 42 31 6 0 Special education 49 12 1 1 0 0 63 80 18 4 3 0 0 105 Total

Table 1. Respondents' identification data

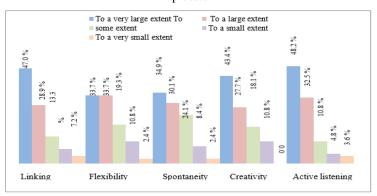
Thus, of the 105 students who participated in this surveyed, 40.6% of those enrolled in the pedagogy specialization and 59.4% of those enrolled in the specialization of special education. The majority of responses from pedagogy students leans towards the female gender of which aged 19-25 years responded 37.3%, between 26-30 there was a percentage of 7.2%, and for the age between 31-45 years 3.6%. The male gender recorded a percentage of 2.4% of subjects aged

19-25. The specialization of special education recorded a predominantly female response rate, as follows: for the age group 19-25, 32.5%, for the age group 26-30, 144%, and for the age group 31-45, 1.2%. The male gender scored for age 19-25 years 1.2%. Respondents completed the questionnaire via the online service Google Forms.

Looking at identifying perceptions of the importance and the impact of collaborative learning on

student academic achievement and effective learning the first item reflects the elements that define teacher involvement in learning as seen by students. That is why within this item on the extent to which students ranked the defining elements of teacher engagement within the learning process, 80.7% of students say that active listening, to a great extent and to a great extent, is a defining characteristic of teacher engagement. Students (75.9%) define teacher involvement by relating to a great extent and to a great extent. A percentage of 71.1% of respondents rank creativity as an important characteristic of teachers in the learning process. Flexibility was defined by questionnaire respondents (67.4%) to a very great extent and to a great extent. We note that 65% of the students' state that spontaneity defines teachers' involvement in the learning process to a very great extent and to a great extent.

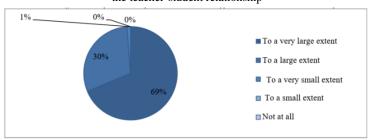
Figure 1. The defining elements of teacher involvement in the learning process



To what extent do the following elements define teacher involvement in learning?

The responses to this item presented in Figure 2 show that 99% of students believe, to a very large extent and to a large extent, that the teacher-student relationship needs to be based on a cooperative and collaborative approach, which shows how important it is for respondents to approach both teachers and students in the educational process.

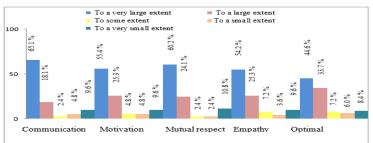
Figure 2. Predisposition of cooperative and collaborative approach in the teacher-student relationship



To what extent do you think the teacher-student relationship needs to be based on a cooperative and collaborative approach?

Within the item showcased in figure 3 on the presence of elements in the teacher-student relationship for the purpose of effective learning, a percentage of 84.3% of students ranked mutual respect as an important element constituting the teacherstudent relationship to a great and great extent. Questionnaire respondents (83.2%) consider creativity an essential characteristic that influences effective learning to a great extent and to a great extent by being present in the teacher-student relationship. percentage of 80.7% of the respondents support the presence of motivation to a very great and great extent in the academic relationship. We note that a percentage of 79.5% of students affirm the presence of empathy in the teacher-student relationship to a very great extent and to a great extent. Students (78.3%) state that optimal development in the academic relationship contributes to effective learning. This result is hand in hand with the idea that students tend to engage positively when teachers are responsive to them, foster freedom and choice, and promote positive social interactions (Cadima et al., 2010).

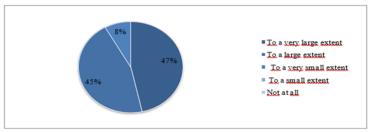
Figure 3. Importance of the following elements in the teacher-student relationship



To what extent should the following elements be present in the teacher-student relationship in order to achieve effective learning?

Responses to this item regarding the importance of frequent communication with teachers as a useful element in achieving effective learning show that 92% of students consider frequent communication with teachers to be an important variable. This shows the need for a communicative and collaborative approach in the teacher-student relationship. In addition, it is important to achieve the acquisition of information and knowledge with a minimum of resources, in a limited time, with the help of frequent communication between students and teachers.

Figure 4. The importance of communication in the teacher-student relationship for effective learning

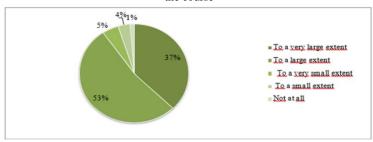


Is frequent communication with teachers in your year of study a useful element in achieving effective learning?

Comparing the responses to the previous items (1, 2, 3, 4) under the first objective ("Identify the perception of the importance of collaborative and cooperative learning to achieve academic achievement and effective learning") we observe a congruence in the responses. The teacher-student relationship, frequent communication and mutual respect are key elements in collaborative and cooperative learning. Students consider collaborative and cooperative learning a fundamental element in achieving academic achievement and effective learning.

When it comes to analysing students perceptions of the relationship between teamwork and academic performance we looked at frequency with which teachers' instructions are followed in the course by students. The responses to this item show that 90% of the students feel that they follow the teacher's instructions/group discussions accurately to a great extent and to a great extent during the course which shows the degree of students' involvement and motivation in the course tasks.

Figure 5. Frequency with which teachers' instructions are followed in the course

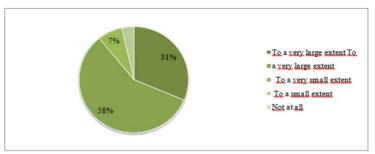


To what extent do you follow the teacher's instructions/group discussions accurately during the course?

Regarding the teamwork approach during class activities presented in Figure 5, students agree that, in a high percentage- 90%, that that they follow the teacher's instructions/group discussions accurately to a great extent and to a great extent during the course

which shows the degree of students' involvement and motivation in the course tasks.

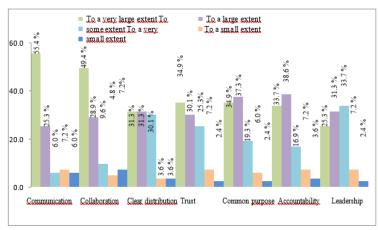
Figure 6. Frequency of the teamwork approach in learning activities



To what extent are the learning activities your teachers propose to you based on teamwork?

The responses to this item distinguish that 89% of the students are of the opinion that the learning activities proposed by the teachers in the field of Education Sciences are very much and to a large extent based on teamwork, which demonstrates the teachers' collaborative and cooperative approach to learning.

Figure 7. Presence of the following elements in team activities



To what extent are the following variables presented in team work activities?

In this item on the frequency of presence of elements in team activities in undergraduate studies, a percentage of 80.7% of students ranked the presence of communication very much and to a great extent in the proposed team activities. A percentage of 78.3% support the presence of collaboration to a very great extent and to a great extent in working groups. The questionnaire respondents (72.2%) stated that the common goal is present to a very great extent and to a great extent in the team activities. A percentage of 72% of students stated the presence of responsibility in group tasks to a very great extent and to a great extent. We note that trust is present to a very great extent and to a great extent in a percentage of 65% based on student responses. A percentage of 62.6% stated that

clear task distribution is present in team activities to a very great extent and to a great extent, and 30.1% ticked "to some extent". Nearly half (56.6%) of the students chose 'very much' and 'to a great extent' for leadership, and 33.7% ticked 'to some extent'. According to Kyprianidou (2012), studies done in the field of education claim that students who actively engage in collaborative activities tend to learn better and increase their academic performance.

#### 7. Discussions

As evidenced in this study one of the most important issues relating to the factors that stimulate learning efficiency and academic performance is the corrective feedback that significantly influences effective learning and academic performance as portraited also by Ellis (2009), in a study that focused on defining corrective feedback as an important issue in teacher education programs, not least since there is emerging evidence that it can help improve both oral and written linguistic accuracy. It is now obvious that simplistic pedagogical proscriptions and prescriptions cannot reflect the reality of either the process or the acquisitional result of corrective feedback. As a result, this article proposes that teacher education programs provide teachers with a set of standards to serve as a foundation for reflection and teacher-led research on corrective feedback. Teachers must be guided by research while also determining how much of its conclusions apply to their individual classrooms. Teamwork, as a regulatory intervention by teachers, has a significant effect on effective learning and thus academic performance. Therefore, teachers' interventions produce considerable positive changes in the achievement of academic performance and thus effective learning but a lot more studies must carry on exploring other implication that may be taken int consideration when not only giving oral corrective feedback, but also written corrective feedback to students.

Another key aspect that is pinpointed as a positive influence on student learning is to involve teachers in the students' educational process through collaborative and cooperative learning. This finding goes hand in hand with Davidson (2014) findings showing that cooperative learning promotes interdependence through a combination of goals, tasks, resources, roles, and rewards, whereas collaborative learning promotes interdependence solely through goals, tasks, and, on sometimes, limited resources. Moreover, Brubacher et al. (1990) states that collaborative learning promotes

natural team building through cooperation; it does this by fostering dynamic and innovative thinking, valuing the contributions of others, and supporting members of the group when they make presentations to the class. Taking this into consideration another closer look should be on the process of developing teachers' skills in order to manage different crisis situation when dealing with different categories of students who may or may not be opened to working in groups.

#### 8. Conclusions

The main objective of the research is to highlight how teachers' learning interventions impact students learning and academic performance. Thus, teachers' interventions to influence learning led to the achievement of academic performance, i.e., effective learning.

The results of the study showed that corrective feedback significantly influences effective learning and academic performance. Teamwork, as a regulatory intervention by teachers, has a significant effect on effective learning and thus academic performance. Therefore, teachers' interventions produce considerable positive changes in the achievement of academic performance and thus effective learning.

One answer to the question of how students can learn effectively, which underlies the development of this paper, is to involve teachers in the students' educational process through collaborative and cooperative learning, a structure that includes teambased activities and corrective feedback based on the tasks at hand or completed by students, but also with the help of student-centred teaching and their developmental needs, a framework achieved through one-to-one interventions in university courses.

Scaling the literature available on this field several other factors arose such as: motivation because students who have positive relationships with their teachers have a high degree of motivation in learning (Yunus et al, 2011), teaching style of teachers and the idea of attachment because through a secure attachment, it involves the student in learning in a positive way (Kennedy & Kennedy, 2004). Research has shown that learning effectiveness and academic achievement are greatly influenced by relationships within the university space.

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# **Cooperative Learning of Italian Literature in the Post-Pandemic Era**

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Research article

# Cooperative Learning of Italian Literature in the Post-Pandemic Era

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#### **Abstract**

Keywords: cooperative learning; Italian literature; foreign language didactics; post pandemic university The paper analyses how cooperative learning can be used in teaching literature, specifically 19th century Italian literature. It presents the results of group activities carried out in October 2022 by students from the Faculty of Letters of the "Babes-Bolyai" University of Cluj-Napoca, with specialisation in Italian A and B. These are students attending the Italian Literature II course, taught in Italian. The participants returned to university (face-to-face didactic activities) only in the spring of 2022, in the second semester of their first year of study at a university level. They spent more than one year of high school during the Covid-19 pandemic (with online school). After having carried out a cooperative activity in the practical course that focused on the study of Italian literature, in groups of 3-4 students, they were given an anonymous questionnaire to express their views on cooperative learning of foreign languages and literatures. The questionnaire contained 7 questions in which the teacher wanted to check whether the students found cooperative learning more effective than the classical methods of learning foreign languages and literatures in the post-pandemic period and how the cooperative activity stimulated their curiosity for Italian literature, especially for reading the novel studied during the practical course.

#### Zusammenfasung

Schlüsselworte: kooperatives Lernen; italienische Literatur; Fremdsprachendidaktik; postpandemische Universität Der Beitrag analysiert, wie kooperatives Lernen im Literaturunterricht eingesetzt werden kann, insbesondere in der italienischen Literatur des 19. Jahrhunderts. Es werden die Ergebnisse von Gruppenaktivitäten vorgestellt, die im Oktober 2022 von Studenten der Fakultät für Philologie der "Babes-Bolyai"-Universität Cluj-Napoca mit Spezialisierung auf Italienisch A und B durchgeführt wurden. Es handelt sich um Studenten, die den Kurs Italienische Literatur II in italienischer Sprache besuchen. Die Teilnehmer kehrten erst im Frühjahr 2022, im zweiten Semester ihres ersten Studienjahres auf Universitätsebene, an die Universität zurück (Präsenzveranstaltungen). Während der Covid-19-Pandemie verbrachten sie mehr als ein Jahr in der Hochschule (mit Online-Schule). Nachdem sie in Gruppen von 3 bis 4 Studenten eine kooperative Aktivität im Praktikum durchgeführt hatten, die sich auf das Studium der italienischen Literatur konzentrierte, erhielten sie einen anonymen Fragebogen, um ihre Meinung zum kooperativen Lernen von Fremdsprachen und Literaturen zu äußern. Der Fragebogen enthielt 7 Fragen, mit denen die Lehrkraft überprüfen wollte, ob die Schüler das kooperative Lernen für effektiver hielten als die klassischen Methoden zum Erlernen von Fremdsprachen und Literaturen in der Zeit nach der Pandemie und inwieweit die kooperative Aktivität ihre Neugier auf die italienische Literatur anregte, insbesondere auf die Lektüre des Romans, der während des Praktikums untersucht wurde.

## 1. Introduction

One of the biggest challenges faced by literature teachers in university education after the online teaching experience caused by the Covid-19 pandemic was to return to normality, i.e. to return, from a didactic point of view, to a teaching situation in which students should be able to acquire through their training the professional and transversal competences provided by the study plans. In the case of the 19<sup>th</sup> century Italian literature, course taught at the Faculty of Letters (at the "Babeş-Bolyai" University in Cluj-Napoca, Romania), the general and specific objectives of the discipline had to be achieved through contents appropriate to the level of understanding of the new

generations of students, using classical and interactive teaching methods for the course activities and methods involving active participation and hermeneutic analysis on texts for the practical courses. So it is not only students in pre-university education who have had and need support to recover their learning losses afer online school (Muste 2020), but also students at a university level. Sometimes university teachers, as indeed all teachers, have been put in a position to go beyond their basic role and contribute to the recovery of the mental and physical health and social development of students. The disruption of education systems has resulted in large numbers of students

missing out on significant knowledge that they would have normally learned in the classroom, and this was and is still visible not only in younger children but also in those attending university. Nevertheless, university students in Italian at the Faculty of Letters in Cluj-Napoca were enthusiastic about returning to school, attended classes in large numbers and created strong bonds with their university teachers, who were perceived as reference points in contemporary society, not only professionally.

The paper addresses a number of issues related to the teaching of Italian language and literature to native-speakers Romanian and Hungarian students enrolled at the Faculty of Letters of "Babes-Bolyai" University of Cluj-Napoca, officially registered as students in Italian A and B (class 2021-2024). It is specifically focused on the practical course Italian Literature II, a compulsory course for all the undergraduates of the Italian section, taught in Italian, which discusses the classic 19<sup>th</sup> century Italian authors Giacomo Leopardi (1798-1837), Alessandro Manzoni (1785-1873), Carlo Collodi (1826-1890) - author of the famous novel Le avventure di Pinocchio, - and Giovanni Verga (1840-1922). Among the professional competences foreseen by the curriculum of this course we could list the analysis and presentation of literary phenomena in the context of Italian culture, the understanding of the relationships and influences between literary and critical categories, as well as the relationships between different the current methodologies, understanding the of the interdependencies between text and fictional world, the ability to analyse and distinguish the specific characteristics of the novel as a literary genre, to exemplify in detail the subjects dealt with and to associate them to the text, the ability to analyse a literary text using the concepts and methods of modern criticism; the ability to use critical language and concepts, but also to understand the applicability of interdisciplinary methods to literary criticism. Among the transversal competences we mention the use of the components of the field of language and literature in full accordance with professional ethics, relations; interpersonal communication and assumption of specific roles; organisation of an individual project of continuous training; fulfilment of training objectives through information activities, team projects and participation in institutional programmes personal professional of and development.

In the first weeks after returning to university, it was evident the need for a new idea of school, which could be able to respond to the changes brought by the Covid-19 pandemic, an education that would facilitate the cognitive development of university students, develop their intellectual capacities and help them to form themselves as individuals, perfectly integrated in a society that has profoundly changed in recent years. The young participants in this course were born between 2001 and 2003 and have attended two years of online schooling (final year of high school and first year of university).

The main problem encountered after returning at the university, in physical classrooms, was the students' difficulty in reading the compulsory bibliography of the course. One of the tools we used to remedy this problem was and is cooperative learning, an extremely useful learning modality after the long period of isolation imposed by the pandemic. It is well known that Cooperative Learning emphasizes the cooperative mode over the competitive and individualistic mode of learning. It is a method that seems to provide not only excellent academic results at university level (Millis 2010), but also necessary educational objectives in a post-pandemic society.

Cooperative Learning is a well known method in Romania, with different approaches, from *Learning* toghether (D.W. Johnson and F.P. Johnson 1991), to Student Team Learning (R. Slavin 1992), to Structural Approach of Cooperative Learning (Kagan 1994), to Group investigation (Shlomo Sharan 1994), to Complex Instruction (Cohen 1999), to Collaborative Approach present in the United Kingdom (Cowie, Smith, Boulton & Laver, 1994) and in Australia (Green & Reid, 1990). All Cooperative Learning theorists (D.W. Johnson, R.T. Johnson, Holubec, Kagan etc.) have stressed the importance of introducing cooperative learning in schools given the benefits of this type of learning: positive interpersonal interaction, face-to-face interaction, learning and use of social skills, individual and group responsibility, review and continuous improvement of teamwork (Comoglio & Cardoso, 1996: 24), etc. Mario Comoglio gives an essential definition of this type of learning: a "totality of classroom management techniques in which students work in small groups on a learning activity and receive evaluations based on the results obtained" (Comoglio & Cardoso, 1996: 24). In the specific case of the students in Italian from Cluj-Napoca, we were interested in helping them go through the bibliography of the practical course. First of all we wanted them to read the compulsory bibliography that would allow them to achieve the objectives of the subject. If the general objective of the course is to form an overview of the literary period studied, among the specific objectives we mention the illustration of the essential elements of Italian Romanticism and *Verismo* in relation to European literature; the illustration of the critical and literary reception of the authors studied, including their presence in Romanian culture; the identification of elements of intertextuality. Concerning the practical course, the objective is to critically interpret a literary text of great complexity, in Italian, on the basis of the concepts and methods studied.

The bibliography for the practical course contains the works of the authors studied (Giacomo Leopardi, Canti; Alessandro Manzoni, I Promessi sposi; Carlo Collodi, Pinocchio; Giuseppe Verga, I Malavoglia, as well as the novels Fantasticheria, Rosso Malpelo, Cavalleria rusticana). Auxiliary teaching tools to help the students were available in physical and digital format and made available by the teacher at the beginning of the course. These are mainly anthologies and histories of Italian literature (Santagata, Carotti, Casadei, & Tavoni, 2006; Guglielmino, & Grosser, 1995). A compulsory Ferroni, critical bibliography containing relevant works to the understanding of the literature studied (Blasucci, 2001; Luporini, 1980; Caretti, 1976; Asor Rosa, 1995; Russo, 1919) has also been provided, as well as an optional bibliography (Santagata, 1994; Dolfi, 2009; Raimondi, 1975; Marcheschi, 1990; Marcheschi, 2016; Luperini, 1981).

#### 2. Problem statement

Our study aims to investigate the effects of cooperative learning at the university level, with applications to the study of foreign languages and literatures, particularly 19th century Italian language and literature. As mentioned above, the challenges caused by the Covid-19 pandemic were numerous also in university learning, and one of the main problems after returning to university, face to face, was to find effective solutions for the cognitive development of university students after the long period of isolation, for the development of specific, professional and transversal skills, of the subjects taught, but also for the recovery of social skills.

# 3. Research hypothesis

The first research hypothesis of the study is: "Second year students, native speakers of Romanian or Hungarian, majoring in Italian Language and Literature, will have a positive attitude towards cooperative learning carried out in the Italian Literature II course, taught face-to-face in the academic year 2022/2023, exclusively in Italian, after more than one year of online school".

The second research hypothesis of the study is: "Cooperative learning will stimulate the curiosity of the same students to read the whole novel studied in class and to interpret it critically".

In the following we will show the sample of respondents of the present study. Even though the students enrolled in the Italian Language and Literature section in the academic year 2021/2022 were 39, the sample on which the study was carried out in the academic year 2022/2023 is a group of 16 students, students who participated in the practical Italian Literature II course when the questionnaire was distributed. The subject Italian Literature II involves 56 hours of study distributed in 28 hours of lecture and 28 hours of practical course per semester, i.e. two hours of lecture and two hours of practical course. Even if we will describe below also a series of general observations related to the present research carried out during the lecture, we underline that the research methodology used in the present study involves the description of a case study, a random encounter lasting two hours of practical course: in the first hour students carried out traditional seminar activities on the topic of the study, in the second hour cooperative activities. Afterwards they were given a questionnaire with open and closed questions, which will be discussed in the chapter Research findings.

The 16 students who attended the class were mostly born in 2002 (10 students), others were born in 2001 (6 students). They study Italian language and literature in combination with various other languages taught at the Faculty of Letters of "Babeş-Bolyai" University: with English (6), Norwegian (2), Hungarian (1), Korean (3), Finnish (1), Romanian (1), French (1), at beginner or advanced level. One of the participants was an Erasmus student from France who could not complete the questionnaire (she does not know Romanian, language of the questionnaire). So the number of valid questionnaires was 15. I remind readers that the students surveyed have only been back in college (physical classroom) during the spring of

2022, in the second semester of their first year of university, and spent more than a year of high school online because of the Covid-19 pandemic.

In the following we will present a sample of the content of the practical course. We will describe the content, the topic and the objectives of the practical course, in relation to the general objectives of Italian Literature II. We will also describe how the experiment was carried out.

At the first course meetings of Italian Literature II (October 2022) we discussed Verga's novel I Malavoglia (2 hours of class and 2 hours of practical course per week), focusing on the themes addressed by Giovanni Verga, in close connection with literary criticism, and we have particularly explored the defeat theme, present in the entire prose of the Italian author, a prose in which there are a considerable number of characters for whom "life is only an illusion, a disappointment, a defeat or death" (Asor Rosa, 1997: 495). We explained to those who attended the course the relationship between French Naturalism and Italian Verismo, Verga's life, author's ideological and cultural maturation, themes as the "law of the strongest" and of "the vanquished", pessimism, the "ideal of the oyster" and the "religion of the family" in the choral novel I Malavoglia. The students who attend the lecture and the practical course do not usually ask questions about the contents taught weekly or about the course bibliography. This silence can be interpreted as a lack of interest (yet they were in the room, attending the class, although attendance is not compulsory) or as an inability to elaborate on the content transmitted. Another explanation is their limited knowledge of Italian. At the professor's insistence they state that there are no questions because the course content is clear.

In the practical course we have taken up the information about Verga's short stories - in particular *Fantasticheria* considered as a poetic manifest, but also *Rosso Malpelo* in which we have dealt with the theme of the relationship between consciousness and action. We also discussed the mythical dimension of the exclusions and Verga's linguistic solutions, in particular the choral techniques. We checked in the practical course whether the novel *I Malavoglia*, analysed during the meeting, had been read by the students. We found out that the students which attended the lecture on 19 October 2022 (22 people) didn't read the novel analysed (with four exceptions: two students had read the novel in Italian long time

before and two had read it in an English translation). Students were kindly asked to read the novel in order to be able to understand the papers and speeches of their colleagues in the practical course. They were told that the Romanian translation of Verga's novel and short stories was available in the lending section of the Faculty of Letters library (Verga, 1955; Verga, 1983; Verga, 1964; Verga, 1959), in the same building where the practical course was held. The professor also showed them the websites where they could find the novel online (free on www.liberliber.it and in audiobook format on you tube).

However very few students started reading the novels in order to understand the lectures. Our teaching experience from previous years suggests that many students wait for the exam session in order to read the bibliography, but in this case the number of students that didn't read the novel was much higher than in previous years (before the online school). The teacher's major concern was that at this rate they would not be able to achieve the minimum performance standards and would not be able to take their exams.

To help them we used a group exercise on October 26<sup>th</sup>, 2022, which we carried out during a practical course meeting (a meeting which lasted two hours). During the first hour, students listened to two seminar presentations (individual researche works) in which two students spoke about: I Malavoglia, the objective and impersonal narrative. Verga's linguistic solutions - the chorality, and I Malavoglia: the denial of progress and history, the mythical dimension of the excluded. The presentations followed standard methods (oral presentation and power point with oral presentation). We observed a lack of interest of the students on collegues's analyse, fatigue, sleepiness, inability to interact with colleagues who prepared their research. There were no questions, neither for the colleagues who presented, nor for the professor who explained the different polemics related to Verga's style (Giacomo Devoto, Leo Spitzer and Asor Rosa's theses).

During the second hour the teacher proposed them a handout with an excerpt from chapter XI of the novel (Verga, 1985: 226-227). We propose here a small fragment of the excerpt in English translation: "But from that time forth he thought of nothing but the easy, wandering life other fellows led; and in the evening, not to hear all that idle chatter, he stood by the door with his shoulders against the wall, watching the

people pass, and meditating on his hard fate; at least one was resting against the fatigues of to-morrow, when must begin again over and over the same thing, like Cousin Mosca's ass, that when they brought the collar reached out his neck to have it put on. "We're all asses!" he muttered; "that's what we are—asses! beasts of burden." (...)"You are afraid of work, are afraid of poverty; I, who have neither your youth nor your strength, fear them not. 'The good pilot is known in the storm.' You are afraid of having to work for your bread, that is what ails you! When my father, rest his soul, left me the Provvidenza and five mouths to feed, I was younger than you are now, and I was not afraid; and I have done my duty without grumbling; and I do it still, and I pray God to help me to do it as long as I live, as your father did, and your brother Luca, blessed be their souls! who feared not to go and die where duty led them". (Giovanni Verga, House by the-medlartree, translated by Mary A. Craig 1890).

The teacher explained the students that the fragment represents an exchange between two points of view, the points of view of two heroes defeated by the struggle for progress, who nevertheless enter the world of myth (Asor Rosa, 1997: 549). We also clarified Vitilio Masiello's vision of the novel (1987: 44-45). We delineated the struggle for survival which is a universal law in the novel and for the Malavoglia family, a family who has different ideas and feelings from those of the dominant community, even if their perspective is that of the "vanquished", of a bunch of losers, historically and ontologically. We focused on the literary criticism where one can understand that these characters help the reader to go further, to understand, through the myth of these defeated heroes, "the whole tragedy of the historical process and of human development" (Masiello, 1987: 44-45).

In the cooperative learning exercise, the 16 students who attended the seminar were divided into groups of 3-4 and the teacher assigned them the task: some groups were chosen to support the point of view of master 'Ntoni, the patriarch of the family and his values, as shown in the fragment read in class, others to support the point of view of the young nephew 'Ntoni.

The working atmosphere was radically different during the second hour, the students were animated, they discussed, they searched for unknown words in Italian with the help of online resources, they discussed among themselves with great passion and interest. One by one, through their research work and

their presentations, the two portraits of the characters took shape. The students delegated a representative of their own free will to present the results of the group's research, but they supported it by respectfully adding some essential considerations. They also collaborated in presenting the characters and the whole class benefited from the work of their colleagues.

Padron 'Ntoni (or master 'Ntoni) appeared as a supporter of patriarchal values, the students noted that he speaks a popular language, that he resorts to proverbs and compares human life to that of animals, that he is representative of an immobile, repetitive culture, that he has a clear worldview: for him the social condition cannot be changed. The economic and symbolic centre of the patriarchal family is the home, and the family's mission is not to bring about improvements, eventual progress, but to protect the family from accidents, illness, social events that could destroy it. Master 'Ntoni' worldview is based on the ethic of home, work and duty that guarantees the survival and respect of the community, rather than on self-interest.

The groups that have dealt with padron 'Ntoni's grandson, who goes by the same name, 'Ntoni, have noted that he refuses to be compared to a pack donkey. He is the only one in his family who knows the world, who travelled outside the community of the village, he is different from his family, but lost between two worlds, the patriarchal and the modern. He is a wide-eyed dreamer who wants to become rich to help his family. Even though the family ethic survives in him, he denies his grandfather's principles, his home ethic, the morality of work and his sense of duty.

To draw conclusions the teacher asked the students to sit in a circle in the classroom and choose, from the characters analysed, the one that comes closest to their own values. There were three groups of values: patriarchal, proactive, neither. Each students, individually, presented his own views. The class was divided between supporters of 'Ntoni and those who considered both views to be exaggerated, none of the students agreed with the patriarcal vision of master 'Ntoni. The students thus expressed their personal opinion on the most important themes in Verga's prose: work ethic, family theme, etc. They observed that both characters are to blame for their own destiny, but that basically both are victims of economic ignorance: master 'Ntoni refuses modern culture being anchored in the patriarchal one, while 'Ntoni is rebellious and unprejudiced, but does not understand that the rich, too, conquer and preserve their lifestyle through work and effort (Santagata, 2006: 284).

At the end students were given an anonymous questionnaire to express their views towards cooperative learning.

# 4. Research findings

The questionnaire included an initial part in which it was explained to the students, simplifying the problem, that "although it is known under different names (cooperative learning, collective learning, community learning, mutual learning, team learning, group study, circulated study, etc.), collaborative learning implies cooperation (working together with someone), collaboration, i.e. active participation in carrying out an action, based on the exchange of proposals, ideas". The questionnaire included 7 open and closed questions. As we said before, the number of valid respondents was 15.

- 1. "Have you ever worked in a team with other colleagues to achieve teaching objectives? At what level? Middle school, high school, university." To this question, the majority of respondents (12) stated that they had worked in teams with other colleagues to achieve teaching objectives in middle and high school (80% of the respondents). It confirms that the cooperative learning is well known in Romania. The others (3 persons), having language combinations with Hungarian, French and English, stated that they were not familiar with this type of learning.
- 2. "Have you ever worked in teams with other colleagues at university to learn languages?" To this question a total of 9 respondents (60%) stated that cooperative learning was used at university for learning foreign languages, while 6 persons (40%) stated that they did not use this type of learning. Cooperative learning is widely used in the Faculty of Letters for foreign language learning, we tend to believe that the 40% of respondents who claim that this learning has not been used does not adequately reflect the reality, as we will see from the analysis of the following question
- 3. "Have you carried out group projects at university to learn Italian? If yes, in which subject?" To this question 10 students (67%) answered "no" and only 5 students (33%) acknowledged cooperative learning: 2 in culture and civilisation (13%) and 2 in Italian literature I (13%). From our direct experience and knowledge, cooperative learning methods were used in the Italian department for the generation of students who responded to our questionnaire, both in the culture and civilization course (first year, attended online) and in the Italian language and literature I course (first year of university, face-to-face, with physical presence). However students did not identify the method of

cooperative learning only from the teaching act. In order to understand what type of method the teacher applies, the student has to be explained that they are participating in a group project. We think this could be a valid explanation for the results of the questionnaire.

- 4. "Do you think this type of learning is more effective than traditional methods for studying Italian?" The majority (13), i.e. 86%, considered it a more efficient method, compared to 14% who did not. This result coincides with that of other studies dedicated to cooperative learning.
- 5. At the semi-opened question "If yes, how has cooperative learning helped you to acquire specific linguistic, literary, cultural skills?" the students could chose between a limited number of answers (It helped you to learn more deeply. It cultivated relationships based on mutual respect. It forced you to put more effort into the learning process. It developed your communication skills. You have developed critical thinking. You have socialised. You have exchanged opinions. You have learned other opinions. You developed self-confidence.), but also to supplement the information (with **Others**). In this case 61% of students indicated that it helped them to learn more deeply, 53% considered that it cultivated relationships based on mutual respect, and forced them to put more effort into the learning process, 69% considered that cooperative learning developed their communication skills, 62% believe that collaborative learning developed their critical thinking, 84% are satisfied that they socialised, 100% believe that the exchange of opinions helped them in acquiring coursespecific skills, 84% believe that it helped them by making other opinions their own, and 61% of respondents believe that it developed their self-confidence. Some of the respondents wanted to specify at this point that cooperative learning helped them in acquiring linguistic, literary and cultural competences by "increasing attention, willingness to engage, high dynamics, accumulating and memorising notions much faster", another believes that it is "much easier to understand a concept/some phrases, words, if they are explained to them in a non-academic context", and another believes that "cooperative learning helped me in acquiring these competences by the fact that it is a dynamic process and I can retain aspects more easily".

# 6. "Do you think it would be necessary, from your perspective, to use cooperative learning more often in acquiring Italian language skills?"

At this question 13 respondents answered yes (87%), one answered that she, personally, doesn't think it is necessary and one of them answered that it is not necessary, but she would like to use cooperative learning more often because it is a more fun way of learning than the classical one. The answers to questions 5, 6 and 7 confirm the first hypothesis of our

study, i.e. students' positive attitudes towards cooperative learning in the post-pandemic period.

# 7. "How did the exercise in class stimulate your curiosity about Verga's novel?"

In the last item, number 7, students were asked to indicate how the exercise they did in class stimulated their curiosity for the novel *I Malavoglia* by Giovanni Verga. We numbered the questionnaires from 1 to 16. Students gave a wide variety of answers showing their positive attitude towards cooperative learning, emphasizing once again that their responses confirm the first hypothesis of our study. In order to see if also the second hypothesis of the study has been confirmed, we believe it is necessary to reproduce the students' responses.

Respondent 1: "It made me more interested in the subject, I could understand it better and I want to know more".

Respondent 2: "It made me understand the novel better".

Respondent 3: "The exercise stimulated my curiosity, because I heard different opinions that I want to be able to understand".

Respondent 4: "It made me want to find out why my colleagues who have already gone through the novel had the opinions they did".

Respondent 5: "A lot of the information shared in class about Verga's novel was already familiar to me. But it was interesting to hear the (somewhat unpredictable) perspectives of others".

Respondent 6: "It made me curious".

Respondent 7: "This exercise surprised me in a pleasant way because the group discussion of ideas from Verga's excerpt was diverse, requiring more detailed engagement".

Respondent 8: "This exercise made me realise that there are several points of view, which now makes me see the novel from more perspectives".

Respondent 9: "I saw different perspectives which deepened the characters".

Respondent 10: "I saw a different perspective".

Respondent 11: "I heard more opinions and points of view, and it would help me in the future to do exercises like this in order to develop critical thinking".

Respondent 12: "By challenging the desire to understand more deeply the debated topics".

Respondent 13: "Because communicating and debating ideas helps us to be more active, to discover more points of view and to accept or contradict them. (It keeps us motivated!)".

Respondent 14: "The exchange of opinions is very effective as it maintains afloat all the students, everyone becomes curious about each other's opinions, which makes you want to know more about Verga's works and his way of writing".

Respondent 15: "It was more interactive, and this way helped me to concentrate better".

Respondent 16: (Erasmus student from France): "Working in a team allows the exchange of ideas and therefore allows the discovery of different points of view. Expressing one's own opinion on a topic related to Verga's novel allows one to adopt a different way of understanding Verga and to have a greater interest".

As we can see, the students said the cooperative learning helped them to be more interested in the subject, to better understand it, to want to know more, to recognise different opinions, to live a pleasant learning experience because of the fact that the group discussion of ideas from Verga's excerpt was diverse, requiring more detailed engagement. Most of them pointed out the several points of view on the characters and some of them said such exercises would help them to develop critical thinking. They stated that communicating and debating ideas helped them to be more active, more motivated and more concentrated. Only one of them wanted to know more about Verga's works and his way of writing.

Regarding the second hypothesis of our study, the students stressed the fact that the more interactive inclass exercise stimulated their curiosity for the novel. They also said that they understood the subject better, without talking about its critically interpretation. We could conclude that the exercise only partly oriented them towards reading the whole novel and critically interpreting it. However, the cooperative exercise seems to have helped them to learn better and also to respect different opinions and points of view. If we discuss here the results of the proposed exercise from the perspective of the so-called *Collaborative* Approach - which emphasizes "the importance of context, interaction and group communication, highlighting the importance of the group and group cooperation for an education for peace, for the discovery of interdependence" (Comoglio & Cardoso, 1996: 44) – we must say that the effective collaboration between students organized in small groups could have helped them to better learn, but also to change their social and cultural attitudes. In the post-pandemic society, the faculty is a context that guides the interpretation, it is not just a place where some knowledge is transmitted. The classroom experiment was a way for students to learn new informations by engaging in the learning process.

After receiving the tasks, and after analysing the characters' world view, the students had opportunity to bring up their own life experiences and world view that interacted with the new information in order to prepare the ground for a larger experience that would become the basis for a future learning (Reid, Forrestal & Cook, 1989: 9-11). The learning context, created through cooperation, developed the students' confidence, allowed them to express themselves through the language at their disposal, accustomed them not to be afraid of criticism, accustomed them to choose a speech appropriate to the context. The students' answers showed that for them the class was a context in which they got involved, they explored the new knowledge, then, with the help of the foreign language teacher (Mezzadri 2003), they were forced to clarify, reorganize the information, transform it for a deeper understanding of the theme. Through the oral presentation of the results of the group research and the subsequent decomposition of the group and its recomposition in different ways, the students were charged with a certain tension that led to a deeper understanding of the subject. The answers to the questionnaire at the end of the exercise allowed the students to reflect on the results achieved, trying to discover together, students and teachers, which is the ideal form not only to transmit knowledge, but also to understand surrounding critically the world (Comoglio & Cardoso, 1996: 47-49).

## 5. Conclusions

Aware of the fact that our research took into account a very small number of respondents, students of the Italian section of the Faculty of Letters of the "Babeș-Bolyai" University in Cluj-Napoca, a section that has only 15 budgeted places for the A specialization, we notice however, in this case, the overwhelming number of students who impressed by the effects of cooperative learning of Italian literature. They were able to learn a content far away in time (the 19<sup>th</sup> century literature) and far away in space (Italy). The cooperative approach brought this content close to the 2022 students, who discovered the modernity of the author studied. The students had a positive attitude towards cooperative learning carried out in the Italian Literature II practical course, so the first research hypothesis formulated at the beginning turned out to be true.

Regarding the second hypothesis of our study, even if the results obtained do not allow us to know precisely if the students will read the novel in its entirety and interpret it critically, we can still affirm that this exercise will help them achieve the specific objectives of the subject. The students seem to be determined, at least if we take into account the results of the research, to read the novel and, we hope, the literary criticism as well. The critical interpretation of a literary text of great complexity, in Italian, based on the concepts and methods studied, is the objective of the practical course, a place where the students must develop their critical thinking with the help of didactic tools. The reason why we proposed this exercise was to help students reach the minimum performance standards necessary to pass this exam, to offer them a modern method for learning the main concepts discussed in the course, to create conditions for them to recognize them and define them correctly. The class exercise brought into discussion some of the themes and forms present in Giovanni Verga's prose, from the relationship between nature and society, to the theme of progress and the "vanquished", from myth to the theme of the family or to veristic prospectives.

Given the initial enthusiasm of the students, which is quite normal in front of new experiences, it would be perhaps interesting to regularly propose cooperative learning exercises in the practical courses and then analyze, at the end of the semester, also the exam results of this group of students. We could discuss such results in a future study in which it would be useful to track whether the students really read the main works analyzed, whether they really acquired, as a result of cooperative learning, an overall view of the field; if they are able to analyze the texts studied in correlation with the theoretical concepts and with the historicalcultural context, if their linguistic and communication competence, their logical-critical capacity, elaboration and interpretation improves thanks to collaborative learning. We could still conclude by underlining that following our study, despite the limits derived from the number of respondents, cooperative learning continues to represent a current study method effective also for university education, as evidenced by more extensive studies (Cooper & Mueck, 1989; Cooper, Robinson, & Ball, 2003; Johnson, Johnson, & Smith, 1991; Millis, B.J., 2002, 2005, 2006; Millis & Cottell, 1998; Albulescu & Catalano, 2022). Even if we discussed only Italian literature, cooperative learning is ideal for teaching all kind of literatures (national international literatures), precisely because of the deep transformations that contemporary society experienced in the post-pandemic period. Because of the global challenges of the contemporary world, the

method continues to manifest its most important characteristics that have made it (and continues to make it) one of the most effective didactic methods, through the positive interdependence and communicative competence that is established between group members, through individual and group assessment and through heterogeneous groups.

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# The Role of Metacognition in Strategic Learning. Critical Analysis and Exemplifications

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Research article

# The Role of Metacognition in Strategic Learning. Critical Analysis and Exemplifications

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#### **Abstract**

Keywords:
"thinking about thinking";
metacognition; learning; strategy;
strategic learning

Metacognition is often referred to as "thinking about thinking". It is a regulatory system that helps people understand and control their cognitive performance. Metacognition allows students to take charge of their own learning. It involves awareness of how they learn, an assessment of their learning needs, generating strategies to meet those needs, and then implementing the strategies (Hacker, 2009). Strategic learning represents that type of learning in which the learner consciously participates in the act of learning, is responsible for the learning process, and controls his efforts in the direction of building, using, and promoting particular, specific cognitive strategies, techniques, and tools, gains independence, learns how to learn independently and effectively.

# Zusammenfasung

Schlüsselworte: Nachdenken übers Nachdenken"; Metakognition; Lernen, Strategie; strategisches Lernen Die Metakognition wird häufig als das "Nachdenken übers Nachdenken" erwähnt. Sie ist ein Regulierungssystem, das den Menschen hilft, ihre eigene Leistung zu verstehen und zu kontrollieren. Metakognition ermöglicht es den Studenten, sich mit ihrem eigenen Lernen zu beschäftigen. Es handelt sich darum, dass die Studenten sich ihres Lernens bewusst sind, ihre Lernbedürfnisse einschätzen und Strategien generieren, um diese Bedürfnisse zu erfüllen und die Strategien in die Tat umzusetzen (Hacker, 2009). Strategisches Lernen stellt eine Art des Lernens dar, bei der der Lernende bewusst am Akt des Lernens teilnimmt, für seinen Lernprozess verantwortlich ist, seine Bemühungen zur Verwendung und Förderung von bestimmten kognitiven Werkzeugen überprüft und zum Schluss lernt, wie er selbständig und effektiv lernen soll.

# 1. Introduction

"Metacognition" is a concept that has been used to refer to a variety of epistemological processes. Metacognition essentially means cognition about cognition; that is, it refers to second-order cognitions: thoughts about thoughts, knowledge about knowledge, or reflections about actions. So if cognition involves perceiving, understanding, remembering, and so forth, metacognition involves thinking about one's own perception, understanding, remembering, etc. These various cognitions about cognitions can be labeled as "metaperception", "metacomprehension" and "metamemory" with "metacognition" remaining the superordinate term. (Papaleontiou- Louca, 2003)

Flavell (1978) referred to it as "knowledge that takes as its object or regulates any aspect of any cognitive effort" (p. 8). Moore (1982) defines it as "an individual's knowledge about various aspects of thinking" and it has also been described as "the abilities of individuals to adjust their cognitive activity

in order to promote more effective comprehension" (Gavelek & Raphael, 1985, pp. 22-23).

Moreover, a definition of "metacognition" according to Paris & Winograd (1990) "captures two essential features ...: self-appraisal and selfmanagement of cognition" (p. 17). Self-appraisals are people's reflections about their knowledge states and abilities, and their affective states concerning their knowledge, abilities, motivation, and characteristics as learners. Such reflections answer questions about 'what you know, how you think, and when and why to apply knowledge strategies" (Paris & Winograd, 1990, p. 17). Self-management refers to "metacognition in action", that is mental processes that help to "orchestrate aspects of problem-solving" including "the plans that learners make before tackling a task", "the adjustments they make as they work", and "the revisions they make afterward" (p. 18). It is important to note, here, that "theoreticians seem unanimous – the most effective learners are self-regulating" (Butler &

Winne, 1995, p. 245). Key to effective self-regulation is accurate self-assessment of what is known or not known (Schoenfeld, 1987). Only when students know the state of their knowledge can they effectively self-direct learning to the unknown.

A regulation system helps people understand and control their cognitive performance. Metacognition allows students to take care of their learning. It involves awareness of how they learn, an assessment of their learning needs, generating strategies to meet those needs, and then implementing strategies (Hacker, 2009). Metacognition consists of two complementary processes: 1) knowledge about knowledge and 2) the regulation of knowledge.

- **1.** *Knowledge about knowledge* has three components:
- a) knowledge of the factors that influence a person's performance;
- b) knowledge of the different types of strategies used for learning;
- c) knowing which strategy to use for a specific learning situation.
- **2.** The regulation of knowledge involves setting objectives and planning; monitoring and controlling learning; evaluating one's adjustment (evaluation of results and strategies used).

Considering the peculiarities of strategic learning highlighted in the specialized literature and analyzing the approaches and definitions for strategic learning, I have elaborated the following own/working definition:

Strategic learning is the type of learning in which the learner consciously participates in the act of learning, is responsible for the learning process, and controls his efforts towards building, using, and promoting particular, specific strategies, techniques, and cognitive tools, gains independence, learns how to learn independently and effectively.

"Strategic" students – have a set of thinking and learning strategies that they use competently, to reflect on and control their own learning process, as well as to acquire new knowledge (Fennimore & Tinzmann, 1990 apud Popovici Borzea, 2017, p. 158).

# 2. What is the role of metacognition in strategic learning?

"A metacognitive approach to instruction can help students take control of their learning, define their own learning goals, and monitor their progress in achieving them." (Bransford et al., 2000, p. 18)

When students use metacognitive strategies, they can take a step back to observe their way of thinking and to reflect on the learning process. They are also active participants in learning (Kohen & Kramarski, 2018). Students who use metacognitive strategies know themselves and know exactly their learning style, strengths, and weak points, beliefs and motivation, level of knowledge of different strategies, and the ability to apply and transfer these strategies and skills. They plan, monitor, and evaluate their processes and summarize the lessons of learning and reflect on learning.

Metacognitive skills are learning skills that benefit learners and help them develop into a wide range of domains, including cognitive and affective. Students with metacognitive skills learn better. Metacognition comes into play when learners engage in independent learning, self-regulating learning, reflective learning, understanding, problem-saving, communication, and collaboration. Metacognition develops critical thinking skills. Good critical thinkers engage in several metacognitive activities, especially highlevel planning, and high-level evaluation strategies (Ku & Ho, 2010). Metacognition is positively linked to self-regulating, independent learning, learning, and self-management. Metacognitive regulation essential for self-regulating learning and relates to student performance to a large extent.

In general, metacognitive regulation promotes academic success, especially in higher education since both organizational structures and academic tasks at this educational level underline self-management and independent learning (Backer et. al., 2015).

Metacognition and metacognitive learning promote communication and collaboration skills. Students are asked to verbalize their way of thinking and to discuss in pairs or groups the formation of metacognitive skills. Students are recommended to work in a team; and they must be able to express or present their way of thinking, opinions, and arguments. The training helps to facilitate both collaboration and communication skills.

When using this approach, they could use such questions: "What is the problem that needs to be solved?" "How should I solve the problem?" "How well am I doing?" "How well did I do?" "How can I do better next time?"

Kamei (2021) develops a holistic framework for learning. It describes learning as a continuous cycle that involves setting your own goals for the study, drawing up the study plan following the set objectives, implementing the study plan, and then revising the plan. After which the process resumes. This part of the learning framework is known in the scientific literature as the Metacognitive Cycle (Tanner, 2012; Zimmerman, 2002).

(Tanner, 2012) published an article on metacognition in which she offers several strategies to help students monitor their learning. She provides a list of separate questions to be given to students as a guide to planning, monitoring, and evaluating their training.

Table 1.: Questions of learning planning, monitoring, and evaluation (translated and adapted after Tanner, 2012)

Planning	Monitoring	Assessment
What strategies will I use to study (eg: study groups, problem study, making graphs, hands-on experiments), or do I spend many hours studying and doing recaps?  How long do I intend to study? How much time do I need to devote to study?  Which aspects of the study material should I emphasize more and which less, considering my current comprehension capacity?	To what extent am I organized in studying the materials for the exam?  To what extent do I make use of all the available supports in my study?  Do I have problems motivating myself?  What ambiguities have I clarified? How did I go about clarifying them?  What uncertainties do I still have and how will I clarify them?	What was effective in my training and what should I capitalize on it next time?  What went wrong, what should I change?  Which questions did I not answer correctly? Why? How does my answer compare to the suggested answer?  What uncertainties do I still need to clarify?

These questions favor the engagement of students in such processes of self-reflection, which will allow them to become self-sustaining learners. Essentially, these questions provide students with a roadmap for organizing and monitoring their learning.

Strategic learning begins with the formulation of learning goals (Kamei, 2021, p. 14).

In formulating the learning objectives, students will be able to use the SMART method (Lawlor, 2012), as follows:

- (S) Specific: Is your objective clearly defined?
- (M) Measurable: Can you measure the criteria to track your progress?
  - (A) Achievable: Can you achieve your goal?
- (R) Relevant: Is the goal aligned with what you want?

(T) Framed in time: Is there a reasonable, defined time for achieving/measuring this goal?

For example, many of the students have quite high and ambitious goals (such as becoming a doctor or lawyer, winning a gold medalist in the Olympics, or having their society) that may or may not be achievable in a short period. However, it is recommended that SMART goals be complemented by aspirational goals. Thus, SMART goals can be the steps towards achieving aspirational goals and help to monitor the achieved progress. Whether they are SMART goals or aspirational, effective strategic learning is also based on the permanent rethinking and reformulation of learning objectives (Kamei, 2021, p. 27).

The effective use of strategies can increase motivation, perseverance, and self-esteem and consequently promote academic success and independent learning.

Students who use metacognitive strategies can find solutions even for the moments when their demotivation occurs in learning. A useful example of this is the "5 why?" model. (Kamei, 2021, p. 97). So, students can formulate solutions for certain demotivating situations they face. Such a situation would be: "I feel demotivated to study because I don't like the subject very much."

- 1. Why don't you like it very much?
- a. I don't like it too much because I'm not doing well.
  - 2. Why don't you do well in this?
- a. I'm not doing well because I don't spend enough time studying.
  - 3. Why don't you spend time studying?
- a. I don't spend enough time studying because I can't concentrate.
  - 4. Why are you not able to concentrate?
- a. I can't concentrate because I'm unhappy with the fact that I can't sit with my friends and talk to them about my problems.
  - 5. Why can't you see your friends?
- a. I prioritized the study instead of going out with friends because I'm not doing well in class. But maybe it would be better to take a few breaks from classes planned for study to meet with my friends. That will make me more effective when I study (Kamei, 2021, pp. 96-97).

A useful technique for self-motivation and self-discipline is in Kamei's view (2021) to create types of "If-Then" statements. "If" is a goal that is intended to be achieved (such as solving five exercises within an hour). "Then" is what you can do if you finish successfully (I'll go for a walk with friends.)

(Kamei, 2021, pp. 124-125) proposes for the evaluation of how it was learned, the use of the model "The 3 R's" – Recapitulation, Reflection, and Review.

**Recap**: What happened when you implemented a different way of learning?

**Reflection/ Self-Reflection:** Considering my observations about my learning, are there any aspects of my learning plan that I should return to?

**Review**: How should I best revise my learning plan considering personal reflections on how I learned? (If the student has achieved the learning plan, he can reflect on what he could do better to become an even better learner).

For the metacognitive system to work, it is necessary for students to have adequate information about both general and specific strategies, as well as why, when, where, and how to use these strategies.

Phrases like *learning strategies*, *teaching strategies*, *and strategic learning* are widely used to suggest that students can choose specific procedures to accomplish specific tasks. Learning metacognitive strategies is useful because:

- Strategies help students to start and understand the learning process.
- Strategies help students overcome their areas of weakness and perform at the level at which they are capable.
- The strategies promote flexible thinking and teach students the importance of addressing different tasks.
- Strategies encourage and facilitate independent learning.

Learning strategists are important in helping students capitalize on their skills.

# 3. Why should we teach learning strategies?

As Dunlosky states, "Teaching students how to learn is as important as teaching the content because acquiring both the right learning strategies and the foundational knowledge is important—if not essential—to promoting lifelong learning" (2013, pp. 12–13).

An understanding of how metacognition develops, and what we can expect children of different ages to be capable of, necessarily underpins approaches to teaching metacognition. In principle, the earlier you introduce metacognition to children in age-appropriate ways, the more time learners have to develop and deepen their knowledge, skills, and experiences. (Smith-Ferguson, 2020).

As Kuhn (2000) notes, the development of metacognition is about gradually increasing the use of adequate strategies, "with the inhibition of inferior strategies as important an achievement as the acquisition of superior ones" (p. 179).

From an educational perspective, research suggests the most important determinant of metacognitive ability through the early schooling years is explicit instruction and support for the

development of metacognitive skills (Dimmitt & McCormick, 2012).

(Whitebread & Neale, 2020) suggests that children preschool-aged should be offered opportunities to explore metacognitive strategy use in a wide-array of contexts: with parents, teachers, and peers, including through both play-based learning and ways that encompass explicit dialogue and reflection (Whitebread & Neale, 2020). Outside of formal learning contexts, the development of metacognition in young children can also have important positive effects on behavior, motivation, and emotion, establishing the basis of self-regulation (Bronson, 2000).

Learning strategies can only be successful when students are willing and able to generate strategies, capitalize on them, and take responsibility for the strategies learned. Students need to understand how they learn and how specific strategies can help them improve the accuracy and effectiveness of their learning. The willingness of students to apply strategies for their work in the classroom and at home, therefore, depends on the extent to which they recognize the specific value of these strategies. Students need to know their learning profiles and needs as learners and recognize how and why strategies can help them achieve success in learning. Therefore, an essential ingredient for learning successful strategies is the awareness of each student of the strengths and weaknesses as well as the strategies that are most suitable for their learning profile.

Although students obtain greater accuracy over time by using specific strategies, they can initially sacrifice the speed and efficiency of the learning activity. However, the systematic use of strategies ensures that students are becoming more and more efficient, and their working time is reduced. The use of strategies can lead to a written product that is much more organized and that requires less drafting. As a result, less time is ultimately required for the written work of students, and the results materialize into better-written products and higher grades.

# **4.** What could be the benefits of using metacognitive strategies for students and teachers?

Metacognitive strategies facilitate the process of learning how to learn.

Students can successfully use a series of metacognitive strategies:

- 1. Knowing the limits of one's memory capacity and developing an external means of support.
- 2. Adopt and adapt strategies according to(s) the learning situation, self-monitoring learning strategies.
- 3. Identifying how to understand what they have read and then reviewing the approach, changing the strategies used, if they have proved ineffective.
- 4. Making the selection of the information necessary for a better understanding of the material.
- 5. Repetition of skill-acquired abilities, to obtain competence.
- 6. The periodic application of self-testing, and self-evaluation to see how well they have learned and fixed what they have learned.

To develop the metacognition of their students, the teacher can address the following metacognitive strategies:

- 1. Questioning. The questions allow students to reflect on their learning processes and strategies.
- 2. The use of self-reflection. Encouraging students to critically analyze their assumptions as well as how they might have influenced the learning process.
- 3. Encouraging self-riding. They are asked to generate their questions and develop answers to increase understanding. The questions may be aimed at achieving personal goals.
- 4. Promoting autonomous learning. Teaching appropriate metacognitive strategies fosters autonomous learning.
- 5. Facilitating access to mentors. Many people learn best by interacting with peers who are somewhat more advanced.
- 6. Solving problems in the team. Solving problems through cooperation can help improve metacognitive strategies, thus facilitating mutual and collaborative learning.
- 7. Thinking out loud. It is useful for students to be taught how to think aloud and report their thoughts while performing a difficult task.
- 8. Self-exploration. Self-explanations in writing and orally can help students more easily understand a difficult topic.
- 9. The possibility of making errors. The possibility of making errors while they are formed

stimulates the students to reflect on the causes that caused their errors.

## 5. Conclusions

Before class, teachers can prompt students to revisit what they do and do not know about the topic, activating their prior knowledge with questions. During class, teachers can prompt and probe them, to monitor their learning and progress. In the learning process, that is, when we use metacognition, the results take a back seat in favor of the analysis of the process of obtaining the result. Thus, by dialoguing with the student on how he worked, what tasks he proposed, how he found and used resources, whom he collaborated with, what strategy he approached, how he felt, what he would change in the way he works, we manage to achieve and other training objectives, much more important for him in the learning process, such as self-questioning, self-knowledge, development of new strategies, multiplication of learning learning resources, socialization, development of reflective communication skills, modeling of an autonomous personality (Răduț-Taciu, Bocoș, & Chiș, 2015, p. 128). Metacognition has an important role and contributes to the development of self-assessment.

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Mapping the Needs? Analysis of the Emotional and Pedagogical Abilities for New Teachers in their First Year of Teaching

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Research article

#### Mapping the Needs? Analysis of the Emotional and Pedagogical Abilities for New Teachers in their First Year of Teaching

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#### **Abstract**

Keywords: In-service Teacher Training; Professional Development of Teachers; SEL (social emotional learning); 21st Century Skills; First Year Teachers; Training Program; Resilience; Wellbeing In their first year of teaching, teachers should develop mental and emotional resilience as they develop their teaching skills, strengthen their resilience, and develop their professional identity alongside social-emotional competencies that can increase teachers' resilience and enhance their personal and professional development. Teachers can be resilient to a certain degree, but this can vary depending on the time, situation, or location where they teach, they also may experience times in their careers when they cannot control some changes, but others may be beyond their control especially due to the recent global pandemic that increased the understanding of the need to strengthen emotional resilience. For this, it's necessary to map and analyse the components that build the emotional resilience of the new teachers in their first year at school. This article presents doctoral research results focusing on mapping primary competencies and needs in the first year of teaching so that teachers can cope with daily challenges. The article emphasizes the importance of these skills. This article presents doctoral research results focusing on mapping primary competencies and needs in the first year of teaching so that teachers can cope with daily challenges. New teachers need to develop SEL and resilience skills in service. The article emphasizes the importance of these skills. Based on the results of a focus group conducted on new teachers at the end of their first year of teaching, we examined the primary needs that affect emotional resilience and wellbeing, which are key for integrating new teachers into the classroom.

#### Zusammenfasung

Schlüsselworte:
Lehrerfortbildung; Berufliche
Weiterentwicklung von
Lehrkräften; SEL (sozialemotionales Lernen);
Fähigkeiten des 21.
Jahrhunderts; Lehrer im ersten
Jahr; Trainingsprogramm;
Widerstandsfähigkeit;
Wohlbefinden

In ihrem ersten Lehrjahr sollten Lehrkräfte mentale und emotionale Resilienz entwickeln, während sie ihre Lehrfähigkeiten entwickeln, ihre Resilienz stärken und ihre berufliche Identität neben sozial-emotionalen Kompetenzen entwickeln, die die Resilienz der Lehrkräfte erhöhen und ihre persönliche und berufliche Entwicklung fördern können. Lehrer können bis zu einem gewissen Grad belastbar sein, aber dies kann je nach Zeit, Situation oder Ort, an dem sie unterrichten, variieren. Sie können auch Zeiten in ihrer Karriere erleben, in denen sie einige Veränderungen nicht kontrollieren können, andere jedoch möglicherweise außerhalb ihrer Kontrolle liegen auf die jüngste globale Pandemie, die das Verständnis für die Notwendigkeit verstärkt hat, die emotionale Widerstandsfähigkeit zu stärken. Dazu ist es notwendig, die Komponenten abzubilden und zu analysieren, die die emotionale Widerstandsfähigkeit der neuen Lehrer im ersten Schuljahr aufbauen. Dieser Artikel stellt Doktorarbeitsergebnisse vor, die sich darauf konzentrieren, primäre Kompetenzen und Bedürfnisse im ersten Lehrjahr abzubilden, damit Lehrkräfte die täglichen Herausforderungen bewältigen können. Der Artikel betont die Bedeutung dieser Fähigkeiten. Dieser Artikel stellt Doktorarbeitsergebnisse vor, die sich darauf konzentrieren, primäre Kompetenzen und Bedürfnisse im ersten Lehrjahr abzubilden, damit Lehrkräfte die täglichen Herausforderungen bewältigen können. Neue Lehrer müssen SEL- und Resilienzfähigkeiten im Dienst entwickeln. Der Artikel betont die Bedeutung dieser Fähigkeiten. Basierend auf den Ergebnissen einer Fokusgruppe, die mit neuen Lehrern am Ende ihres ersten Lehrjahres durchgeführt wurde, untersuchten wir die primären Bedürfnisse, die sich auf die emotionale Belastbarkeit und das Wohlbefinden auswirken, die für die Integration neuer Lehrer in den Unterricht von entscheidender Bedeutung sind.

#### 1. Introduction

The Mackenzie Report from 2007, contains two famous quotes that discuss the topic of how to transform a school into one that is excellent. According to Braun, H. (2008) the first quote focuses on the quality of teachers, while the second focuses on the quality of learning and its relationship with teacher-student interaction. Consequently, promoting

student-teacher interaction can enhance teaching and learning. To accomplish this, teachers and students must develop several components of interaction: social-emotional learning and 21st-century competencies, recognizing the emotional processes that contribute to this process, and the importance of developing emotional competence in teacher training

programs. It seeks to improve the quality of this interaction through that competence. This study aims to examine how this interaction can be improved, the emotional processes that influence it, and the importance of fostering competence in teachers during their first year of teaching.

#### 2. Theoretical foundation

It is widely recognized that teachers' success is determined by providing comprehensive and coherent training programs that address the diverse needs of the system (Corujo-Vélez et al., 2021). It has been proven teachers who develop social-emotional competencies are more likely to reduce risk-taking behaviors, increase resilience, improve wellbeing, and enhance their personal and professional development by developing these skills (Strong & McMain, 2020). In the first stages of their professional development, first-year teachers must emphasize the importance of emotional skills in the 21st century (Kamei et al., 2021). Developing emotional resilience is crucial for enhancing the professional development of teachers. The ability of teachers to deal with the natural stresses and setbacks associated with teaching is essential. Several factors contribute to resilience, including job effectiveness, satisfaction, responsiveness, efficacy, pride, agency, interpersonal relationships, positive optimism, competence, autonomy, interpersonal emotions, empathy, and emotionally (Schonert-Reichl, intelligent teacher 2017; Beltman, 2020; Xie & Derakhshan, 2021). Teaching is a challenging profession, and it is essential for new teachers to feel supported and have a sense of agency during their first year. In addition to the fact that this resilience is not a psychological quality inherent, it is instead a socially constructed capacity that recognizes that teaching is a complex, demanding and unpredictable profession. Thus, developing teachers' resilience through comprehensive teacher education programs in academic settings is essential. Every day, teachers encounter complex situations inside and outside of the classroom—this emotional state and readiness influence educational outcomes worldwide (Derakhshan & Nazari, 2022).

Social-emotional learning (SEL) is historically and theoretically based on several theories of human development (Kamei & Harriott, 2021). The purpose of social and emotional learning (SEL) is to enable teachers to demonstrate empathy for others, understand and manage emotions, and make responsible decisions. All teachers must possess these

skills, particularly first-year teachers (Schonert-Reichl et al., 2017). An analysis of social-emotional competencies' role in training new teachers shows that training teachers are essential to any education improvement or change. School and classroom integration and implementation of social-emotional learning (SEL) programs have increased, as well as the development of comprehensive SEL implementation As result, programs. a teacher professional development programs must incorporate resilience, emotional and practical learning, and teaching skills (Cheng, 1996). While new teachers face demands and pressures entering schools, they only sometimes possess the appropriate tools to meet them.

Consequently, it becomes increasingly essential to accompany new teachers during their initial professional development. Teachers are most likely to develop emotional and mental resilience during their first year of teaching since this is when they can learn about themselves and develop their professional identity and resilience (Cornu, 2013). It has become increasingly crucial for the global education system to focus on teacher training, empowerment, and the successful integration of new teachers into the classroom (Borko, 2004). This stage is crucial to developing a new teacher and the relationship between emotional intelligence and learning (Turan, 2021). The importance of a training program that specifically addresses the needs of new teachers has increased even more considering the recent pandemic and the need to develop a training program that will provide more accurate responses for new teachers due to the pandemic. It has become increasingly important for teachers to possess emotional skills to cope with changes due to the global pandemic. A teacher's development of social-emotional competencies has been shown to significantly reduce risk-taking behaviors, improve resilience and wellbeing, and contribute to personal and professional growth (Burakgazi et al., 2019; Durgesh, 2020; Chalkiadaki, 2018; Imran, 2018; Alahmad et al., 2021; Corujo-Vélez et al., 2021). Consequently, understanding the needs of first-year teachers after the pandemic can increase the strength of their resilience.

#### 3. Research methodology

The research aimed is to map the new teachers' essential components and needs in their first year of teaching.

#### 3.1. Process of Conducting Research

Data Muserment - Develop the focus group guide.

Focus groups were conducted using a focus group guide that contained a series of questions and prompts. The same focus group guide was used for each focus group in this study. The main themes of this study dealt with the research topic and various issues and components related to teaching work in general ("Managing and making sense of focus group data", 2011). They focused on teachers at the end of their first year of teaching and how these components were incorporated into their training program during this first year.

- To examine the progression and improvement of new teachers' pedagogical abilities during the first year of their teaching careers.
- Valuate the tools given to the new teachers for classroom management and handling disciplinary problem
- To examine the progress in practically applying 21st century skills and using digital tools during the lessons.
- Emotional aspects Examine whether their perceptions of their professional identity changed in their first year of teaching and the effects they had on their emotional intelligence and motivation.

#### 3.2. Research Question

Are there any unique components or skills for new teachers with different professional backgrounds that the existing training program does not refer to?

#### 3.3. Participants

The study included 32 new teachers after completing a regular training program and was conducted by random sampling. Because the study used the Zoom app, it was possible to reach more participants throughout Israel. As a result, teachers from across the country participated in the study, which gave a broad picture of the various training programs available in Israel.

#### 3.4. Research Tools

Qualitative- Focus groups. Uses of a focus group in this research came from a need for quick

information gathering that will help build the intervention program (Wilkinson, 1998), and because of a new outbreak of Cubid 19 in Israel at the time of the study, the study was conducted remotely using the Zoom app.

#### 3.5. Data Collection and Analysis

Data collection is done in several stages. Manual recording of the main points said during the focus group, in addition to this, the participants were asked to write down key points in the chat, which allowed for the concentration of the information at the end of the meeting. The use of zoom as a research tool has advantages and disadvantages. One of the advantages in the aspect of collecting the information was the possibility of making a consistent and accurate record of the participants' statements. The main drawback was the lack of non-verbal communication which is very important. All information collected was kept confidential and anonymous. The data management and analyses were performed using thematic analysis and categorizing. Using thematic analysis makes it possible to analysed the data collected under different circumstances and precisely ascertain the relation between concepts and weigh them according to their recurrence frequency about the content (Gibbs, 2021).

#### 3.6. Consent and ethical considerations

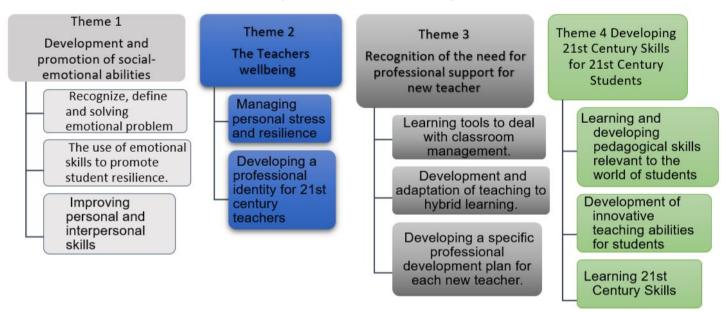
The focus group was conducted via Zoom, so all participants received prior informed consent. It was stated that the participants were participating voluntarily in the study, that they could stop and participate at any time, and that they were free not to answer any questions.

Furthermore, participants were not recorded or photographed during the Zoom discussion, complete anonymity was maintained during the analysis of the results, and no information could be used to identify them.

#### 4. Results

Thematic analysis was done to find patterns and develop themes, The following figure shoes the main themes and categories:

Figure 1: The Main Themes and Categories



Upon analysing the thematic and categorized data, two of the four themes deal with emotional aspects, which illustrates how important these aspects are to teachers. In the first theme, we discuss the development of students' emotional abilities, and in the second theme, we discuss the development of the teacher's emotional abilities. The following examples are provided to clarify each theme further:

Table 1. Theme 1

	Development and promotion of social-emotional abilities								
Categories	1. Recognize, define and solve "The training program contributed to a								
	emotional problems. learning and diversifying teaching methods and								
	strategies for dealing with complex situations."								
	2. The use of emotional skills to "but we have hardly dealt with emotional								
	promote student resilience. issues. Especially during the Corona period"								
	3. Improving personal and "I do not know how to create the initial								
	ersonal skills motivation, the connection with the students."								

### 1. Theme 1 - Development and promotion of social-emotional abilities

The categories in this theme are part of the accessibility of theoretical and research knowledge, in the intervention program, about the development and social-emotional learning of teachers and students. What has emerged from this theme is a need to develop teachers' and students' social and emotional abilities (Kamei & Harriott, 2021; Bunăiașu, 2018).

1.1 Category 1- From the content analysis, the category recognizes, defines, and solves emotional problems. Evidence of this category is found in the teacher's words: "The training program contributed to my learning and diversifying teaching methods, strategies for dealing with complex situations."

Moreover, reinforcement of this can be seen in the following words of another teacher:" I have no tools to identify problems New. " A quote that strengthens this category is" I had a hard time recognizing and defining the emotional problems that arose among the students during the Corona period. "

- In conclusion, the ability to identify and define responses to emotional problems is needed during learning and teaching.
- 1.2 Category 2- From the content analysis emerges the category using emotional skills to promote student resilience. Evidence of this is in the teachers' words who said: "I lacked tools to strengthen the emotional resilience of students" and, "but we have hardly dealt with emotional issues." An additional quote that reinforces this category is, "During the Corona period,

many students did not zoom in and drop out of school ... I felt a decrease in their resilience and did not know what to do" "

- In conclusion, the same training programs do not provide tools for identifying and strengthening emotional abilities, and teachers raise the need to provide such tools to the new teacher.
- 1.3 Category 3- From the content analysis emerges the category of improving personal and interpersonal skills. Evidence of this can in the words of the teachers who said: "I do not know how to create the initial motivation, the connection with the students" The importance of the relationship and its development is also reflected in the following, which are, in my eyes, the most important topics for a teacher in the 21st

century "and further reinforcement for this category can also be seen in the following:" I felt I lacked personal abilities to strengthen the motivation and connection between the students and me."

To summarize, there is a need to develop abilities for identifying, defining, and responding to emotional problems that emerge during learning and teaching. There is a connection between these abilities and students' ability to motivate and create a personal relationship that promotes learning. Same training programs do not provide tools for identifying and strengthening emotional abilities, and new teachers raise the need to provide such tools to strengthen their abilities.

Table 2. Theme 2
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Theme 2	The Teachers wellbeing	
Categories	1. Managing personal stress and	"I think my emotional resilience and
	resilience.	strengthening the discourse in the classroom will
		make me a better teacher."
	2. Developing a professional	"I did not feel a unique contribution to the
	identity for 21st-century teachers.	training program to develop my professional
	,	identity."

- 2. Theme 2 The Teachers' wellbeing. The categories in this theme are part of a contemporary research development that emphasizes the teacher's wellbeing. The wellbeing development of the teacher is essential for the teachers, the school, and the whole system to cope with a negative and stressed situation (Hascher & Waber, 2021). The need to strengthen their professional identity and emotional resilience stems from the teachers' words.
- 2.1. Category 1- From content analysis comes the managing personal stress and resilience category. Evidence of this is "I think what will make me a better teacher is my emotional resilience and strengthening the discourse in the classroom "and " I do not feel that the training program has contributed much to me when it comes to emotional resilience....we see great importance in the teacher's resilience and ability to cope in class." Further reinforcement for this category is in the following words of the following teachers: " We talked a lot about the emotional resilience of the new teacher, but we received almost no practical tools for developing our resilience ...., In the teachers' room with the parents and more."

- In conclusion, one can see the importance of the emotional resilience of the teacher, especially in his first year of teaching.
- 2.2. Category 2- The next category emerges from the content analysis, developing a professional identity for 21st-century teachers. From the teachers' words, one can see many references to developing their professional identity: "I did not feel a unique contribution to the training program to develop my professional identity."

"The training program dealt extensively with the development of professional identity" Further reinforcement can be seen in the following: "especially in shaping my identity as a beginning teacher .... we would like to engage and develop my professional identity as a teacher... I think the first year is significant for developing my professional identity."

• In summary, teachers emphasize developing their professional identity, especially in the first year of teaching, and the significance of emotional resilience for maintaining their wellbeing.

Table 3. Theme 3

Theme 3	Recognition of the need for professional support for new teachers					
Categories	1. Learning tools to deal with	" I still feel that I lack knowledge on the				
	classroom management.	subject, especially with regards to classroom				
	management."					
	2. Development and adaptation of "to solve discipline problems the					
	eaching to hybrid learning. arose in Zoom."					
	3. Develop a specific professional	" In the training program, we dealt a lot				
	development plan for each new teacher.	with peer feedback, which was a significant				
		tool for my professional advancement."				

- 3. Theme 3- Recognition of new teachers' need for professional support. The categories in this theme are part of providing tools and professional help to teachers. The categories in this subject are part of the accessibility of theoretical and research knowledge, which deals with teachers' professional and personal development as a person who learns throughout life. From this theme arises the need to develop tools that address the new teacher's full range of professional needs (Styfanyshyn & Yurko, 2020; Kelleher, 2003; Durgesh, 2020).
- 3.1. Category 1- From the content analysis, the category that emerges is learning tools to deal with classroom management. From the conversation with the teachers came much evidence for this: "I still feel that I lack knowledge on the subject, especially regarding classroom management" and "We still feel that more classroom management tools are needed... there are students in the class who interfere and have many difficulties, and we do not know what to do". This category can be strengthened in these words: "We did very little class management in our training program sessions. Although we talked about discipline issues, we did not get enough practical tools."
- In conclusion, it can be said that teachers raise a need for tools for classroom management and discipline.
- 3.2 Category 2- From the content analysis, the category that emerges is the development and

- adaptation of teaching for hybrid learning. Evidenced in the following words: "..to solve discipline problems that arose in Zoom " and" I did not get enough knowledge and digital tools for distance learning ... I cannot combine distance learning with close learning ". This claim is reinforced in the following words: "Especially during the Corona period, it was indispensable, and I felt that these were capabilities that I lacked."
- In conclusion, it can be said that from the teachers' words, there is a need to provide tools for the development of hybrid learning and tools for distance learning from the professional development of the teachers.
- 3.3. Category 3- An analysis has created the category of developing a specific professional development plan for each new teacher from the content. The need for this arose in the following words: "Sometimes I felt lonely and did not have information whether I studied well or not ... I did not know what I needed to improve and how .. Watch me in classes but did not get feedback that promotes me or a neat work plan for personal development."
- In summary, professional guidance and personal and professional development are necessary for the new teacher. Also, teachers emphasize the need to develop tools for the management and discipline of classrooms. Additionally, to provide tools for distance learning and hybrid learning.

Table 4. Theme 4

Theme 4	Developing 21st Century Skills for 21st Century Students							
Categories	1. Learning and developing	"I lacked tools for providing assessment to a						
	pedagogical skills relevant to the world of	student with behavioral and academic						
	students	difficulties."						
	2. Development of innovative	"I still lack ways to improve teaching						
	teaching abilities for students	processes for my students."						

Ī	3. Learning 21st Century Skills	"I felt I did not get enough tools and skills
		for the 21st century."

Theme 4- The theme that emerges from the following categories deals with developing 21st-century skills for 21st-century students. That the teachers raised in their words as a place for professional development (Burakgazi et al., 2019; Durgesh, 2020; Chalkiadaki, 2018; Imran, 2018).

4.1. Category 1- From the teachers' content analysis, a category, learning and developing, deals with pedagogical skills relevant to the world of students.

The teachers refer to the development and learning of these tools such as: "I lacked tools for providing assessment to a student with behavioral and academic difficulties" and "students today are different from what they used to be, and I need to learn how to promote the relevance of my teaching." Further reinforcement can be seen in these things:" I had students who only when I brought them topics from their world, they began to learn... I lack the knowledge and accessibility to learning and knowledge of how to develop such tools."

- In conclusion, the teachers' need arises for learning tools that will strengthen the relevance of learning marriages and teaching methods to the world of students in the 21st century.
- 4.2. Category 2- From the teachers' content analysis, the category Development of innovative teaching abilities for students emerges. "I still lack ways to improve teaching processes for my students" ..... "I learned in my training program innovative assessment methods for students ."In addition to strengthening this category, we learned several tools for developing enriching experiences and "Various experiences for students. However, I still feel that I lack knowledge on the subject ... When students come to me and ask for new teaching methods, I do not always know what to do."
- In conclusion, the teachers said that developing their ability to design innovative teaching methods is essential.
- 4.3. Category 3- The Learning 21st Century Skills category emerges from the teachers' content analysis. Teachers have often referred to skills for learning development in the 21st century. For example: "I felt I did not get enough tools and skills for the 21st century,

there is great importance to the development of 21st-century skills, and it seems that we did not emphasize it in the training program ", and " These skills are essential. We need to teach differently in a way more adapted to the 21st century. We need to learn more about these skills practically. We mainly dealt with this in theory".

In summary, teachers recognize the necessity and significance of developing 21st-century learning skills during the training program. In the 21st century, teachers require learning tools that will enhance the relevance of learning marriages and pedagogy.

The teachers said that developing their ability to design innovative teaching methods is essential.

#### 5. Discussions

A new training program was developed as a result of this research, which aimed to map the needs of new teachers during their first year of teaching. A new training program will be implemented as a component of the intervention program. This study used qualitative research to explore, describe, and learn about individual viewpoints and develop theories based on participant opinions (Pardede, 2018).

The results of the research are consistent with those found in various studies. According to them, the first year of teaching is complex, and teachers face several challenges. During their first year of teaching, it is essential for first-year teachers to have several components in their training program. In addition to teaching pedagogical or didactic skills, new teachers must also receive training that includes social and emotional skills and assist them in adapting the curriculum to the unique needs of 21st Century students. (Corujo-Velez et al., 2021; Mahoney et al., 2018; Jones et al., 2021).

According to the research question, new teachers with different professional backgrounds may require specialized skills or components not addressed in the existing training program. Answering The answer to this question can be divided into two parts.

We examined and explored whether there are any unique components that new teachers should be aware of in the first part of the question. During the study, teachers were highly engaged in four main areas: 21st-century pedagogy, social and emotional skills

development, professional development, and professional identity. It is important to note that these points are consistent with the findings of additional studies that have been conducted in recent years on the needs of first-year teachers.

A second part of the research question revolves around the needs of teachers in their first and second careers. Based on the study's results, teachers in their first career had no significant difference in their needs and requirements concerning developing the necessary skills. Following the teachers' statements, the teachers encountered similar needs and difficulties

#### 6. Conclusions

A set of competence has been identified in this study that includes knowledge, skills, and abilities that contribute to teachers' emotional resilience at the end of their first year as teachers.

There are several conclusions that can be drawn from the first study regarding the significance of a teacher's first year in school

#### The impact of the training program

There are several ways in which the training program impacts the new teacher:

- An effective teacher training program will enhance a teacher's ability to translate theory into practice
- An effective teacher training program will provide the teacher with the skills necessary for the 21st century.
- An effective teacher training program will influence a new teacher's perspective regarding the development of open and close relationships between students, their colleagues, and their teachers.
- Hence, a program emphasizing the skills of SEL can contribute to the influence and perspective of new teachers on teaching processes and the importance of communication in providing a conducive learning environment
- It is also suggested in this study that teachers at the end of their first year of teaching should facilitate a development of communication skills

This study also suggests that the teacher should be able to:

• Develop interpersonal and personal relationships.

- Enhance their emotional wellbeing and identify their emotional abilities
  - Develop their professional identity.
- Learn how to design innovative teaching methods.

The conclusions led to the development of a new training program. At the end of the year, a new model of teachers' SEL will be developed, with the anticipated results relating to knowledge, abilities, and professional identity.

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# The Importance of Role Play and Artistic-Plastic Activities in the Preschoolers Self-Knowledge and Emotional Expressivity Development

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Research article

## The Importance of Role Play and Artistic-Plastic Activities in the Preschoolers Self-Knowledge and Emotional Expressivity Development

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#### Abstract

Keywords: preschoolers; self-knowledge; educational interventional program; role play; emotional expressiveness The preschool period becomes a favorable ground for the development of emotional and social skills. We consider that the educational and family environment play an important role in the development of these competencies. Emotional and social skills play an important role in the child's further development. A good ability to understand emotions, self-knowledge, the environment in which and how they occur develops empathy and at the same time allows the preschooler to relate effectively to those around him, to respond appropriately to the emotions of others and to adapt more easily to the social environment. The main purpose of this research refers to the increased efficiency of both the role play and the artistic-plastic activities in the socio-emotional development of preschoolers. By introducing role-playing games in the didactic activity through stories and artistic-plastic activities, educational actions are initiated, the results of which are recorded and processed in order to demonstrate their value. The results of this study showed that the use of artistic and plastic activities as well as role play contributed to managing their own emotions, to understanding the need to respect the feelings and feelings of others, developing the ability to relate to others, improving skills, communication and self-expression in the development of self-confidence, the development of confidence in individual abilities, the development of self-control identifying possible solutions to problems such as anger, disappointment, sadness.

#### Zusammenfasung

Schlüsselworte: Vorschulkinder; Selbsterkenntnis; pädagogisches Interventionsprogramm; Rollenspiel; emotionale Ausdrucksfähigkeit Die Vorschulzeit wird zu einem günstigen Boden für die Entwicklung emotionaler und sozialer Fähigkeiten. Wir sind der Ansicht, dass das schulische und familiäre Umfeld eine wichtige Rolle bei der Entwicklung dieser Kompetenzen spielt. Emotionale und soziale Fähigkeiten spielen eine wichtige Rolle in der weiteren Entwicklung des Kindes. Eine gute Fähigkeit, Emotionen, Selbsterkenntnis, die Umgebung, in der und wie sie auftreten, zu verstehen, entwickelt Empathie und ermöglicht es dem Vorschulkind gleichzeitig, sich effektiv auf seine Umgebung zu beziehen, angemessen auf die Emotionen anderer zu reagieren und sich leichter anzupassen zum sozialen Umfeld. Das Hauptziel dieser Forschung bezieht sich auf die Steigerung der Effizienz sowohl des Rollenspiels als auch der künstlerisch-plastischen Aktivitäten in der sozio-emotionalen Entwicklung von Vorschulkindern. Durch die Einführung von Rollenspielen in die didaktische Tätigkeit durch Geschichten und künstlerisch-plastische Aktivitäten werden pädagogische Aktionen initiiert, deren Ergebnisse erfasst und aufbereitet werden, um ihren Wert aufzuzeigen. Die Ergebnisse dieser Studie zeigten, dass der Einsatz von künstlerischen und plastischen Aktivitäten sowie Rollenspielen dazu beitrug, mit den eigenen Emotionen umzugehen, die Notwendigkeit zu verstehen, die Gefühle und Gefühle anderer zu respektieren, die Fähigkeit zu entwickeln, mit anderen in Beziehung zu treten, Fähigkeiten zu verbessern, Kommunikation und Selbstausdruck bei der Entwicklung von Selbstvertrauen, der Entwicklung von Vertrauen in individuelle Fähigkeiten, der Entwicklung von Selbstbeherrschung, dem Aufzeigen von Lösungsmöglichkeiten für Probleme wie Wut, Enttäuschung, Traurigkeit.

#### 1. Introduction

Preschool age represents the period, the comma in the phrase of life, when children need adults as landmarks, to learn how to relate to others with respect for their needs and those around them, how to manage the process of solving various situations, either emotional or social, that they face every day. To learn to live their daily emotions healthy. Self-knowledge is the fascinating process by which children discover themselves. Self-knowledge lasts a lifetime. From birth, children are not aware of the idea of good / bad about themselves. They learn these things from everything around them: people, things, events, activities, and so on. In the process of self-knowledge family is the strongest force. The first years

are the most important in developing a genuine self-esteem in a person. Positive self-esteem cannot be given to one person by another person or society. It must be "won" by each individual (Mecca, Smelser & Vasconcellos, 1989). Self-knowledge is a collection of opinions describing oneself as an individual in relation to the physical and social world. The components of self-knowledge include convictions regarding appearance and physical features, abilities and capabilities, features of character, interests, desires, needs, attitudes, social roles, own position among other people, opinions and beliefs on what an individual deserves from other people (Uszynska-Jarmoc, 2022).

Preschool age is a fairly long period in which there are significant changes in the emotional life of the child. The emotions and feelings of the preschooler accompany all its manifestations, whether it is games, songs, educational activities, or the fulfillment of tasks received from adults.

Self-image is built through self-knowledge, thus developing self-confidence, self-esteem, "brick by brick", discovering the Self. From this point of view, it is considered important that preschoolers be motivated to participate in new activities, to be also involved in self-knowledge activities.

Emotions are formations of personality. They characterize individuals from a social-psychological point of view, highlighting the importance of the emotional process for personality. Emotions are a reflection of the processes that take place in the body of the individual, ie they are reduced to organic perceptions, somatic and vegetative reactions, which automatically manifest themselves under the influence of affectogenic irritants. In reality, however, during childhood, emotions go through a progressive path of development, accumulating a richer content and more complicated forms of manifestation under the influence of social conditions of life and education. Regarding the role of emotions in guiding and guiding the child's behavior, in the investigations of the psychologist Piaget (2005) it is mentioned that "during childhood the emotional and cognitive management of behavior go through the progressive path of development coordinating and complementing each other" (Piaget, 2005, p. 149). **Emotional** expressiveness, an important component of emotional intelligence, represents the preschooler's ability to express his emotions and feelings through verbal and

non-verbal behavior using mimicry, tonality and gestures.

Role play can be conceived as an environment that ultimately helps to express the emotions and feelings that some preschoolers face. Through role play and artistic-plastic activities, the preschooler can acquire autonomy, personality development and will even influence his activity as an adult. Role play, the safest way to access the child's soul, to his wonderful world of thoughts and dreams, has real formative values. It contributes to the intellectual, social, emotional, physical and aesthetic development of the child, and cultivates self-confidence the spirit competition.

The game responds to the need for spiritual freedom and movement and is the requirement to escape from adult pressure. In the game, the child engages according to his own timing in action, participates voluntarily and is in control of the situation. His emotions and feelings become richer in content. The friendly emotions are more accentuated than the aggressive ones. Hostile relations give way to cooperation and competition. By playing, the child is able to achieve performances that other activities outside the game could not produce.

The artistic-plastic activities are a means of dynamism and expression of the preschooler's life. The child's motivation for artistic and plastic activities is represented by the need to express their own feelings, experiences, the need to render the image in an artistic way or the pleasure of telling stories in images.

#### 2. Problem statement

One of the goals that preschool education assumes is, in addition to preparing the child for school, the child's socialization and the gradual achievement of personal autonomy (Breben et al. 2009). Socialization is, therefore, a concept used in describing and explaining how children acquire the behavior necessary for their adaptation to the culture and society of which they are a part. Socialization can be defined as "the process by which a person acquires rules of conduct, belief systems, and attitudes of a society or social group so that he or she can function within it" (Birch, 2000, p. 45).

Throughout childhood, emotions follow a progressive path of development, accumulating a richer content and more complicated forms of manifestation under the influence of social living

conditions and education. Piaget (2005) assumed that "during childhood the emotional and cognitive direction of behavior go through the progressive path of development coordinating and complementing each other" (Piaget, 2005, p. 143).

The ability of preschoolers to regulate their emotions effectively with the help of the adults around them is the main goal of socio-emotional development, because this process has a protective role on the mental and social health of children. Preschoolers face a number of obstacles when they learn to regulate their emotions and behavior. They learn to tolerate frustration, cope with anxiety, defend themselves, negotiate friendships, and even tolerate being alone when marginalized. Self-esteem means continuous self-knowledge and a clear understanding of oneself. It helps children to feel good about themselves and to think positively about themselves.

A teacher cannot teach his children to recognize their feelings and to deal with them if they themselves are not able to do so, because it is well known that they follow the actions of the adult and at the same time imitate his qualities and defects. Terebush (2020) on this issue advises teachers to learn to accept their own emotions. "The message that was sent to you as a child by adults saying that you should not cry or be afraid was not the right one. Accept that the whole diversity of emotions we experience is part of the human condition" (Terebush, 2020, p. 151).

Therefore, the role play favors the child's experience of a social reality in a specific way, due to its main function of assimilating the real to the "I". Assuming different roles, playing them, the child reproduces patterns of behavior and assimilates them into his own behavior. Role play presumes liberty and its source is found in children's imagination.

Identifying and expressing emotions are important in communication and emotional control, which contributes to the development and completion of children's social relationships. Another important aspect is the ability to understand and discern the emotions of others, necessary for the manifestation of empathy. Children's assumptions about the emotional state of others will be guided by children's expectations, perceptual sensitivity, and the level of mental representations they have about their emotional knowledge (Shapiro, 2016).

The role of educators in developing children's emotional and social skills is extremely important,

especially since "preschoolers spend more of their active time in kindergarten than spending with their parents. Kindergarten itself is a social context in which children have the opportunity to interact with other children to a greater extent than in the family. in these situations, children can Therefore, systematically learn about appropriate emotions and social behaviors. Educators' reactions to children's emotional manifestations are an important source of learning about emotions. Using words that describe emotions in different contexts is a way to teach children to recognize and name their own or others' emotions. If the educator is not used to drawing children's attention to emotions, nor to discussing the emotional consequences of certain behaviors, then their pupils may not acquire the words that describe emotions" (Ștefan & Kallay, 2010, p. 44).

#### 3. Research methodology

#### 3.1 Purpose of research

The aim of this research is to demonstrate the benefits of using both role play (through therapeutic stories) and artistic-plastic activities in the development of emotional expressiveness and self-knowledge in preschoolers, focusing on the following objectives:

- 1. Assessment of the emotional abilities, respectively of the self-knowledge of the participants included in the research.
- 2. Elaboration and implementation of an educational intervention program based on role play and artistic-plastic activities starting from the identified needs.
- 3. Investigating the formative impact of the proposed intervention program for the development of self-knowledge and emotional expressiveness in preschoolers.

#### 3.2. Hypothesis and research variables

This study's hypothesis is the following:

• The application of the intervention program "Little artists, big emotions!" will lead to the formation and modeling of the preschoolers self-knowledge and emotional expressiveness.

*Independent variable*: proposed educational intervention program

Dependent variables: emotional expressiveness, self-knowledge

#### 3.3. Participants

In order to verify the hypothesis formulated and to follow the objectives stipulated in the research, 22 preschoolers from Ardud Kindergarten with Extended Program "Cetate" structure, Satu Mare county, have participated. Of these, 11 preschoolers participated in the intervention program, and the other 11 preschoolers constituting the control group. The sample of participants consists of 12 boys and 10 girls aged between 5 years and 6 months and 6 years and 6 months.

#### 3.4. Instruments

3.4.1. The Child Self-View Questionnaire (CSVQ, Eder, 1990)

The CSVQ, consists 62-item forced-choice measure designed to assess young children's psychological self-concepts considered appropriate for children 3 ½ - 7 years of age.

The child's responses to the CSVQ were evaluated with regard to nine dimensions of the child's self-concept; these nine dimensions are: achievement, social potency, social closeness, well-being, traditionalism, harm avoidance, alienation, stress reaction, and aggression (Eder, 1990).

Thus, although a number of childhood self-concept measures have included items assessing self-perceptions of academic or athletic competence (Marsh et al., 1991), or overall appraisals of self-worth (Harter, 1982), the CSVQ is intended purely to measure self-views with respect to social, emotional, and personality characteristics.

3.4.2. Scale Parental Beliefs about Emotional Competence in Children (COMPE, Mendes et al., 2018)

Emotional competence is a critical and impactful component of a complete and healthy development. The aim of this study was to briefly present the construction stages of the COMPE scale and to verify the preliminary psychometric parameters such as the dimensionality and reliability of the articles. In order to obtain the final form of the scale, the content validation procedures for the creation of the initial version and the Response Theory were adopted to analyze the psychometric properties of the articles. As a result, this document presents a scale with a total of 30 items capable of composing a measure of the mentioned parental fillings, with three theoretical facets indicative of emotional competencies related to:

(a) emotional expression, (b) emotional understanding and (c) ) emotional regulation, which is aggravated in a single point.

This questionnaire was completed by the parent of each participant selected in this research, keeping the data confidential.

#### 3.5. Procedure

This research has an experimental design, as it extends over the school year 2020-2021 (October 2020-June 2021).

In the *pre-experimental phase*, the tools were applied through systematic direct observation and interview with parents, which was based on the four competencies: emotion recognition, expression of emotions, understanding of emotions and emotional self-regulation. Then, through direct systematic observation, the preschoolers participating in this research were evaluated to identify the level of development in the area of socio-emotional abilities.

In the *experimental phase* - starting from the difficulties identified following the evaluation, the educational intervention program "Little artists, big emotions!" was implemented.

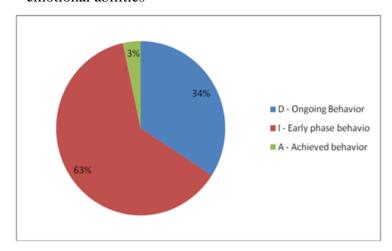
The proposed intervention program includes a set of 26 activities that have been folded on the following methods: role play, drawing, music and storytelling. The main objectives pursued were the following: experiencing a variety of emotions such as: fear, courage, joy, reconciliation through nonverbal language, developing confidence in individual abilities, identifying possible solutions to certain emotions such as anger, disappointment, sadness, managing behavioral and emotional reactions to potentially conflicting situations, building empathy, altruism, providing help and teamwork, selfmotivation to overcome negative emotional states, training to assess moods emotional experiences during the day, the development of self-control and the development of gratitude.

In the *post-experimental phase* we analyzed the effects of interventions on children's behaviors in formal contexts. At this stage, the aim was to observe the socio-emotional behavior of preschoolers in the activities carried out in kindergarten, and to investigate the degree to which the proposed activities contributed to the development of self-knowledge and emotional expressiveness of preschoolers. Also, in this phase, the same instruments was used, based on which

the progress of each preschooler was recorded in part of the two stages (pre-experimental stage and postexperimental stage).

#### 4. Results

Fig. 1. Results obtained in the pre-test phase for emotional abilities



Following the pre-test on the development of emotional abilities (see fig.1) developed in the preschool period of the 22 preschoolers of the large group, it was found that 63% of them are in the early stages of developing emotional skills, 34% are in the developmental phase, and 3% of them are in the phase of developing emotional skills, knowing how to identify their emotions, how to explain them and at the same time to express emotions in various conditions.

Table 1. Comparative analysis of the measured variables of the participants from pretest and posttest

Experiment	al phase	<b>Emotional</b> expresivity	Self- knowledge
Pre-test	N	22	22
phase	Mean	3,34	2,91
Std. Error of Mean		.12	.27
	Minimum	2,14	1,32
	Maximum	4,55	4,86
	Std. Deviation	.56	1.28
	% of Total Sum	44,1%	43,8%
	% of Total N	50,0%	50,0%

Experimental phase		Emotional expresivity	Self- knowledge	
Post-test	N	22	22	
phase	Mean	4,23	3,74	
	Std. Error of Mean	.13	.15	
	Minimum	2,36	2,36	
	Maximum	4,90	5,00	
	Std. Deviation	.60	.72	
	% of Total Sum	55,9%	56,2%	
	% of Total N	50,0%	50,0%	
Total	N	44	44	
	Mean	3,79	3,32	
	Std. Error of Mean	.11	.16	
	Minimum	2,14	1,32	
	Maximum	4,90	5,00	
	Std. Deviation	.73	1.1	
	% of Total Sum	100,0%	100,0%	
	% of Total N	100,0%	100,0%	

Following the collection of reference data both through systematic direct observation and from discussions with parents, the preschoolers participating in this study handling with the following difficulties (see table 1): at the level of emotional expressiveness, the majority of preschoolers do not express the emotions they feel when they play with other peers or when another child takes their toy or spoils their game, they do not proudly share their work done in front of their peers and do not offer to help those around. Also, preschoolers confront with difficulties at the level of self-knowledge: they believe that those around them do not appreciate them and wish them harm, they do not appreciate both themselves and the work they do, they do not share their work with pride in front of their peers.

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Lable 2.	Paired	Samples	i iesi i	Kesiiiis

	Pre-te	est	Post-t	est		95% CI for			
Variables	M	SD	M	SD	N	Mean Difference	t	df	d Cohen
Emotional expressivity	3.34	.56	4.23	.60	22	-1.42;23	2.90*	21	1.58
Self-knowledge	2.91	1.28	3.74	.72	22	75;03	2.25**	21	2.03

<sup>\*</sup>p<.01; \*\*p<.05

After the application of the proposed educational intervention program implemented behind the needs identified in the pretest phase, improvements appear in the measured variables (see table 2). Therefore, the use artistic-plastic activities and role-playing contributed statistical significant at the level of emotional expressiveness (preschoolers improved their understanding of the need for respect for the feelings of those around them, developed their empathy and altruism, they manage to express both positive and negative emotions in a more functional way), but also at the level of self-knowledge (preschoolers have gained a higher level of selfconfidence). Moreover, for testing the effectiveness of the proposed educational intervention program, we calculated the effect size and obtained a d=1.58 for the emotional expressivity and a d=2.03 for the selfknowledge, which means that the program had a very strong effect.

#### 5. Conclusions

The main purpose of this research was to highlight the beneficial and positive role that role play and artistic-plastic activities have in the development of self-knowledge and emotional expressiveness in preschoolers. In this research we wanted to confirm the fact that artistic-plastic activities and role play, often encountered in kindergarten activities, through their effect on preschoolers are influenced by the development of self-knowledge and emotional expressiveness.

Respect for the needs of children is an essential requirement, which means that the formative approach cannot be general but specific to everyone. Kindergarten is very important in the development of emotional and social skills of children, through the influence of teachers, especially due to the fact that starting with preschool age the active time children

spend in it is greater than the time spent in the family. It is well known that teachers face most difficulties/problems when it comes to correcting or straightening children's behavior. It is from this point of view that we consider it important for teachers to have knowledge of psychology so that they can come more easily to the aid of preschoolers and help them both emotionally, but especially cognitively, in the overcoming their emotional fears. The healthy development of the soul and the body creates the premises for a quality cognitive development.

Regarding the needs and requirements of preschoolers as "actors" on the educational stage, in the educational process we consider that the teacher, but especially the educator, embodies a "conductor" who uses a whole series of tools, activities, techniques, methods, to meet these needs.

Knowing the behavior of the preschooler allows the teacher to provide the child with experiences that are more appropriate to his or her operating model. Moreover, the teacher is able to identify the contexts in which children need more support and what kind of help should be provided based on their experience. Both cognitive and social-emotional development are based on contexts in which children practice a series of behaviors step by step with the help of an adult. "Without the assistance of an adult, a child cannot know how to organize his emotions, how to express them in a socially accepted way, how to control his emotions so as not to hurt others, how to act and to cooperate. There are many life contexts that are too difficult for children to manage, consequently they need the help of an adult" (Catalano, 2019, p. 60).

Testing the educational interventional program "Little artists, big emotions!" over 22 preschoolers, we can confirm that this program has demonstrated its effectiveness regarding raising the level of emotional

expressivity (d=1.58) and the level of self-knowledge among preschoolers (d=2.03).

In conclusion, after each method applied, we believe that the performances that children perceive and make them responsible in solving future work tasks can be obtained. Preschoolers understand and notice that their involvement is different. When encouraged, they will cultivate a desire to get involved in solving other tasks. By applying these methods, preschoolers learn to share their ideas, gain confidence and become responsible for their ideas and actions.

A limitation of this research was represented by the chosen instruments that are not validated and adapted to the Romanian population, so that their psychometric properties cannot be modified. Another limitation was the small number of participants included in the research, respectively the lack of a control group to have an increased level of accuracy of the results obtained. A possible future research direction would be to insert activities that parents can participate with preschoolers so that they become aware of the long-term development of these skills for their preschoolers.

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## Integrative Analysis of Ethical Intelligence and Moral Intelligence: New Conceptual Models and Developments in Education

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## Integrative Analysis of Ethical Intelligence and Moral Intelligence: New Conceptual Models and Developments in Education

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#### Abstract

Keywords: moral intelligence; ethical intelligence; integrative review of literature This study proposes an integrative analysis of the moral intelligence and ethical intelligence concepts in order to understand the chronological and conceptual evolutions of a new type of intelligence, which will later on serve as a base for the operationalisation of the concept. The methodological approach consists in an integrative literature review, which is generally defined as a form of research that reviews, critically analyses and synthesises representative studies on a topic in an integrated way, allowing for the emergence of new frameworks and perspectives. This research examines the literature for a period of 185 years (up to 2021) aiming to develop chronological taxonomies in order to provide an overview of the meanings associated with the concepts of ethical and moral intelligence. The results of the integrative review consist in chronological taxonomies of the concepts, that are complemented by conceptual maps of the ethical / moral intelligence. The conceptual maps emphasise the functional relationships between the constituent elements of ethical / moral intelligence, as well as the applied values in the area of education.

#### Zusammenfasung

Schlüsselworte: moralische Intelligenz; ethische Intelligenz; integrative Literaturrecherche Diese Studie schlägt eine integrative Analyse der Konzepte der moralischen Intelligenz und der ethischen Intelligenz vor, um die chronologischen und konzeptionellen Entwicklungen einer neuen Art von Intelligenz zu verstehen, die später als Grundlage für die Operationalisierung des Konzepts dienen wird. Der methodische Ansatz besteht in einer integrativen Literaturrecherche, die allgemein als eine Forschungsform definiert wird, die repräsentative Studien zu einem Thema auf integrierte Weise überprüft, kritisch analysiert und zusammenfasst, wodurch neue Rahmen und Perspektiven entstehen können. Diese Forschung untersucht die Literatur für einen Zeitraum von 185 Jahren (bis 2021) mit dem Ziel, chronologische Taxonomien zu entwickeln, um einen Überblick über die Bedeutungen zu geben, die mit den Konzepten der ethischen und moralischen Intelligenz verbunden sind. Die Ergebnisse der integrativen Überprüfung bestehen in chronologischen Taxonomien der Konzepte, die durch konzeptionelle Landkarten der ethisch-moralischen Intelligenz ergänzt werden. Die konzeptionellen Landkarten betonen die funktionalen Beziehungen zwischen den konstituierenden Elementen der ethischen/moralischen Intelligenz sowie den angewandten Werten im Bildungsbereich.

#### 1. Introduction

A thesis on ethical/moral intelligence that proposes new conceptual models and developments in the field of education can be considered significant due to the imperative of translating ethical decisions and moral precepts from the sphere of academic debates into the real world. We will call it intelligence because this concept encompasses a framework of skills. At the same time, it represents a language, and because we are interested in the practical dimension of the concept, in this study, the focus will be on the literacy process of people in terms of understanding and functioning in relation to this concept.

The analogy with functional illiteracy can help us in this proposed direction. We know the letters and can read, but we do not understand the textual and metatextual elements, we do not decipher in a logical manner the structure and content of the work. In this way, we can consider that ethical illiteracy is also manifested by the fact that we know words like love, justice, authenticity, we can read them and develop coherent sentences that contain them, but we do not always understand them in relation to each other, we do not observe them in their evolution towards actions made following a process of analysis and decision. We tend, as individuals of the human species, to function

gregariously and do what the world does, and many times our surroundings do not have a positive influence on our individual functioning. Therefore, it is considered here that practical philosophy has two dimensions: the orientation towards topics of immediate and current interest - artificial intelligence, cloning, war, gender identity, respectively the method - from academic discourse of meditation type to active discourse.

An integrative analysis of ethical intelligence (EI) and moral intelligence (MI) represents a first step towards transforming the discourse on values from the spectrum of business storytelling and branding into a moral education approach at the organisational level. At the personal level, ethical/moral intelligence supports the process of self-understanding, is a motivational factor and has the capacity to produce extended effects on groups through role modelling. In the field of education, ethical/moral intelligence is part of a holistic education, being the characteristic that ensures the development of human consciousness as a whole.

#### 2. Theoretical foundation

When it comes to intelligence in general, a diversity of theoretical models and approaches to the concept can be accessed in the literature. There is no unified view of how this component of our cognition is defined, but we can trace how the way scientists have conceptually defined intelligence has evolved. The Merriam-Webster dictionary defines intelligence as "the ability to learn or understand or to deal with new or trying situations" (Merriam-Webster, n.d.), while the Explanatory Dictionary of the Romanian Language defines it as "the ability to understand easily and well, to notice what what is essential, to solve new situations or problems based on previously accumulated experience."(Dexonline, n.d.)

At the beginning of the last century, the first initiatives to measure intelligence appeared, and the first type of intelligence considered was cognitive intelligence. The creators of the IQ test are Alfred Binet and Theodore Simone, two psychologists, who at the beginning of the 20th century created the first model by which they could measure intelligence in the case of children with special learning needs in the French education system. Binet states in Modern ideas about children: "With practice, training, and above all method, we manage to increase our attention, our memory, our judgement, and literally to become more intelligent than we were before." (1975/1909, pp. 106-

107). One of the researchers who created a scale that would be widely used is the Romanian-American psychologist David Wechsler, who created the WISC model, in which correlations with other tests valid at the end of the first half of the 20th century are analysed. Weschler defined intelligence by testing kids through items that refer to "global capacity to act purposefully, to think rationally, and to deal effectively with his environment" (Weschler in Littell, 1960, p. 134).

One of the most prominent figures of contemporary pedagogy, the Swiss psychologist and biologist Jean Piaget, would shift the focus from IQ to the stages of psychological development. Coincidentally, Piaget began his career collaborating with Theodore Simone in the latter's laboratory. Piaget proposes in Genetic Epistemology that intelligence be analysed in relation to developmental stages, namely sensory-motor, preoperational, concrete operations, and formal operations (1971). Although the theory is very successful in pedagogy, Piaget also fails to create a unified perspective on human intelligence.

In the 1980s, one of the most comprehensive works in the field of intelligence appeared, namely Perspectives of the Mind by Howard Gardner, a work containing the Theory of Multiple Intelligences. It foresees the way intelligence research would evolve until today: "we must say, once and for all, that there is not, and never can be, a single, irrefutable and universally accepted list of human intelligences. There will never be a master list of three, seven, or three hundred intelligences that will be adopted by all researchers." (Gardner, 2022, p. 196). Moving from a paradigm in which cognitive intelligences were relational only to language and logic allows the author to reproduce in the original list from 1983 seven intelligences: linguistic, musical, logicalmathematical, spatial, physical-kinesthetic, interpersonal and intrapersonal, and from 1995 to add an eighth intelligence, the naturalistic one, and consider the suggestion of an existentialist intelligence (Gardner, 1999). Daniel Goleman argues that EI may be even more important than cognitive intelligence and argues that a new quotient can be measured by looking at a person's ability to emotionally selfregulate, express their emotions, and relate to others (Goleman, 1995). Goleman also introduces the concept of social intelligence through a book published in 2006, titled in this way.

A first test to measure emotional intelligence, however, was proposed by a trio of researchers: John Mayer, Peter Salovey and David Caruso (2001). The test is called MSCEIT (Mayer-Salovey-Caruso Emotional Intelligence Test). The focus on this new intelligence is due to the attempts to negotiate between Western and Eastern philosophies in the second half of the last century that begin to allow a transition from Western pragmatism to a holistic view of the individual that corresponds to a better representation of the body triad -mind-spirit. It is worth mentioning the EQ-i model, which introduces the concept of "emotional quotient", developed by Reuven Bar-On (2011). It contains six scales: the self-perception scale, the self-expression scale, the interpersonal scale, the decision-making scale and the stress management scale.

After the development and theorization of cognitive intelligence, multiple intelligences (linguistic, musical, logical-mathematical, physicalkinesthetic, spatial, interpersonal, intrapersonal, naturalistic), emotional intelligence and social intelligence, another intelligence appears that can be compared to the new intelligence that was suggested to Gardner, "the intelligence of big questions". As it was not introduced into the body of multiple intelligences, but visibly represented a direction of interpretation of one of the specifically human capacities, existential intelligence does not return under the same name, but appears, when moving into the 21st century, another approach to theoretical models of the mental faculties: spiritual intelligence. Zohar and Marshall (2000) not only propose a new type of intelligence, but even build an integrative model for those discovered before, we mean here IQ and EO.

General conclusions about intelligence refer to the widely accepted idea that they refer to one's ability to encounter a problem and solve it optimally. We see that the differences between theories are not necessarily produced by the process itself through which intelligence is manifested, nor by the result obtained, but rather by the dimension processed: information, emotion, spirit.

Although there is a general tendency to think of terms like "clever" or "smart" as synonyms for "intelligent", there is almost a general consensus that an intelligent person is by no means necessarily "wise." As David Brooks says: "You can be knowledgeable with other men's knowledge, but you

can't be wise with other men's wisdom." (2019, p. 131). At this point a new dimension enters the discussion: knowledge. Could we say that knowledge is the content of intelligence, while understanding is the content of wisdom? Although we cannot say that intelligence contains "knowledge", although it is based on its processing, we can say about understanding that it is the content of wisdom, according to the Explanatory Dictionary of the Romanian Language, wisdom is a "superior ability to understand and judge things."(Dexonline, n.d.) However "to judge" can mean "to think", but also to form an opinion about someone and to associate a characteristic with the judged object. Traditionally, morality tends to be associated with wisdom, usually a moral decision is a wise decision, it is a "right judgement".

A welcome deepening in terms of understanding the distinct meanings acquired by the notions of "ethics" and "morality" is provided by Isabel Baptista, based on an analysis of Paul Ricoeur's philosophy: "ethics tends to take priority over the second (moral), characterised by a theoretical dimension related to the questioning of "whys", foundations, goals and principles that guide behaviour, such as good, virtue, truth or justice. While the second, morality, tends to privilege the decision about what and how, thus identifying itself with the normative universe of prescriptions and rules of conduct." (Baptista, 2007, pp. 28-29).

Related to the evolution of morality, what is important to note is that from the perspective of sexual selection, considering the case of the peacock, evolution prioritizes reputation (creating a tail that does not allow flight easily endangers the survival of the male). Therefore, within biology, reputation maintenance and enhancement become the most desirable goals of an individual within a species. As Joyce would say: "If a good reputation means sharing food indiscriminately with the group, then an indiscriminate food-sharing trait will develop; if a good reputation means wearing a pumpkin on your head, then a pumpkin-wearing trait will develop." (Joyce, 2007, p. 33).

What does it mean to respect ethical premises and moral principles? At a first level, nothing more than preserving an "impeccable" reputation. Therefore, the fact that we feel shame about something we have done indicates a primary capacity for moral responsibility. Even if it is based on the avoidance of ostracism, one of the most fundamental fears for Homo Sapiens

Sapiens, which, according to Brown (2021), although it represents psycho-emotional pain, activates the same neural networks as physical pain, shame symbolises awareness of wrongdoing and submission to norms intra-community.

#### 3. Research methodology

#### 3.1. General objective and research questions

The objective of this study is to analyse the literature produced on "ethical intelligence" and "moral intelligence" concepts from the perspective of the definitions and the chronological evolution of the concepts. The following research questions were formulated and based on them we propose to develop an analysis of ethical intelligence:

- What are the areas of study interested in researching ethical/moral intelligence content, which is the evolution of this concept through time?
- What are the main items of ethical/moral intelligence that can be integrated in a conceptual structure with the aim of creating a starting point for further research on this matter?

#### 3.2. Research hypothesis

The working hypothesis is that, in the specialised literature, there is a lack of consensus regarding the definition of this new type of intelligence, that there is no clear perspective on the chronological evolution of the use of key terms, that the areas of study are varied and offer narrow perspectives to the context addressed and that the inter-changeable use led to the production of two lines of research that did not assimilate each other (one line of discussion about ethical intelligence, another line about moral intelligence). This study proposes the development of an integrative theoretical model, starting from the analysis of the literature produced in both lines of study.

#### 3.3. Research design

This study is based on the integrative review of literature research methodology. This research model allows for critical analysis and synthesis of the literature produced on a given topic in order to propose new research models and directions. According to Richard Torraco: "They are also used to review new emerging topics that generate a growing body of literature that may include contradictions or a discrepancy between the literature and observations about the issue, which are not addressed in the literature." (Torraco, 2016, p. 1).

#### 3.4. Procedure

The coverage of the literature will be pivotal, our aim being exclusively to analyse the definitions, theoretical models and the relevance of creating a new type of intelligence, therefore not opting for an exhaustive, exhaustive selective, representative or central approach. The steps of the integrative literature review, including filters (inclusion and exclusion criteria) are outlined below (PRISMA, Page et al., 2021):

- The first filter applied in the selection of literature consists in the elimination of materials that address the theme of "ethical intelligence" with the meaning of "ethical intelligence services". At the same time, studies on ethical dilemmas within programs that develop the concept of artificial intelligence and studies on the ethics of intelligence tests will be excluded.
- Studies that are not accessible in English, Romanian and Portuguese were excluded.
- Articles presenting experimental or semiexperimental, qualitative or quantitative research, which do not propose new theoretical models or integrative visual schemes, which do not extend and validate previously proposed models, were excluded.

The taxonomy of sources will include a conceptual model and a diachronic model, both represented by visual schemes. The public to whom this integrative study is addressed is represented by practitioners (professionals, especially in the field of education), the aim being to enrich the perspective of the formative valence and development of moral/ethical intelligence.

To make a diachronic taxonomy regarding definitions of ethical/moral intelligence, the Google Books platform will be used, with the advanced search option.

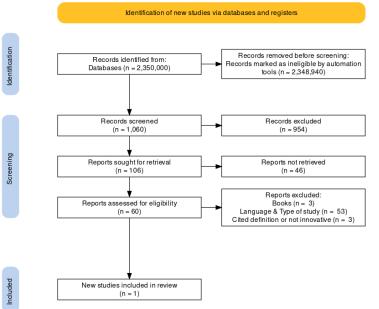
In the first stage, the keywords "ethical intelligence" will be entered, and the search will be filtered according to the following criteria: 1. XIX century; 2. The 20th century; 3. XXI century. For each century, 10 relevant sources will be chosen that contain the phrase in the content or in the titles of the chapters, not as official titles or subtitles of the works.

In a second stage, the keywords "moral intelligence" will be entered, and the search will be filtered according to the following criteria: 1. XIX century; 2. The 20th century; 3. XXI century.

For each century, 10 relevant sources will be chosen that contain the phrase in the content or in the titles of the chapters, not as official titles or subtitles of the works.

The Google Books platform was used to create a conceptual taxonomy. In the first stage, the phrase "ethical intelligence" will be introduced and all papers with "ethical intelligence" in the title or subtitle will be selected for analysis. In a second stage, the phrase "moral intelligence" was introduced and all works with "moral intelligence" in the title or subtitle were selected for analysis (Fig. 1 and Fig. 2).

Figure 1. PRISMA 2020 for the inclusion of articles relevant to "Ethical intelligence".

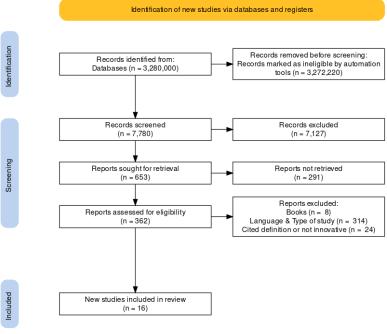


To complete the conceptual taxonomy, the Google Scholar platform was used (with the advanced search option and the My Library function), and the phrases "ethical intelligence" and "moral intelligence" were entered, respectively, and the doctoral theses were chosen, articles and publications that propose visual models and integrative schemes starting from moral/ethical intelligence, critical analyses, conceptual extensions, validations/invalidations of already existing sources.

English language sources are used, because in Romanian there is no material generated by Google Scholar or Google Books as a result of the search for "ethical intelligence" or "moral intelligence". In Portuguese, for "inteligência Ética" no results are generated, while for "inteligência moral" three results

are generated, two articles being published in Portugal and one in Brazil. The following figures show the search, screening and inclusion of articles according to PRISMA 2020 (Page & McKenzie & J.E., Bossuyt & Boutron & Hoffmann & Mulrow, et al., 2021).

Figure 2. PRISMA 2020 for the inclusion of articles relevant to "Moral intelligence".



#### 4. Results

The results of the integrative studies are presented through figures related to diachronic taxonomies and conceptual taxonomies.

#### 4.1. Diachronic taxonomy

Diachronic taxonomy of sources that define or mention ethical or moral intelligence through 19th, 20th and 21st century.

Based on the 60 analysed sources, covering 185 years, in the interval 1836-2021, the diachronic taxonomy was elaborated, visually represented by 6 figures (Fig. 3-8). This taxonomy contains exclusively works, publications, studies and articles that mention or define ethical intelligence, respectively moral intelligence, without being materials specifically intended to deepen these notions. The critical analysis of the sources will be carried out in relation to the sources specifically intended for the concepts, organised chronologically in Figure 9 for books and Figure 10 for articles.

1895

1895

Butler, Graves, Nelson

"reason exercised in a

special field, the field of

1893

1857

**Henry Allon** "as sufficient to 1878

1880

Isaac M. Wise

"Hillel the

purest ethical

Horace Traubel John Bascom **David Thomas Rudolf Schmid** "positive and "disclosing broadly Isaak A. Dorner and deeply the "a highly spiritual invaluable "touching even "the law-giving forms and issues of and ethical distillation of Ethical the Christian thought" intelligence" Intelligence" conduit" point"

1888

1889

E.D. Cope

"knowledge of right and

Figure 3. Definitions and mentions of Ethical Intelligence During the Nineteenth Century.

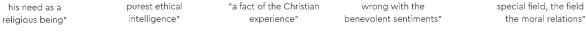
1886

Franz Hérman

Reinhold Frank

"a fact of the Christian

1882



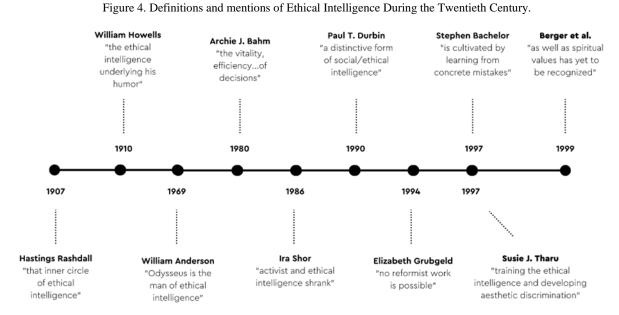


Figure 5. Definitions and mentions of Ethical Intelligence During the 21st Century

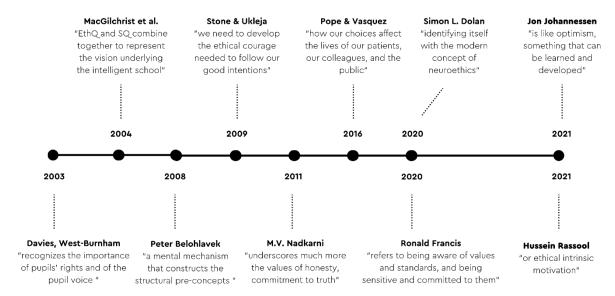


Figure 6. Definitions and mentions of Moral Intelligence During the Nineteenth Century

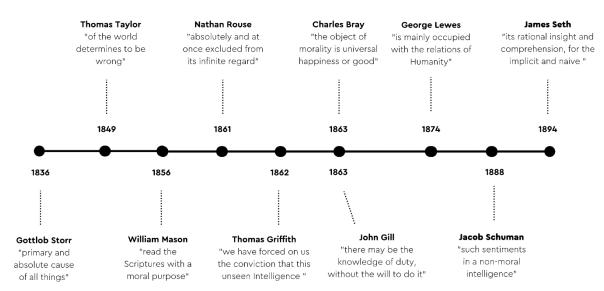


Figure 7. Definitions and mentions of Moral Intelligence During the Twentieth Century.

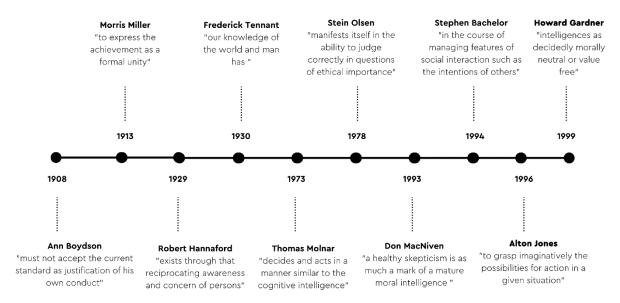
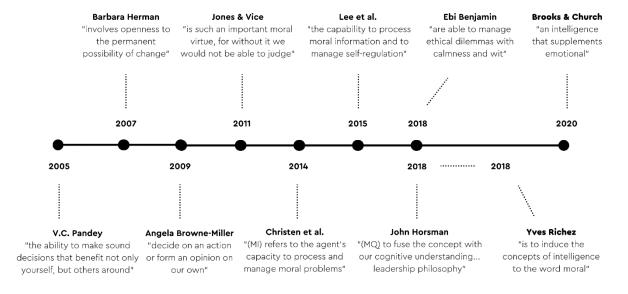


Figure 8. Definitions and mentions of Moral Intelligence During the 21st Century.



Diachronic taxonomy of sources specifically intended for the study of ethical, respectively moral intelligence

In this stage, books, articles, publications and scientific journals that have as their main theme the study of ethical/moral intelligence will be analysed.

Sources that mention the key terms in the title or subtitle were selected and only those that propose new/original definitions, theoretical models and visual schemes were included in the present analysis.

Figure 9. Books dedicated specifically to ethical/moral intelligence.

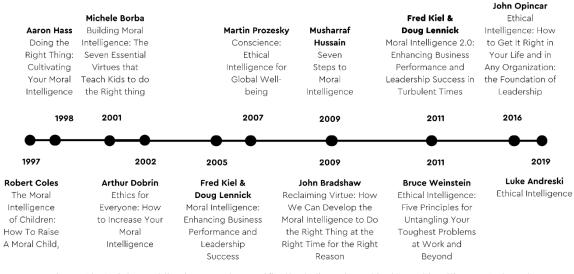
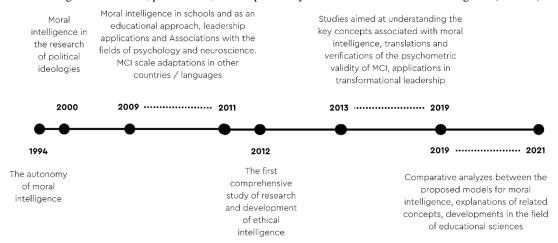


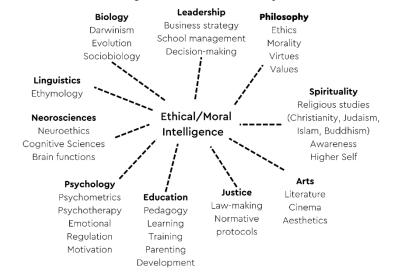
Figure 10. Articles, publications, works specifically dedicated to ethical/moral intelligence (selected).



#### 4.2. Conceptual taxonomies

Two representative schemes were made for the conceptual taxonomy. The first (Fig. 11) illustrates the areas of interest in the application and research of ethical/moral intelligence. The second (Fig. 12) is developed as a conceptual map of ethical intelligence from the perspective of the main elements it has in its content, proposes functional associations between them and defines the goals of the development of this type of intelligence.

Figure 11. Conceptual taxonomy - areas of interest in ethical/moral intelligence. Author Andrei G. Stupu.



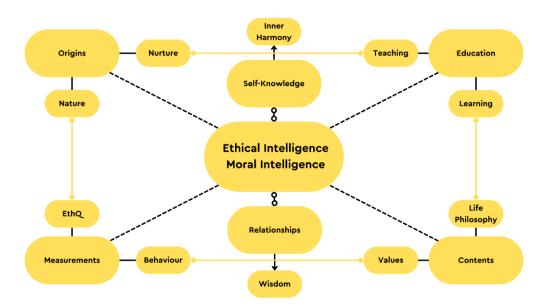


Figure 12. Conceptual Taxonomy - Map of Ethical/Moral Intelligence. Author Andrei G. Stupu.

#### 5. Discussion and conclusions

Starting from the field of educational sciences and educational management, Neil Hawkes defines ethical intelligence as "Ethical intelligence is the ability to ethically self-regulate your behaviour. This transformative dimension is a person's capacity to be self-led, acting appropriately by making wise choices, when meeting the daily multidimensional challenges, which are experienced in our complex world." (Neil Hawkes, online)

Carrying out an integrative review of literature on the topic of ethical andmoral intelligence will prove useful considering the fact that up to now there is no study that unitarily assimilates the works addressed separately to "ethical intelligence", respectively intelligence". "moral Also, the chronological placement of the "invention" of the concept varies from one author to another, with most pointing to 2005 as the reference point for the introduction of the concept of "moral intelligence", others going all the way back to Mesopotamia and Ancient Egypt. As we saw, "modern" research on this topic began at the end of the last century, and the first explicit mentions can be found starting up to 200 years ago.

The conceptual map represented in Fig. 13 opens up new directions in educational and philosophical research through its items directly related to the following research questions to be analysed in future research: Where does ethical/moral intelligence come from? Are its origins in our genetic background and conditioned by our brain function, or is it a product of

the environment we are born into? If both are involved, what are the weights for each? Is ethical/moral intelligence improved through education? What are the methodologies proposed by the pedagogues? What are the ways to train adults to develop ethical/moral intelligence? Can ethical/moral intelligence be measured? If so, do we measure it psychometrically and define a coefficient, or can it only be measured phenomenologically by observing the consequences of a person's ethical or unethical decisions?

The present research begins by exploring two themes of study, ethical intelligence and moral intelligence respectively. It subsequently demonstrates, through the integrative research of the literature regarding both directions of study, by making diachronic and conceptual taxonomies that the two refer to the same concept. This approach is unique, being the first time that a scientific paper systematically approaches various sources for a time span of 185 years with the aim of identifying definitions, developments, theoretical models and practical applications of the concept of ethical/moral intelligence.

Most authors speak of a moral crisis and a decay of human behaviour (Boss, 1994; Hass, 1998). In our study, this moral degradation is explained by the lack of identifying and assuming a life mission, a meaning that guides the individual towards a level of development that allows him to generate a positive impact on others.

It is imperative that the fundamental role of ethical/moral intelligence in the authentic development of the human being be recognized, no longer confused with theoretical memorization and the gross lack of practicability of concepts. It requires a group self-knowledge and harmonisation of the common objective, a pertinent definition of the team's mission and vision, followed by the integration of servitude, the fundamental idea that one without the other is unable to accomplish its work and to produce, as a result, value for oneself and for the community.

Viewing the main moments in the history of the study of intelligences can help us outline the importance of this intellectual dimension, but as we can see, the fields of study of the concept of intelligence vary. Considering the field in which the present work falls, namely, educational sciences, the literature included in this analysis also addresses speculative theoretical models, which associate a series of concepts with the purpose of defining intelligences, from functionality, to psychological archetypes, to temperament, talents and even dimensions of spirituality that are difficult to quantify. However, the latest research in the field of neuroscience, the field of study that investigates intelligence by observing the brain dynamics and functionality of individuals in relation to cognitive tasks, can give us an overview of the augmentation of capabilities. Can we have a problem with a brain intervention or a pill to increase intelligence without education and learning? As challenging as this assertion is for educational scientists, it is also valuable at this point in the study of intelligences, because it opens up a new transdisciplinary horizon.

neuroscientists Among there still disagreements about how we define intelligence, but most tend to agree with Jensen, who says that "Intelligence is surely not the only important ability, but without a fair share of intelligence, other abilities and talents usually cannot be fully developed and effectively used... It [intelligence] has been referred to as the "integrative capacity" of the mind." (Jensen, 1981, p. 11). The book The Neuroscience of Intelligence integratively analyzes the most important developments in the field of neuroscience related to intelligence. The general conclusions of Richard Haier's exhaustive work help us to have an objective picture of the state of evolution of intelligence research and to discard a number of myths based on outdated research or erroneously popularised by the media. The most important ideas would be that intelligence testing

is a valid method, that genes have a significant impact on the development of intelligence, and that "intelligence genes" are beginning to be discovered, that intelligence is processed by networks throughout the brain, with no single centre of intelligence, that developments in neuroimaging can contribute to understanding intelligence.

The diachronic and conceptual taxonomies proposed in this study represent a valuable resource for further ethical/moral intelligence research endeavours. The research questions proposed by the study are in themselves directions of analysis and deepening for researchers in various fields, with experts in educational sciences, psychology, neuroscience and philosophy at the centre of attention. Integrative research on ethical intelligence, respectively moral intelligence continues to develop not only a proposal for a new time of intelligence, but contributes to the vast collection of works from all fields concerned with the development of human potential. To achieve greater clarity on the concept, a series of efforts to integrate all intelligences in a relational model and a definition of ethical/moral intelligence from the perspective of its functionality and manifestation are But perhaps the most reconceptualization is related to the very name of this intelligence, the two directions of study, divided between morality and ethics having to be brought together under a comprehensive name.

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values of human-animal interactions and the multidimensional study of community-oriented volunteering.

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## Mobile Augmented Reality Applications in Higher Education

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#### **Mobile Augmented Reality Applications in Higher Education**

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#### **Abstract**

Keywords: augmented reality; 3d models; education; mobile applications; performance evaluation Visual technologies such as AR (Augmented Reality), VR (Virtual Reality), or MR (Mixed Reality) show an increase in popularity in the educational field. In addition to the fact that they can significantly improve the transfer of information in education, they can turn lessons into more interesting and interactive activities. Among these technologies, AR has become the most accessible, due to the rise in the popularity of mobile devices. The increasing popularity of distance teaching and the increasing performance of mobile devices and applications will make this topic an important one in the future in educational psychology. The current study aims to evaluate the effectiveness of using AR in learning and compare it with classical 3D models. Following the calculations, we discovered a minor influence. This implies that the group of students who used simple 3D outperformed the group of students who used Assemblr AR, but the gap between the 2 learning methods was not very wide. The results indicate that the use of 3D models is effective in learning but there is no significant difference between the AR and normal 3D models. The limited effects and the findings of other studies on AR in education imply that additional research is required.

#### Zusammenfasung

Schlüsselworte: erweiterte Realität; 3D-Modelle; Ausbildung; mobile Anwendungen; Leistungsbewertung. Visuelle Technologien wie AR (Augmented Reality), VR (Virtual Reality) oder MR (Mixed Reality) erfreuen sich im Bildungsbereich wachsender Beliebtheit. Neben der Tatsache, dass sie den Informationstransfer in der Bildung erheblich verbessern können, können sie den Unterricht in interessantere und interaktivere Aktivitäten verwandeln. Unter diesen Technologien ist AR aufgrund der zunehmenden Popularität mobiler Geräte die am besten zugängliche geworden. Die zunehmende Popularität des Fernunterrichts und die zunehmende Leistungsfähigkeit mobiler Geräte und Anwendungen werden dieses Thema in Zukunft zu einem wichtigen Thema in der Pädagogischen Psychologie machen. Die aktuelle Studie zielt darauf ab, die Effektivität des Einsatzes von AR beim Lernen zu evaluieren und mit klassischen 3D-Modellen zu vergleichen. Nach den Berechnungen entdeckten wir einen geringen Einfluss. Dies impliziert, dass die Gruppe der Studenten, die einfaches 3D verwendet haben, die Gruppe der Studenten, die Assemblr AR verwendet haben, übertroffen hat, aber der Abstand zwischen den beiden Lernmethoden war nicht sehr groß. Die Ergebnisse zeigen, dass die Verwendung von 3D-Modellen beim Lernen effektiv ist, aber es gibt keinen signifikanten Unterschied zwischen den AR- und normalen 3D-Modellen. Die begrenzten Effekte und die Ergebnisse anderer Studien zu AR in der Bildung implizieren, dass zusätzliche Forschung erforderlich ist.

#### 1. Introduction

For many teachers or educators, the learning experience with the help of augmented reality (abbreviation that we will use below - AR) is a new concept. Although these technologies have been studied and analyzed in the educational context, these technologies have not been implemented in many institutions (Geroimenko, 2020).

AR technologies can help pupils or students develop new techniques to study and memorize, compared to classical ways of learning. Studies on these types of applications have highlighted several advantages such as: (1) the application transforms the representation of the problem so that difficult concepts are easier to understand; (2) the application presents

relevant educational information at the right time and place, providing easy access to information and reducing extraneous elements in student tasks; (3) the application directs students' attention to important aspects of the educational experience; (4) the app allows students to be physically active while also providing immersion to educational concepts; (5) the application allows students to interact with spatially challenging phenomena (Radu, 2014).

Even though there are many studies that confirm the usefulness of AR technologies in education, many contemporary researchers claim that the research of AR in education is still at an early stage. Wu et al. (2013) argue that evidence of the effects of AR on

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learning and teaching "appears to be superficial". In a meta-analysis conducted by Radu (2014) where he reviewed 26 studies on AR in education, he identified both positive and negative effects of using this technology and possible factors underlying them.

A study by Ibanez et al. (2014) investigated how effective these types of virtual learning environments are. The study showed positive results in terms of its effectiveness, which led to several further studies. Examining studies on the effectiveness of AR in the educational system, especially those published recently, proved that the use of this technology leads to increased performance and motivation in students, creates positive emotions, and helps students adopt a more positive attitude towards the subject studied (Wang, Duh, Li, Lin & Tsai, 2014). It should be noted, however, that these experimental studies have shown effectiveness only in some fields of science. According to a review by López-Belmonte et al. (2020), the majority of augmented reality research has been directed to educating users on how to utilize the technology effectively in the learning environments it creates and its use in education considering the diversity of learners.

Future research should concentrate on emerging AR devices like smartphones and AR glasses. Three generations of augmented reality in education are described in a review by Garzón (2021). The study identifies some significant issues with prior AR applications and, at the end, offers some suggestions for resolving these issues to maximize the advantages of AR for education. In the third generation (starting in 2020), smartglasses are frequently used as hardware. Smartglasses are a type of wearable technology that, like smartphones, has the potential to change how we live. Smartglasses have a variety of benefits over competing technologies, including voice and control, non-intrusive technology, no need for touchscreens, and more.

#### 2. Theoretical clarifications

A strong trend that can be observed in the field of education is digitization. This type of education modernization consists of transmitting and receiving printed or handwritten information into digital information (Machekhina, 2017). This process was accelerated with the onset of the COVID-19 pandemic, during which online distance learning became standard in several countries. During this time, much has been invested in increasing the quality of digital education (Bubb & Jones, 2020). For digital

education, in the past, specialized rooms were needed, equipped with computers and projectors. Recently, more and more students have acquired learning experiences through portable devices such as smartphones and tablets (Geroimenko, 2020).

Electronic learning (or e-Learning) describes a set of technology-mediated methods that can be applied to support student learning and can include elements of assessment, guidance, and instruction. There are many media and technologies available to support elearning. The Internet, for example, can be a communication medium that connects many students in virtual space, creating learning communities (Jonassen et al. 1999).

An e-learning course can reduce study time by 30% compared to a traditional face-to-face course without sacrificing course content (Le & Nguyen, 2020). At the same time, students can save around 60% of expenses due to the elimination of costs for travel, accommodation, or purchase of learning materials. Studies show that people prefer hybrid ways of learning, with both types of learning having advantages and disadvantages (Oliver & Trigwell, 2005).

For different learning situations and outcomes, several theories are acceptable. If we wanted to define it briefly, we can say that learning is a long-term change in associations or mental representations because of experience (Ormrod, 2011). Although there is no universally accepted definition of learning due to its subjective nature, we can draw on one of multiple learning perspectives or paradigms (Ormrod, 2011). Below are briefly presented the theories of learning according to the most studied paradigms:

According to the behaviorist paradigm, all behaviors are the result of our interaction with the environment. Many behaviorists argue that internal processes should be excluded from psychological studies because we cannot directly observe and measure them (e.g. thoughts, motives, representations, etc.) (Watson, 1925). In the same way that real science researchers examine events in the physical world, behaviorists argue that psychologists should investigate learning through objective scientific investigation. Psychologists can remain unbiased by focusing on two things they can see and measure specifically, the stimuli in the environment and the body's responses to those stimuli (Gredler, 2008).

A study by Lampropoulos et al. (2022) found that virtual rewards delivered through augmented reality can be crucial components for enhancing learning motivation. Students showed beneficial behavioral, attitude, and psychological changes in an AR environment, as well as enhanced engagement, motivation, active participation and information acquisition.

According to cognitivism, people are active participants in their learning. From their perspective, knowledge is actively constructed and is not simply a result of interaction with the environment (Ashworth et al. 2004). Individuals select how they process their knowledge in their minds, and these cognitive processes determine what information is remembered and what information is ignored. Unlike behaviorism, cognitivism tries to understand complicated cognitive processes (the so-called 'black box'), looking for links between learning, information processing, perceptions, and memory. At the same time, learning involves establishing mental representations or connections that are not always reflected in visible behavioral changes (Ormrod, 2011). AR applications can be developed to activate different areas of the brain, such as improving reflexes, promoting critical thinking, and helping people learn new patterns of connections. AR games based on cognitivism are useful for learning a foreign language and memorizing new content (Geroimenko, 2019).

Constructivism is a philosophy of teaching and learning that holds that learning (and knowledge) is the consequence of "mental construction". In other words, people learn by combining new and old knowledge. Constructivists believe that the environment in which a concept is taught, as well as people's ideas and attitudes, influence learning (Olusegun, 2015). AR applications can provide a variety of opportunities to build new knowledge by combining physical and mental components. Recording video, taking photos, recording sound, and modeling and integrating that perceptual information, through various sensory modalities, with the user's real-time surroundings are examples of AR-based constructivist activities (Laine et al. 2016). Ideas from this theory are also found in augmented reality applications such as Leometry, which collaborative AR application that allows students to build three-dimensional mathematical and geometric models in a shared AR workspace, providing new dynamic opportunities for interactions, thus promoting higher-level learning and to help develop their ways of

learning. Discovery learning is a constructivist method of problem-based learning in which learners acquire new information by experiencing a domain and deducing rules from the consequences of their interactions with it (Ozdem-Yilmaz & Bilican, 2020). In a study, Liang et al. (2021) explore the potential of augmented reality in training medical professionals through the use of a stroke assessment simulation. According to the study's findings, the majority of students thought that extended reality would be an excellent educational tool for clinical training and healthcare. Simulators, with their interactive features, allow learners to gain information using the scientific method and are suitable for learner-centered learning.

Humanistic theories of learning are based on humanistic concepts from the works of Abraham Maslow and Carl Rogers. In this paradigm, the emphasis is on the individual, who has a holistic approach to learning (Sharp, 2012). According to the paradigm, in addition to intellect and environmental stimuli, personal interests, enthusiasm, and intrinsic motivation are also important (Seel, Humanistic learning theory focuses on personal development and involves consideration of emotional factors such as an individual's self-concept, values, and emotions. Humanistic education enhances learning by relating to students' lives, emotions, and experiences on a personal level. As a result, children learn more and more deeply (Johnson et al. 2014). AR technologies can help create a learning environment that sparks students' interests. In AR, it is easy to change the working environment and can make learning more enjoyable and immersive.

According to connectivism, learning is a network phenomenon affected by technology and socialization. The basic idea of connectivism is that most information acquisition takes place through social networks (Siemens 2006). Connectivists argue that a person's knowledge is dynamically shared and created through continuous interactions with other people within a network. AR technology can help provide the necessary framework for connectivist learning as well as channels to connect with dynamic data sources (Revelle et al. 2014). These principles are used in AR apps like Assemblr, which allows students to acquire knowledge by interacting with other students in a virtual classroom. Augmented reality users may be more inclined to study a certain subject in a classroom setting (Li & Liu, 2022).

#### 3. Methodology

#### 3.1. The research design

For this study, we have two hypotheses: H1: Students who use 3D models for learning neurology subjects will have significantly better results, and H2: Students who learn using AR technology – compared to simple 3D models with the same digital content – will have better results.

To test the proposed hypotheses, this study used a two-condition (AR vs. Simple 3D Models) betweensubjects design, with participants randomly assigned to each condition. The independent variable in this study was the learning modality: in AR or classic 3D. The dependent variable in the study is the amount of information retained after the learning session. A t-test conducted to compare students' achievement in terms of their post-test scores between the experimental (AR) and control groups (3D Models). In addition, we used Cohen's effect size index d (Cohen, 1988) to illustrate the magnitude of practical significant difference between groups. It should be noted that Cohen's d values of 0.20, 0.50, 0.80, and 1.0 are interpreted as a small, medium, large, and very large effect sizes, respectively.

#### 3.2. Participants

This preliminary study recruited 27 dyads of 3rdyear students (N=54) from the Faculty of Psychology of Babes-Bolyai University, Cluj-Napoca. The criterion for being a participant was that he/she had learned about neurology since the first year. The experimental group consisted of 26 students whose ages varied between 21 and 26 years. Additionally, none of the students had prior experience using AR technology. The control group included 26 students between the ages of 21 and 26. To ensure the two groups of students had equivalent prior knowledge prior to treatment, a t-test was performed on their pretest scores. The result shows that the learners in both groups had no statistically significant difference in their pre-test scores indicating that the two groups had similar prior knowledge on the topic of brain and neuron structure.

#### 3.3. Measuring instruments

For this study, we used the Assemblr Edu application. Assemblr Edu is an augmented reality platform designed to facilitate the learning process of pupils and students. The application is compatible with mobile devices with Android (version 7.0 or

later) or IOS (version 11 or later) operating systems. This application was chosen because it has several advantages from a functional and organizational point of view compared to other available applications. From the perspective of AR representation, the Assemblr Edu app is an easy (cloud-based) way to upload, edit and share 3D models with others. Participants are able to view an item of interest in 360 degrees with subsequent annotations and explanations. The application allows the implementation of animations and interactions through which processes that can be difficult to explain with classic images can explained to the participants. organizational point of view, the application allows the creation of online classes and sharing of real-time instructions with class members. This allows the study to be carried out remotely. At the same time, the application is relatively easy to use. The application also has some disadvantages. On the one hand, the application has many functional problems, occasionally it stops or works hard. On the other hand, it does not allow uploading of 3D models and has a limited set of models for biology. Since the participants were students in their 3rd year of psychology, the course of interest is neurosciences. The neurosciences participants were chosen because the students needed to be a little familiar with the subject studied but not something recently studied (this being learned in year 1). At the same time, choosing an important subject for the license exam can be a motivating factor to participate in the study. The app helped students locate specific parts of the organ or cell being studied on the model and provided animations and additional information to help them remember the properties of the brain and neurons. Two neurosciences knowledge tests were used to measure retained information. The tests had the same content and consisted of 6 questions with 1 or 2 correct options. Both tests could be scored between 0-10. After correcting the papers, the score from the pre-test was subtracted from the score from the post-test to see how much the student retained. A participant-signed consent form was included on the test paper.

#### 4. Results

To understand the effects of learning (H1) with both AR technology (H1b) and 3D images (H1a) on students' learning achievements, a pretest-posttest t-test was conducted for both learning modalities. The post-test results of the 3D group differed significantly from the pretest results (t(26) -0.79, p 0.0002) as shown in table 1. This suggests that learning with the

help of 3D was very effective for learning in a short time of neurology information, so we can accept hypothesis H1a. The post-test results of the AR group also differed significantly from the pretest results (t(26 -1.44, p 0.0001) also indicated in table 1. This

indicates that learning with the help of AR of the same subject is effective for learning and memorization of the given subject, slightly higher than those of the AR group. So, we can also accept hypothesis H1b.

Table 1.

Paired Sa	amples Test			•	
		Paired Differ	ences t	df	Sig. (2-tailed)
		95% Confi	dence		
	Iı	nterval of	the		
	$\Gamma$	oifference			
		Upper			
Pair 1	Pretest 3D – postest 3D	40717	4.241	26	.0002
Pair 2	Pretest AR – postest AR	78632	- 4 535	26	.0001

The results in the AR group were even better, but to see how significant the difference was, we did a ttest to compare the results. The first time we calculated the difference between the results of the 2nd test and the first and then averaged them. After this, the means were compared in SPSS to see if the differences between the 2 modalities were significant. determine if they were significant, we used the Cohen d index. After performing the calculations, we obtained a Cohen d=0.32 coefficient, which can be interpreted as having a small effect. This suggests that students who used Assemblr AR performed better than the group who used Assemblr 3D, but the difference between the 2 types of learning was not very large (see Table 2). Having a small difference between the results between the 2 types of technologies we cannot conclude that the use of AR technology brought a significant advantage, and we cannot accept hypothesis H2.

Table 2.

Independent Samples T-Test					
	t	df	p	Cohen's d	
Post-Test results	1.18	54	0.243	0.3116	

#### 5. Discussions

One of the aims of the current study was to explore the effectiveness of a mobile application developed for learning in AR called "Assemblr Edu" on the construction of students' knowledge about fundamental concepts in neuroscience. The t-test result of their post-test scores indicates that the learners' knowledge of elastic collision was significantly improved by using the Assembler Edu

application. These results may suggest that the introduction of 3D visual elements may be beneficial in education. This is also suggested by other studies: when comparing the AR software to the conventional physical molecular kit in a study by Abdinejad et al. (2021) on the usefulness of AR in chemistry teaching, it was discovered that the app was more beneficial for students, particularly when taking into account the speed of 3D visualization. It should also be mentioned that these applications also allowed the quick sharing of lessons on a device that these days are always present. Students became familiar with the app relatively quickly, suggesting that these types of apps can be easily implemented in courses and classrooms. However, the results were not significantly different between those who used the app's AR feature or just viewed the models in 3D. This suggests to us that the introduction of 3D models is beneficial but there is no significant difference between the way it is rendered. However, there is a smaller difference which together with the results of other studies on AR (see: Huang et al. 2019) where a significantly better result was obtained for learning in AR compared to other methods, suggests that studies in future are necessary. According to a review done by Tang et al. (2020), the quality and scope of AR research being used in medical education at the moment is insufficient to propose its incorporation into curricula. They make the case that it's critical to standardize AR evaluation techniques and outline the technology's place in medical education.

#### 6. Conclusions

According to research and analysis of augmented reality technology in the field of education, higher education in particular, augmented reality is a type of technology that strengthens the replication of students' learning environments and has a strong theoretical underpinning and technical support in its application. The study demonstrated the usefulness of 3D models but did not uncover any compelling data to support student instruction using augmented reality technology to produce three-dimensional displays of real-world scenarios and instructional materials.

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Research article

## Aspects Regarding the Formative-Informative Relationship in the "Pedagogue" by Clement of Alexandria

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#### **Abstract**

Keywords:

Pedagogue; pedagogy; formative; informative; self-development

The entire work of Clement of Alexandria, but especially the work "The Pedagogue", constitutes a brilliant synthesis of Christian theological and educational thought from the end of the 2nd Christian century, but also a reference document for the subsequent stages of development of pedagogy. For the Alexandrian pedagogue, the value of faith is illustrated by the value of the education he promotes, that is why he puts the Pedagogue at the centre of his ideational approach, as an exemplary model of thought and action. The way he defines the concepts and argues the formative-informative relationship may be surprising today, but hard to dispute. The research conclusions show the fact that the formative-informative report is relevant to the extent that it is supported by the love of the Pedagogue towards those he educates, who does not hate, knows how to be gentle and persuasive even when he disapproves of a certain behavior.

#### Zusammenfasung

Schlüsselworte: Pädagoge; Pädagogik; formative; informativ; Persönlichkeitsentwicklung Aspekte zum formativ-informativen Bericht im Werk "Der Pädagoge" von Clemens von Alexandrien. Das Gesamtwerk von Clemens von Alexandrien, insbesondere aber das Werk "Der Pädagoge", stellt eine brillante Synthese des christlichen theologischen und pädagogischen Denkens vom Ende des 2. Jahrhunderts dar, aber auch ein Bezugsdokument für die nachfolgenden Entwicklungsstufen der Pädagogik. Für den alexandrinischen Pädagogen wird der Wert des Glaubens im Wert der von ihm geförderten Bildung illustriert, deshalb stellt er den Pädagogen als beispielhaftes Denk- und Handlungsmodell in das Zentrum seines ideellen Ansatzes. Die Art und Weise, wie Clemens von Alexandrien die Begriffe definiert und das formativ-informative Verhältnis argumentiert, mag heutzutage vielleicht überraschen, ist aber schwer zu bestreiten. Die Forschungsergebnisse dieser Studie zeigen, dass der formativ-informative Bericht relevant ist, insofern er von der Liebe des Pädagogen zu den von ihm Erzogenen getragen wird, weil der Pädagoge keinen hasst, sondern weiß, wie man sanft und überzeugend ist, auch wenn er ein bestimmtes Verhalten missbilligt.

#### 1. Introduction

One of the main problems of pedagogy remains the periodic redefinition of the formative-informative relationship, a theme of pedagogical reflection that we constantly find in the attention of thinkers from the educational space, from antiquity to the present day. The present paper analyzes the way in which this issue is found in the texts of Clement of Alexandria, classic author not only for the pedagogy of Christian antiquity, but also for the contemporary one. Our research concern was also supported by the constant attention that his writings have received in the modern period of pedagogy, given their very good reception in the context of the reconsideration in European culture (Casey, 1925) of Plato's writings (Maier, 1994) and especially Aristotle (Butterworth, 1919), from whom Clement takes over and develops the concept of education through culture (Albulescu, 2007), which he

places at the foundation of the personal development of the person.

Clement of Alexandria, full name Titus Flavius Clement, was born in Athens, about 150 AD, into a pagan family. The date of his conversion to Christianity is not known, but according to his confession in *Stromate*, Book I, Panten, his teacher from Alexandria, the founder and first leader of the well-known catechetical school in this city, had a decisive role in this regard. Most likely, Clement arrived in Alexandria in 180, and in 200, after Panten's death, he took over the leadership of the school (Opriş, 2012). During the persecutions ordered by the emperor Septimius Severus (202-203), Clement was forced to take refuge in Caesarea Cappadocia (Fecioru, 1982a).

As we have shown in a previous analysis (Opriş, 2011a), the appearance of the school in Alexandria and Clement's activity within it meant, indisputably, the transition to a new stage of education in Christian schools (Scheau, 2014). Education through culture, a key concept that aims to integrate informative elements with formative ones in a structure and on new foundations, was one of the most important directions supported by Clement and the School of Alexandria, a concept taken over and developed later by personalities like Saint Basil the Great, in his well-known address to young people.

Although not preserved in its entirety, the work of Clement of Alexandria is extensive (Hoek, 1988). It is noticeable in all his writings the force with which he tried to present to Christians the role of education and the importance of access to culture (Opriş, 2021) for a high personal moral life, within the society of his time (Ivan, 2020). It is also significant that he does not urge the abandonment of social positions or material goods, for religious reasons, an opinion present in the era, and he argues his point of view by showing the major formative role of helping fellow men, from multiple perspectives.

#### 2. Theoretical foundations

The education promoted by Christianity has experienced a similar course to that of the spread and development of this religion. After a period in which the teaching was transmitted only by living speech, since the apostolic period, written syntheses began to appear and transmitted to different Christian communities in full process of formation. Almost immediately, the reactions of the official religion appeared, supported sometimes to the point of identifying with it, of the Roman emperors. Also supported by some political and religious circles, the open conflict would last almost three centuries, until the edict of religious tolerance, from the year 313, issued by the emperor Constantine the Great. In all this period of time, despite the often generalized campaigns in the Roman territories against those who had become Christians, their first schools began to appear, founded by the descendants of the apostles or their disciples. Necessarily, Christian literature also developed, initially through the multiplication of apostolic texts, later included in the New Testament, and later through the appearance of works of biblical exegesis (Borca, 2020). Thus we meet the first efforts to train all Christians in an education system designed for life (Benga, 2009). The approach was a formativeinformative one and its appearance was not accidental at all, taking into account the fact that the essence of Christian education is the invitation to a continuous inner personal remodelling through consciously undertaken educational-religious approaches.

In the previously presented religious and educational context, the work "The Pedagogue" represents a unique appearance, through its ideology and specific argumentation, but also through the way it generated a whole series of Christian educational models. The author of this work was sometimes called by posterity "Clement, follower of the apostles" (Cyril of Jerusalem) or "Great Clement" (Maximus the Confessor), and some of the martyrologies mention him on December 4. His popularity was very high at the time, although he led the School of Alexandria for a short time (200-203) and did not manage to complete all the works he started. Nevertheless, his fame as a thinker and orator, doubled by the work he left before leaving for Caesarea, keep him in a privileged position among the Church Fathers and Writers (Bolocan, 2008, p. 23).

His remarkable erudition attracted a large and select audience, made up of Christians representing the high social classes, but also pagans or Jews. Some of his disciples, including Origen and Alexander, became, in turn, leaders or founders of catechetical schools. Clement of Alexandria was considered the man who "gathered, in himself first and then in his works, all the thinking of the writers, philosophers and poets of antiquity, the Christian who oriented Christian thinking towards the use of all the cultural conquests of mankind, the theologian who laid the foundations of a scientific theologies" (Fecioru, 1982b, p. 5). Thus, the necessary connection of the new Christian schools with the basic literature of antiquity was achieved.

#### 3. Research methodology

The article aims to highlight the main elements that contribute to establishing the formative-informative relationship in the work of Clement of Alexandria. The present analysis was carried out with the help of a methodology that utilizes both educational and historical research tools. Thus, document analysis, the comparative method and the monographic method were used. Writings of the Alexandrian author and analyzes by different authors from the field of educational sciences and theology, interested in the understanding and capitalization of

his pedagogical ideas in current education, were used in the present research.

First, the research aims to highlight the way in which Clement of Alexandria understands and uses the terms *pedagogue* and *pedagogy*, an analysis based on which he establishes and argues the formative-informative report.

For him, the authentic pedagogue is the one who first takes care of training, with the aim of making the soul better, of guiding it towards a wise life. He claims that this mechanism has the best results. It is analyzed how, as a model, the analyzed author proposes Jesus Christ, about whom he speaks with the term Pedagogue, the educator par excellence, the One who teaches people to become like Him, an approach the author calls *pedagogy*.

The formative-informative relationship in the process of personal development is traced to Clement of Alexandria and in the understanding of the delimitation of the meanings of the concept of philosophy, but in the approach of some topics from the space of moral education. We were interested both in highlighting the meanings that circulated in the era related to philosophy and its role in understanding or knowing the world, as well as the working possibilities of this field in supporting knowledge on stable foundations. In the space of moral models, we analyzed the way in which they campaign for a reconsideration of the attitude towards material values, which they say can become harmful to the formation and development of the person if they are not used correctly. Complementarily, I followed the way in which the dialogue between formative and informative aspects is used by Clement in arguing the need for lifelong education, a true initiative in the history of education.

#### 4. Research results

The work *The Pedagogue* represents a fundamental text for any approach in the field of education that aims to capitalize on classic pedagogical models. Although the scope and complexity of the work are indisputable, given the particularities of the present work, we summarize ourselves to some general analyses, alongside the illustrations and arguments with the most expressive texts for the presented concepts.

The pedagogy represents the work of the Pedagogue and is a "good leadership of man towards virtue since his childhood. But the Lord revealed to us

more clearly what it means to be called a child. Let's not misinterpret the name of a child saying that it is the age where a lack of intelligence is seen. Undoubtedly, those who know only God the Father are children; they are innocent, they are babies, they are righteous" (Clement of Alexandria, 1982a, pp. 175-176).

For Clement, the *Pedagogue* deals first with practical matters (Vornicescu, 1957). The author shows how the Pedagogue calls people to a moral life, prescribes immortal rules of conduct and offers them models for living them. He is the healthy one, who does not need a doctor (Matthew 9, 12) and, through this, he has the knowledge and the opportunity to teach others, to whom he can show that only those who are sick in soul need *Pedagogue* to cure them of their passions and then take them to the Teacher.

Clement does not accidentally use the word *Pedagogue* to give the title of his work. The term is used before him by Paul the Apostle, when he writes to the Galatians about the new law of faith, which brought people out from under the leadership of *pedagogues*, also called *guides* (in the Romanian translation): "Thus the Law was our guide (pedagogue) towards Christ, so that we may turn from faith. And if faith has come, we are no longer under the guidance. For you are all sons of God through faith in Christ Jesus" (Galatians, 3, 24-26).

One of Clement's surprising statements, especially considering the historical moment in which it was made, speaks of formation in terms apparently opposed to instruction: "The pedagogue is concerned with the education of men, not with their instruction; its purpose is to make the soul better, not to teach it; to give advice for a wise life, not for a life dedicated to science" (Clement of Alexandria, 1982a, p. 167). Even if in his time the development of science did not know terms of comparison with the level it has reached today, the Alexandrian author considered it necessary to draw attention to the danger of a science without conscience, an aspect possible, he suggests, by following some intellectual trajectories excessively marked by rationalism.

The Alexandrian author also shows who are those who need a Pedagogue: "Just as those who are sick with the body need doctors, so also those who are sick with the soul need a Pedagogue; first to heal our passions, then to lead us to the Teacher, to prepare our pure and proper soul for the acquisition of knowledge and to make it able to receive the revelation of the

Word. Striving therefore to perfect us through a gradual ascent to salvation, the Word, who in everything he does is loving to people, according to an instruction with good results: first he means us, then he educates us, and at the end of everything he teaches us" (Clement of Alexandria, 1982a, p. 167). For the Alexandrian educator, the value of education and the role of the Pedagogue are comparable to those of medical science. The statement is supported in the Christian doctrine by the teaching regarding the dichotomous nature of man, based on which both the soul and the body need a permanent remodelling.

Another register addressed by Clement is that of the training-evaluation relationship. Although the issue of the role of evaluation in education is not necessarily a novelty brought by Christian education, the justification of an evaluation carried out by the Pedagogue is related to the fact that He is without sin, without personal mistakes from which the disciples can justify their own failures. The great paradox of teaching people and leading them so that they become like Him, and the Judgment becomes, in fact, the place and the occasion of the reward, following the final evaluation, with *eternal value*, belong to the Pedagogue (Opris, 2011b, pp. 61-64).

Clement pays special attention to expanding the meaning of the word Pedagogy. For Clement of Alexandria, the pedagogue is a teacher of both men and women. Although the evangelical texts insist on these aspects long before him, this idea contributed to the opening of a completely new path, towards a new paradigm, for the education systems of the time. Currently, the same model of thinking has even determined the replacement of the classic word related to children's education, with that Sciences of Education or Education Science (Voiculescu, 2005, p. 14). "Pedagogy means educating children; this is clear from its name. However, we must see who the children are that the Scripture speaks of in a veiled way and what pedagogue we must give them. Children are us"(Clement of Alexandria, 1982a, p. 173).

For the quoted author, every man is a child. With this, he also eliminates the contradiction in terms, related to the use of the word *Pedagogy* in the education of adults, but additionally justifies the need for permanent education of Christians. The author of *The Pedagogue* offers as an argument for the use of that term the understanding of the word *child*, also attributed to those who are mature and without malice. What he anticipated before, Clement now openly

presents: Jesus is the supreme educator, whose first concern is to have the same love for children, as the shepherd has for his sheep. The reason why the Pedagogue takes care of those he educates is reaffirmed: communion with Him. "The teacher is Jesus. Sometimes He calls himself Shepherd, saying: I am the good Shepherd (John 10, 11-14). According to a metaphor, starting from the shepherds who tend the sheep, Jesus is the Pedagogue who tends the children, is the Shepherd who takes care of the babies; and because babies are innocent, they are called allegorically, sheep" (Clement of Alexandria, 1982a, p. 196).

The Alexandrian author thus also prepares the explanation of the term Pedagogy. For the theological and educational model supported by him, pedagogy par excellence is synonymous with the Pedagogue because His teaching shows full agreement between the One who presents it and the One who lives it (Cucoş, 1999, p. 45): "The word pedagogy has many meanings. It is a pedagogy of the one who is educated and trained; it is a pedagogy of the one who educates and instructs; in the third place is the pedagogy itself; fourthly, what is learned, for example the commandments, make up the pedagogy, too. [...] The pedagogue leads his children towards a life of salvation because of his care" (Clement of Alexandria, 1982a, pp. 196-197).

The main method of education of the Pedagogue is love (Mândâcanu, 2006, p. 20). By the way, among the three definitions of God, present in the Bible, one identifies the Creator with love: "God is love" (I John 4, 8). This is also the reason why Clement of Alexandria talks about the love of the Pedagogue towards the student, even when he applies a certain punishment or different forms of disapproval. The cited author insists that "the rebuke is a kind of doctoring; remove the passions that have strengthened in our souls, clean the impurities from our life [...]. The rebuke is a kind of diet for the sick soul; it advises what we must do and stops the deeds we must not do" (Clement of Alexandria, 1982a, pp. 196-197) For the perfect Pedagogue, reproof is the expression of love and leads to love: "The Lord does not blame people because he hates them - because he could lose them for this reason -, he does not hate them because He suffered for us. The Lord, like a good Pedagogue, very skilfully hides His blame under reproach, awakening [...] through reproach the wisdom of the mind; then the Lord again, in His turn, seeks to exhort those whom He blamed. [...] The word changes its behavior,

according to the way of life of each one: when it is harsh, when it is gentle" (Clement of Alexandria, 1982a, p. 204). Recent research deepens the concept in terms of current pedagogy, when they talk about the integrated modelling of emotional and cognitive intelligence (Marin, Bocos, & Baciu, 2022).

The Pedagogy of the Pedagogue, in Clement of Alexandria's vision, can only have its origin in the divine person, the only one who has the power to love and reprimand only in situations and with the measure that supports a continuous ascent. All the previously presented aspects, in relation to the absolute pedagogical model, find their crowning in the argument that Clement uses with the intention of demonstrating that such a pedagogy is possible, but absolutely proper only to the Supreme Person: "When the Word threatens, it is obvious that he does not want to do harm, that he does not carry out the threat; [...] The word does not act like the snake that bites as soon as it has inserted its fangs. So God is good. The Lord, before proceeding to action, seeks to soften with words" (Clement of Alexandria, 1982a, p. 205)

By resorting to philosophy, Clement of Alexandria seeks to additionally delimit the approaches and openly express the value of education achieved through live speech or written texts, the two methods being for the cited author extremely important and equal in value. Thus, the author tries to define its meanings and present the true philosophy. He insists on dialectically presenting the meanings of the word philosophy: "We do not call philosophy the doctrine that each philosophical school professes, but the philosophy that is really philosophy; we do not call philosophy that technical wisdom, which includes the experience of things that concern life, but that wisdom which is a sure knowledge of divine and human things, a deep and unerring understanding, which includes in it the present, the past and the future, on which the Lord handed down to us through His coming and through the prophets" (Clement of Alexandria, 1982b, p. 420). His perspective, far from being specific to his era or theological field, was taken up by J.J. Rousseau, who adds that without an authentic philosophy, man easily ends up distorting everything, including himself (Opriș, 2012).

The relationship between wisdom and the love that educates is not only a Clement of Alexandria's major theme, but also a timeless current and necessary research approach in the field of education sciences (Opriş, 2019). The Pedagogy of *the Pedagogue* is

unitary and unique at the same time for each of the students, so that each of them through understanding and experience (Ocoleanu, Preda, 2007, p. 217) gets to know the One who gives meaning and long-term relevance to any formative endeavour.

#### 5. Discussions and conclusions

The author, a very important Christian thinker - brought up in the school of Greek philosophy - theologian, pedagogue and head of the Catechetical School in Alexandria, offers models of theological reflection and educational perspectives that are always valid, given the way in which he managed to use the evangelical text as the main source of inspiration, to which was added the personal experience of applying it in the relationship with the disciples. The starting point in his pedagogical exposition and argumentation is the thesis according to which intellectual-spiritual development is reflected by the way in which each person manages to dialectically base his option on values, personal experience and reflection on his own faith.

Although important, one's own pedagogical experience was left on the back burner in an attempt to provide essential support to the spread of the new education model. The personal level of education, acquired through a very special support from the family and his extraordinary intellectual abilities, brought the Alexandrian author to the position of opening a new perspective to education, not only to the Christian one.

He claims that the formative side must precede and support the informative one, not the other way around. A better valorization of literature with explicit or implicit moral content is what the current pedagogy seeks to propose. The unprecedented development of mass media and the constant technicization of the lives of today's children and adolescents must be balanced by consistent and relevant elements for them, so that development of sensitivity to difficulties, inner restlessness or the expectations of those around them is supported. The growing volume of information with which a student comes into contact in the current period calls for the identification of ways through which these become personal values for those who are educated, as a premise for community remodelling. On this not easy road, remarkable Alexandria offers Clement of perspectives, validated over time. We believe that the present research can provide elements of support to researchers and practitioners in education, in the effort to identify significant answers to the increasing number of questions that educational systems ask themselves, related to the formative-informative relationship.

Clement of Alexandria shows the fact that the success of Christian education cannot be expected in the absence of complex structures that combine elements of theology, morals and philosophy of education with didactic ones. The perspective he supports is based both on theoretical models and assumed values, but also on the didactic experience acquired at the school in Alexandria. In this way, elements from fields that up to him seemed at least partially in opposition to each other are brought together, and the success that accompanied his activity meant that all his writings preserved until the modern period benefit from numerous translations and constant attention. The contemporary period value Clement's writings including for the perspectives they offer related to the use of moral models from literature for the articulation of educational sequences aimed at the formative side, and through this to support the informative line.

**Authors note:** The authors have equal contributions to this article.

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Linguistic Validation of the Romanian and Hungarian Translations of the Attitudes About Sexuality for People with Disabilities Questionnaire

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Research article

# Linguistic Validation of the Romanian and Hungarian Translations of the Attitudes About Sexuality for People with Disabilities Questionnaire

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#### Abstract

Keywords: attitudes toward sexuality; special needs persons; sexual health education The identification of the attitudes towards sexuality and sexual education in family settings are starting points for the development of sexual education intervention programs for people with special needs, as well as training parents to convey objective and needs-oriented sexual health education to their children. The purpose of this study is to provide the academic and educational community in Romania with linguistically and psychometrically validated versions of the Romanian and Hungarian translations of the Sexual Attitude Questionnaire for Persons with Disabilities (Porat, 2009). 246 Romanian and Hungarian speaking participants completed the online questionnaire. The results indicate very good psychometric properties of the Romanian and Hungarian translations of the questionnaire, allowing the assessment of attitudes towards the sexuality of people with disabilities in relation to other relevant psychological and social variables.

#### Zusammenfasung

Schlüsselworte:
Einstellungen zur Sexualität;
Personen mit besonderen
Bedürfnissen; sexuelle
Gesundheitserziehung

Die Ermittlung von Einstellungen zur Sexualität und die familiäre Sexualaufklärung sind Ansatzpunkte für die Entwicklung von sexualpädagogischen Interventionsprogrammen für Menschen mit besonderen Bedürfnissen sowie für die Schulung von Eltern zur Vermittlung von Erziehungszielen und -bedürfnissen an ihre Kinder. Der Zweck dieser Studie ist es, der akademischen und pädagogischen Gemeinschaft sprachlich und psychometrisch validierte Versionen der rumänischen und ungarischen Übersetzungen des Sexual Attitude Questionnaire for Persons with Disabilities (Porat, 2009) zur Verfügung zu stellen. 246 rumänisch- und ungarischsprachige Teilnehmer füllten den Online-Fragebogen aus. Die Ergebnisse zeigen sehr gute psychometrische Eigenschaften der rumänischen und ungarischen Version des Fragebogens, die es ermöglichen, die Einstellungen zur Sexualität von Menschen mit Behinderungen in Bezug auf andere relevante psychologische und soziale Variablen zu bewerten.

#### 1. Introduction

The psychological development of children can be very problematic in the case of societies without comprehensive sexual education programs (embedded in the formal education system), because children often receive information not from their micro-social environment (parents, teachers), but from digital media (e.g. websites or pornographic advertisements). Even in the present days, when the existence of online communication makes it easier to access information, sexuality and sexual health education (SHE) are often considered taboo subjects, especially in the cases of post-communist countries, such as Romania. When it comes to the idea of sexual education of persons with special educational needs (SEN), this topic is becoming even more complex and it often a subject of debates, both for parents and for other people in their social networks.

Sexual health education (SHE), although important for individuals and societies, is often difficult to be implemented in the context of disability. because it can have an impact on the quality of life of people with special needs and beyond. In order to implement sexual education programs for people with spectrum disorders (ASD), autism literature recommends that various individual and social factors should be taken into account, with particular attention given to parental attitudes and knowledge toward sexuality and sexual education, in the sense that parents are considered primary educators in terms of providing sexual health education to their children (Gerchenovitch & Rusu, 2019; Orji& Esimai, 2003). The identification of attitudes toward sexuality for people with disabilities, in general, and of attitudes toward sexual education within the family, in particular, is considered a starting point for the development of intervention programs for SHE of persons with special educational needs, as well as of some programs to prepare parents to provide objective and documented sexual education to their offspring, according to their levels of comprehension and communication.

#### 2. Theoretical foundation

The Sexual Information and Education Council of the United States (SIECUS) defines sexual education as being a continuous process of acquisition of information and formation of attitudes, beliefs and values throughout life. It comprises several aspects and processes of human life, such as: sexual development, sexual health. interpersonal relationships, affection, emotions and thoughts, intimacy, body image and gender roles (SIECUS, 2009). In other words, sexual health does not mean only the actual sexual act, but covers more domains, having an important role regarding the integration in the community. Sexual health is defined as " ... a physical, mental and social state of wellbeing in relationship with sexuality; it does not means only the absence of disease, dysfunction or infirmity. Sexual health implies/requires a positive and respectful approach of sexuality and sexual relationships and the possibility of having safe and pleasant sexual experiences without compulsion, discrimination or violence." (OMS, 2006, p.3).

Intimacy is considered a social and personal construct. Particular discourses about intimacy can influence the ways individuals perceive their interpersonal relationships and interactions and also their expectations about them (Weingarten, 1991). The quality of intimate relationships is considered as being directly attributed to the levels of self-identity of each partner (for example, Barry, Madsen, Nelson, Carroll, & Badger, 2009). Moss and Schwebel (1993) give a multidimensional definition romantic intimacy which is based on the analysis and integration of previous definitions of intimacy found in literature: "Intimacy in lasting romantic relationships is determined by the level of commitment and affective, cognitive and physical positive closeness that is experimented with a partner in a mutual relationship (although not necessary symmetrical)". Moss and Schwebel (1993) describe commitment as being the desire of remaining in a long-lasting relationship with a partner. Affective intimacy is described as the acknowledgment of the emotional world of a partner and emotional exchanges such as compassion.

People with disabilities face some challenges regarding intimacy and often they have difficulties in developing and maintain relationships. Studies so far suggest that a meaningful number of people with ASD interested being involved in relationships. In a longitudinal study of 20 years which had as participants adults with autism, developed by Farley et al. (2009), parents of 41 persons with autism received a series of questions about sexual functioning of their adult child. Parents of children who were not involved in romantic relationships, 44% of them, thought that their son/daughter would want a romantic relationship (Farley et al, 2009). Another study developed by Siebelink (2006) demonstrated that romantic relationships are important for adults with intellectual disabilities, having sexual needs, and their interest for sexuality being visibly manifested. 67 people with intellectual disabilities participated in structured interviews that evaluated their knowledge, attitudes, experiences and needs regarding sexuality romantic relationships. Some respondents revealed that they were interested in being involved in a relationship without the need of sexual contacts while others revealed their wish of having sexual contacts without the need of having a stable relationship (Siebelink, 2006).

The understanding of the way general population experiments romantic intimacy is based on the perception and the values of people that develop typically. This type of understandings can be irrelevant or not meaningful for people with disabilities because they can experience and value romantic intimacy differently. The present research aims to provide a linguistically validated instrument to assess the attitudes about sexuality for people with disabilities living in Romania, in which Hungarian ethnic minority group represents 6.5%.

#### 3. Research methodology

#### 3.1. General objective and research questions

The purpose of the study is to translate and to adapt the Questionnaire about Sexuality for People with Disabilities (Porat, 2009) in Romanian and Hungarian languages, to perform a comparative analysis of the two scales, as well as to analyze the validity of the translated versions of the scales. The decision to translate the Questionnaire about Sexuality for People with Disabilities (Porat, 2009) as amended by Gerchenovitch (2019), was based on the relevance of the content of the scale for further studies in the area of Sexual Health Education and on its good

psychometric properties in another translated versions, i.e., Hebrew. Previous studies had been carried out on the needs of parents with autistic children as per their needs for sexual health education (e.g. Gergely & Rusu, 2021), but the lack of tools has not allowed the participating parents to identify their attitude toward sexuality for people with disabilities. It is acknowledged in the field of SHE that in order to develop a SHE program, the first stage would be to assess the attitudes toward sexuality of the participants.

This instrument was validated together with another instrument, i.e. The Attitudes Toward Sexuality Scale (ATSS), Fisher & Hall, 1988). The participants and the methods are the same for both

instruments. The study regarding the validation of the other instrument was sent for publication to the European Proceedings of Educational Sciences EpES with the title "Psychometric Properties of the Romanian and Hungarian version of the Attitudes Toward Sexuality Scale (ATSS).

#### 3.2. Research participants

In the present study, the participants were N = 246 Romanian speaking (N = 130; M = 30.87, STD = .87) and Hungarian speaking (N = 116; M = 31.03; STD = 1.09) persons, from various Romanian municipalities (Cluj, Bucharest, Covasna, Brasov, Iasi). The descriptive statistics on the characteristics of the sample are presented in Table I.

Table 1. Socio-demographic characteristics of the participants (N=246
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Participant characteristics	Group type (RO = Romanian language speakers, HU = Hungarian language speakers)	N (%)
Age, Range (M± SD)	RO	19-54; N= 128
		$(30.87 \pm .874)$
	HU	18-82; N= 116
		$(31.03 \pm 1.09)$
Gender	RO	Male = $11 (8.5)$
		Female = $119 (91.5)$
	HU	Male = $20 (15.4)$
		Female = $96 (73.8)$
Residence (urban, rural)	RO	Rural= 28 (21.5)
		Urban= 102 (78.5)
	HU	Rural= 37 ( 28.5)
		Urban = $79 (60.8)$

#### 3.3. Data collection

This study was carried out using data collected online from January 2022 to February 2022 on the Google Forms platform. The sampling was based on convenience, through self-selection obtained by the "chain" or "snowball" method (Clark-Carter, 2010) and with the help of social media platforms. The only inclusion criteria were the requirement that the adult respondents should be native Romanian speakers (for the Romanian version of the questionnaires) or Hungarian speakers (for the Hungarian version) and to be above 18 years old.

#### 3.4. Study Design

The research design is correlational non-experimental, meaning that the correlation between the Romanian translated version of ASPD and the Hungarian translated version stands for the similarity (linguistic equivalence) between the two versions. We translated the scale based on the International Test Committee guidelines, as it follows: after the first translation, we conducted a pilot study (N=5) for each of the translated version; the test items were amended on the basis of the pilot study's results; the final version of the translated versions was obtained through the retroversion method (ITC, 2018).

#### 3.5. Procedure

Participants received an online notice inviting them to participate in a study interested in the research of sexuality and sexual education issues in Romania for children with ASD, together with a link to the package of questionnaires. The participants were able to choose to participate or not in this study, after reading a brief description of the aim of the study and information regarding the safety and anonymity of the data. The informed consent was represented by the parents' choice to continue participating in the study after reading this information. Otherwise, by selecting to click the option not to participate in the study, they were automatically taken to the exit page of the online form. The estimated time for filling out the questionnaires was no more than 15 minutes, with the participants having the opportunity to interrupt the fill out process whenever they wanted to do it. Parents were provided with an e-mail address created for the purpose of this study, so that they could contact the authors of the study for any further questions or clarification.

#### 3.6. Instruments

Attitudes about Sexuality for People with Disabilities (Porat, 2009)

This questionnaire, also known as Reuth Open Door Questionnaire, was developed by experts of the Israel Family Planning Association (IFPA). They developed a tool consisting of 12 statements concerning peoples' attitudes to Sexuality for People with Disabilities. Six statements were made so that an agreeing response indicated a liberal orientation and six statements were made so that an agreeing response indicated a conservative sexual orientation. In this study, it was used the version amended by Gerchenovitch and Rusu (2019). The researcher contacted the IFPA and received their written agreement to use the questionnaire for the purpose of the current study (Gerchenovitch & Rusu, 2019). In a study performed by Gerchenovitch and Rusu (2019) on Israeli pre-service teachers (PSTs), the original questionnaire was initially available in Hebrew and it was later on translated by a professional translator into English. According to Gerchenovitch and Rusu (2019), the aim of administrating the Reuth Open Door-IFPA's (Porat, 2009) questionnaire to the PSTs was to measure their attitudes regarding sexuality and disability. The questionnaire contains 12 items, e.g. "It is better not to talk about sexuality with young people with disabilities so as to not let extra

ideas into their heads"; People with a disability don' thave "real" sex; Everyone has the right to exercise his or her sexual potential regardless of their physical or mental condition; If a person with a disability has sexual problems, it is almost always because of his disability. The respondents have to indicate to which degree they agree with the statements about sexuality for people with disabilities, which can be rated as totally disagree, disagree, agree or fully agree (4-point Likert scale). Higher mean values in this questionnaire indicate that the participants possess higher levels of negative attitudes towards sexuality in people with disabilities.

In order to adapt the Questionnaire about Sexuality for People with Disabilities in Romanian and Hungarian languages, a translation procedure using the technique of retroversion (ITC, 2018) was carried out. The items of the scale were initially translated from English into Romanian and into Hungarian by a professional translator. Another professional translator was included in the adaptation procedure for the purpose of translating the Romanian and Hungarian versions of the scale back into English. The items in English obtained at this stage were qualitatively compared to the original English sample items. On the basis of the identified correspondence, the translations into Romanian and into Hungarian were considered appropriate translated versions of the original tool.

#### 4. Findings

#### 4.1. Inferential statistical analysis

The database verification did not identify an abnormal distribution of the data. The Kaiser-Meyer-Olkin (KMO) test has been applied to verify whether the data is suitable for factorial analysis. The test measures the suitability of sampling for each variable of the model and of the complete model. Tabachhnick & Fidell (2013) states that the KMO index ranges from 0 to 1, with 0.6 suggested as the minimum value for good factorial analysis (Tabachhnick & Fidell, 2013). The results in this study show a score higher than 0.6 at all 2 scales, and the results of the Barlett Test are statistically significant: ASPD the Romanian version (KMO=.79; p<.01); ASPD, the Hungarian version (KMO=.79; p<.01).

#### 4.2. Confirmatory factor analysis (CFA)

Confirmatory factor analyses (CFA) were performed in order to validate the ASPD for the Romanian and Hungarian population. CFA was

performed for the one-factor structure model. The normed Chi-square,  $\chi 2/df = 4.17$  indicates an acceptable model fit in this case.

The two correlation coefficients (M<sup>HU</sup>=3.98, SD=1.22; M<sup>RO</sup>= 4.05, SD= 1.18) between the translated versions in the two groups (RO- Romanian speaking participants, and HU – Hungarian speaking participants) were compared using the method of comparison of correlations from independent samples (Eid, Gollwitzer & Schmidt, 2011). The difference

between the coefficients was not statistically significant (N=246, p>.05).

4.3. Reliability/internal consistency of the translated versions of the questionnaire

The scale versions show very good internal consistency (Table 2). In the case of the Romanian version, the Cronbach- $\alpha$  had a value of .75, while in the case of the Hungarian version, the Cronbach- $\alpha$  had a value of .84. The results are presented in Table 2.

Table 2. Results of the test of normality and reliability for the two translated versions of the scale.

Translated versions	M	SD	Median	Min.	Max.	Cronbach-α	Kolmogorov- Smirnov
ASPD-HU	44.95	6.87	73	31	60	.83	D (116)=. 119 p <.01
ASPD-RO	48.22	6.70	68	19	59	.75	D (116)= .129 p <.01

#### 5. Discussion and conclusions

The results of this study indicate that the translated versions of the scales and the subscales of the ASPD Ouestionnaire (Porat. 2009 as amended Gerchenovitch and Rusu, 2019) had a good internal consistency. The findings show that the translated versions can be used as psychometric tools to assess the attitudes toward sexuality in the two categories of responsents in Romania, i.e. Romanian and Hungarian speakers. The results indicate that there are no significant differences between the two language versions, nor between their scales and subscales, which illustrates that the two language versions (Romanian and Hungarian) are linguistically equivalent.

This research has some limitations. Firstly, the data was collected online from a sample of convenience where men were under-represented, which may affect their generalization. Our recommendation is that in the future these scales should be tested on a larger sample. Another variable that should be taken into account in the future is the level of self-reported religiosity and the level of social desirability, which could represent confounded variables that might bias the responses to the questionnaire.

The findings are promising and relevant in opening the possibility to use the Romanian and Hungarian language versions of the Attitudes about Sexuality for People with disabilities Questionnaire (Porat, 2009, as amended by Gerchenovitch and Rusu, 2019) to measure attitudes toward sexuality for people with disabilities prior and after the implementation of SHE programs. It can therefore be concluded that, on the basis of the results of this study, the two versions (Romanian and Hungarian) of the ASPD Questionnaire are linguistically equivalent.

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Reducing Inappropriate Behaviors and Enhancing Social Skills in Children with ASD Through Social Stories

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# Reducing Inappropriate Behaviors and Enhancing Social Skills in Children with ASD Through Social Stories

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#### **Abstract**

Keywords: autism spectrum disorder; social behavior; maladaptive behavior; social communication; Social Story Teaching social skills is a challenging process due to the fact that each skill is difficult to motivate and reward and to the sheer number of skills that can be considered social skills and the infinite ways in which changes in the environment affect the perception of each skill. The most important step in the development of the social skills repertoire in children diagnosed with ASD consists in the occurrence of social desire. Therefore, the social environment must be implemented in a way that is attractive to the child. Many social skills are learned automatically in typical ABA/VB programs. Children with autism spectrum disorder (ASD) seem to lack a desire to search for deeper causal links in their understanding of the world. Instead, they remember predictable routines (for example, brushing their teeth) and processing information at the surface level. This leads to a fragmented and superficial understanding of the environment, although they can remember much about it. Children with ASD face difficulties in achieving social contexts in the sense of other people's behavior, because it relies on understanding their intentions. The aim of this study was to evaluate the effects of a **Social Story** as an intervention used to reduce maladaptive behavior and to enhance social skills in 3 children diagnosed with ASD.

#### Zusammenfasung

Schlüsselworte: Autismus-Spektrum-Störung; Sozialverhalten; Fehlanpassung; soziale Kommunikation; soziale Erzählung Soziale Fertigkeiten sind schwer verständlich und schwer unterrichtbar. Ein Grund liegt daran, dass jede einzelne Fertigkeit eine Begründung und eine Belohnung erfordert. Außerdem kann eine Vielfalt von Fertigkeiten als soziale Fertigkeiten betrachtet werden, und jede einzelne Fertigkeit kann umgebungsbedingt unterschiedlich wahrgenommen werden. Der wichtigste Schritt in der Entwicklung der sozialen Gesamtfertigkeiten eines Kindes mit allgemeiner Autismus-Spektrum-Störung ist die Auslösung des sozialen Wunsches. Deshalb ist es äusserst wichtig, den Kindern das soziale Umfeld möglichst reizvoll darzubieten. Im Rahmen üblicher ABA-/VB-Programmen erwerben Kinder unbewusst viele soziale Fertigkeiten. Anscheinend fehlt autistischen Kinder das Begehren, nach erklärenden Kausalzusammenhängen zu suchen. Sie merken sich jedoch absehbare alltägliche Tätigkeiten (z. B. Zähneputzen) und bearbeiten bloβ oberflächlich die Information. Dies führt zur lückenhaften Wahrnehmung des Umfeldes, obwohl sie diese Kinder auf vielen zahlreichen Informationen ansprechbar sind. Bei der Aneignung von sozialen, vom Verhalten anderer ausgehenden Zusammenhängen stoβen. Kinder im Autismus-Spektrum auf Schwierigkeiten, da dies auf cu das Verstehen deren Absichten basiert. Ziel dieser Studie ist die Auswertungder Wirkungen der sozialen Erzählung als Eingriffsmaβnahme zur Ermäβigung der Fehlanpassung sowie zur Verbesserung der sozialen Fertigkeiten bei Kindern im Autismus-Spektrum.

#### 1. Introduction

Autism spectrum disorder (ASD) is viewed according to DSM-V (American Psychiatric Association, 2013) as a neurodevelopmental disorder characterized by persistent deficits in social interaction, in social communication and by multiple patterns of restrictive and repetitive behaviors along with unusual and obsessive interests. Literature and clinical experience show that children with ASD are able to enhance their understanding of the environment through the development of social skills. As mentioned by Staley (2001) children can acquire a

better adjustment to other people if they are able to understand their own emotions, the one of other and to succeed in recognizing these specific emotions in a social context.

Baron-Cohen (2008) suggested that within the spectrum there is a great diversity, meaning that there are children who avoid other people on purpose being anxious and feeling disturbed by social interactions and children who want to communicate but they lack the knowledge of initiation and maintaining social communication. Therefore, communication can be

totally inappropriate, meaning poor eye contact, difficulties in understanding facial expressions and non-verbal aspects of language, which impedes involving correctly in social contexts (Sansosti, Powell-Smith, 2008). Impaired social and communication skills lead to inappropriate behaviors in children with ASD, creating life-long barriers as mentioned by Rhodes (2014).

#### 2. Theoretical foundation

A recent study conducted by Hanrahan (2020) shows that children with autism spectrum disorders often display maladaptive behaviors as a consequence of distress and frustration they feel due to their lack of effective communication, to their difficulties of understanding and interpretation of social cues. These behaviors (self-injurious, aggressive/destructive and stereotyped/repetitive behavior) are associated with a higher level of stress in the caregivers of children with ASD and therefore there is a strong need for evidence-based interventions to enhance understanding of social situations and to reduce the wide range of inadequate behaviors (Nicholls et al., 2019).

One of these interventions concerns the use of social stories to address social skills development and to reduce the incidence of inappropriate behaviors in children with ASD. This approach was introduced by Carol Gray in 1990 as an intervention technique for children, teenagers and adults with ASD. Social stories are learning tools that mediate a significant exchange of information between parents, specialists and persons with ASD of all ages (Bălaș-Baconschi, 2021). Social stories are simple, short and individualized narratives composed by different types of sentences meant to describe some specific behavior or social situation or to coach an individual in that specific behavior or situation (Gray, 2010). In order to emphasize the effectiveness of social stories, Gray specifies that they are written from the child's perspective, according to his intellectual functioning, to his understanding capacity, to his interests and to his way of approaching other people.

Whilst typically developing children may intuitively know which would be an appropriate behavior in different social situations, children with autism often find social situations extremely confusing. Social stories attempt to help children with autism manage their own behaviour by answering questions like what happens in a given situation, when it should happen, how it should happen as it does

(Rust and Smith, 2006). In the same time, Scattone et al. (2007) strongly recommend the use of social stories due to their individualized construction, adapted for each single case and each child's level of understanding.

As an intervention technique, Social stories were developed during several decades and Gray's initial recommendations were slightly modified. Gray and Garrand proposed in 1993 the use of social stories with higher-functioning children with autism who possess basic language skills and that the entire story should be presented on a single sheet of paper without any images. The authors stated that each story has to be composed by four types of sentences, descriptive, perspective, directive and affirmative and established that each directive sentence has to be accompanied by two to five descriptive, perspective and/or affirmative sentences. During the next years there some other types of sentences have been added but considered optional in a social story: control and cooperative sentences (Gray, 2000). Even if nowadays the use of social stories has been extended to other types of children with disabilities, most of the scientific literature refers to their involvement in children with ASD.

The story should be within the child's comprehension level and limited to the vocabulary and print size that are appropriate to the child's age and ability. In addition, the author reported that pictures in the social story are possible when they do not distract the child and do not restrict his/her ability to generalize the principle beyond the depicted situation (Gray, 2000).

Scientific research has proven that social stories can support people with ASD and/or other developmental, behavioral problems in understanding of social norms, social contexts (Tsai et al., 2007). Recent studies focus also on the fact that social stories can assist children with ASD in gaining a better sense of safety within social situations, in approaching others with much more confidence and with lower levels of anxiety and in the same time, can improve their involvement in learning activities (Riga et al., 2020). In their study, Riga and her colleagues (2020) mentioned one other positive concerning the use of social stories, that is in facing unexpected changes perceived as very stressful for children with ASD (a natural phenomena, the absence of the significant person, the order of the activities within the schedule etc.).

Khantreejitranon (2018) approaches the positive impact of social stories in decreasing inappropriate behaviors in preschool and school children with ASD with severe symptoms, but with high level of communication skills. The results of the study showed significant improvement in behaviors such as making loud noises during the activities, not sharing toys with others, not waiting for one's turn, not knowing to say "Hello", destroying things during temper tantrums due to low frustration tolerance and approaching other people in odd ways.

Research were conducted also to determine if the use of social stories could enhance sequence skills, that is finding a sequential order among activities and within one activity, by activating executive function, namely planing and organizing different tasks.

Social stories offer concrete information concerning things that could occur in some given situations in different settings and also typical behavioral patterns and guidelines that can confer a better sense of security for the children and therefore reduce their fears and increase their emotion regulation (Thomson and Johnson, 2013).

#### 3. Research methodology

#### 3.1. Participants

As part of this research, we followed and selected, under the guidance of therapists from the recovery center, a number of 3 children diagnosed with ASD, integrated in a special education school. The participants with ASD symptoms have been diagnosed in the Pediatric Psychiatry Clinic from Cluj-Napoca, Romania by the psychiatrists from the local hospital in Bistrita.

Three participants between the ages of 7 and 9 were selected for this study. All study participants have an average level of intellectual ability and have associated disorders, behavioral delay, expressive language delay, receptive language delay, or specific speech articulation disorder. Each participant has a low tolerance for frustration. Each subject receives behavioral intervention within the therapy center. We have selected participants with similar backgrounds and abilities, cognitive functioning and academic performances. All the included participants have a diagnosis of ASD and have poor social communication and maladaptive behaviors.

In order to participate in this study, the parent of each participant signed a participation agreement. By signing the informed consent, the parents agreed to the processing of the participants' data and were informed about the activities carried out during the meeting sessions.

According to the protocol for the ASD and ADHD diagnosis, the Diagnostic and Statistical Manual of Mental Disorders (5th edition) criteria (DSM-5; American Psychiatric Association, 2013) was used in order to decide if the children meet the diagnosis criteria. All the children are currently attending a special education school, being included in behavioral interventions programs in the Magic Bibiland Center in Beclean, Romania, which is an association that provides services for children with neurodevelopmental disorders. The demographic information regarding the children can be found in Table 1.

Table 1. The demographic characteristics of children with ASD symptoms

Participant	Gender	Age	Diagnosis	Social behavior
A.B.	Male	9	Pervasive developmental disorder in the autism spectrum;	Frustrations arise when things are not put in the order the
			Expressive language disorder;	subject wants. It is manifested
			Receptive language disorder.	by crying, raising the voice and screaming; violence towards those around.
P.R.	Male	7	Pervasive developmental disorder in the autism spectrum;	Protodeclarative gestures or certain associations with
			Delay in the acquisition of expressive language; Hyper-kinetic disorder.	images or sounds. He walks in circles and plays with a rubber band as self-stimulation.
L.R.	Male	9	Pervasive developmental disorder in the autism spectrum;	Stereotypes and repetitions, patience for a topic of interest

# ParticipantGenderAgeDiagnosisSocial behaviorExpressive language disorder; ADHDHyper-kinetic disorder.

#### Participant A.B.

A.B. is a 9 years old boy with the main diagnosis as pervasive developmental disorder in the Autism Spectrum, expressive language disorder and receptive language disorder. From a somatic point of view, he is a child with a typical appearance. From a psychomotor point of view, he shows right laterality, he knows the body diagram to a large extent, he does not yet know the notion of left and right. Identifies some objects from the school environment, the family environment and the surrounding environment. A.B. is integrated in the inclusive education school in the city, in the first grade, he is making progress and the development of skills is visible. The subject has a slower pace of work, requires additional time to process information and to provide answers. He is easily distracted by certain details in the environment and has an attention deficit. Shows more developed skills for certain areas. It has a very well-developed visual memory remembering the positioning of all objects in the environment. The subject understands simple sentences. Uses hand waving a lot and joins in conversations, meaningless vowels. Frustrations arise when things are not in the order the subject wants. He is crying, raising the intonation to the point of screaming; he is violent towards those around, therefore he is immobilized until he calms down.

#### Participant P.R.

P.R. is a 7 years old boy with the main diagnosis pervasive developmental disorder in the autism spectrum; delay in the acquisition of expressive language; hyper-kinetic disorder. From a psychomotor point of view, he has right laterality, he knows the body diagram to a large extent, he has hesitations regarding the notions of left and right, thus he has orientation deficits. Identifies objects from the school environment, the family environment and surrounding environment. P.R. is integrated in the inclusive education school in the city, in preparation grade, he is making progress and the development of skills is visible. The subject has a slower than typical pace of work. It takes extra time to process the information and provide answers. When he doesn't understand something or doesn't know how to answer,

he emits random words from what he knows better. He likes simple calculations in mathematics, he has communication difficulties and often gets frustrated, sometimes violent. The subject understands simple sentences. He shows difficulties at the level of mental representations. He sometimes has difficulties in understanding the meaning of certain words, as they are hard to decode and encode. He always finds ways to express his needs, uses protodeclarative gestures or certain associations with images or sounds. He walks in circles and plays with a rubber band as self-stimulation. The language is full of repetitions and stereotypes, he cannot pronounce some words and certain sounds: c, t, g, c.

#### Participant L.R.

L.R. is a 9 years old boy and the main diagnosis is given by autism spectrum disorder, delay in the acquisition of expressive language, ADHD, hyperkinetic disorder. He knows the parts of the body and does not present difficulties in terms of laterality. He is passionate about taekwondo, but he can't practice this sport all the time because of the frustrations that arise when he doesn't succeed in a move and because of misunderstanding his colleagues. The trainer occasionally does one-to-one training with the subject. L.R. has an alert work rhythm. He gets bored quickly, he makes constantly logical connections. He likes mathematics and everything that means natural phenomena. He is fascinated by the technology with which he often expresses himself. Knows/writes the letters of print and manages to use them on the computer or other devices. The messages of literary texts bore him and he does not pay attention to them most of the time opening new conversations related to other topics (taekwondo, internet, movies). Has low tolerance to frustration, episodes of low-intensity violence occur. He presents stereotypes repetitions, but if he has enough patience for an interesting topic, he can speak in simple or more complex sentences. When his name is mentioned he is excited and responds to demands. He has quite a varied vocabulary. When he has something interesting to express, he strives and uses all possible methods.

#### 3.2. Measures

#### 3.2.1. Autism Treatment Evaluation Checklist (ATEC)

ATEC was developed by Bernard Rimland and Stephen M. Edelson from Autism Research Institute around 1990 and consists in a form filled out by parents, teachers, or caregivers. It is composed of 4 subscales:

- 1. Language / Communication (14 items);
- 2. Socialization (20 items);
- 3. Cognition / Sensory (18 items);
- 4. Health / Physical / Behavior (25 items).

Unlike most scales, this one does not support copyright and can be used for free by any researcher. Copies of the ATEC are available upon request from the Autism Research Institute or on the ARI website. The Autism Treatment Evaluation Checklist (ATEC) is a simple but effective tool for measuring the effectiveness of various treatments. Unlike other research tools that simply diagnose ASD, the ATEC allows for the measurement of a patient's progression or involution after starting treatment. The ATEC assesses 77 items, such as whether the child knows his name, makes eye contact with others, or has difficulties such bed-wetting, diarrhea, as constipation, and so on.

#### 3.2.2. Social Interaction Questionnaire (SCQ)

The questionnaire was created by Louis H. Janda (Ph.D.) and published in the volume Career Tests. The book was published in the USA in 2004 and sold more than 6 million copies. This test measures the degree of comfort or discomfort due to the subjects' social interactions.

Table 3. Social Interaction Questionnaire

Score	Level
30-70	low
71-110	medium
111-150	high

The questionnaire includes 30 items to which the subjects are asked to answer, the rating being done on a 5-point scale as follows: 5-never (I don't feel this way); 4-very rare; 3-sometimes; 2-often; 1-very often. The lower the obtained score, the more unpleasant the person shows in social relations. (16 items refer to

difficulties in the relationship). The obtained scores will be reported as follows (Table 3).

#### 3.2.3. Buss Perry Aggression Questionnaire (BPAQ)

Buss Perry Aggression Questionnaire was created by A.H. Buss and M.P. Perry in 1992 including 29 questions that are rated on a 5-point Likert scale ("know a lot" = 5, "to a great extent" = 4, "don't know" = 3, "to a small extent" = 2, "not at all" = 1). The scale consists of four factors, namely: physical aggression, verbal aggression, anger, hostility. The physical aggression factor includes 9 items, one of which (item 25) is reverse rated, the items are as follows: 2, 6, 10, 14, 18, 22, 25, 27, 29; The verbal aggressiveness factor includes 5 items, none of which is reverse rated, the items are: 3, 7, 11, 15, 19; The anger factor includes 7 items, one being reverse rated (item 1), having the following items: 1, 4, 8, 12, 16, 20, 23; The hostility factor includes 8 items, none of which has a reverse rating, the items being the following: 5, 9, 13, 17, 21, 24, 26, 28. The scale provides a total score for aggression obtained by summing the scores for each item from the four factors and a total score for each factor of aggression. The total score is divided into three levels.

Table 3. Scores BPAQ

Physical a	ggression	Verbal aggression		
SCORE	SCORE NIVEL		NIVEL	
9-21	Low	5-11	Low	
22-33	Medium	12-18	Medium	
34-45	High	19-25	High	
Anger	1	Hostility		
Anger SCORE	NIVEL	Hostility SCORE	NIVEL	
	NIVEL Low		NIVEL Low	
SCORE		SCORE		

3.2.4. The instrument for measuring the dependent variable

The tool we used to measure the reduction of children's maladaptive behaviors is a set of 9 questions based on the social story read to the participants.

Children's responses were rated on a scale from 0 to 2, where 0 means wrong answer or no answer, 1 means partially answered correctly, and 2 means answered the question correctly. The skills selected for this study are behavior in the classroom, behavior during breaks, listening to friends, and reducing aggressive behaviors.

Table 4. The instrument for measuring the dependent variable

How to behave in class?	<ol> <li>How do you feel when you listen to the teacher?</li> <li>What can I think about when</li> </ol>		
	they ask me something?		
	3. What can I do when they ask me something?		
How to behave	1. What can you do during the break?		
during the break?	2. How do you feel when your colleagues invite you to hang out with them?		
	3. What can I do when they laugh/tell/play?		
How to be	1. What does it mean to have" good hands"?		
friends with others?	2. What should I do when I feel like hitting?		
	3. What can I do when your friends laugh?		

#### 3.3. Procedure

According to the chosen design - the experiment with a single subject – we integrated two phases: that of the basic level (A) and that of the intervention level (B). The number of measurements required in the baseline phase depends on obtaining a stable evolution of the data (Neuman, McCormick, 1995). This base level signifies the absence of a tendency (upward or downward) and low infra-individual variability of the measurements. Thus, for the basic level (A), we decided to use the social story without illustrations – a total of 7 sessions (twice a week) and for the intervention level (B) the use of the social story with illustrations. The time assigned for the social story with illustrations was 20 minutes, twice a week (7 sessions in total). Sessions were 1 to 1. After reading the story, the participants had 45 seconds to respond.

A social story is based on a formula that shows the relationship between descriptive and instructional sentences. This ensures that the description of situations, interactions and concepts is done correctly. The ratio between the number of descriptive sentences and the number of instructive sentences must be greater than or equal to two (Gray, 2010). As mentioned above, a social story must contain at least twice as many descriptive sentences as instructive sentences.

Table 5. Social story without illustrations (basic level).

#### "Mihai, the boy with good hands!"

- 1. Mihai goes to school every day. He likes cars, cats, writing, drawing and playing with his classmates.
- 2. In class I like to listen to the teacher. If she asks me something, I feel angry, I want to cry and hit.
- 3. If I do that, she might get mad at me. When I'm angry, I put my hands on the desk like I learned.
- 4. I go out during the break with my colleagues. They play, I watch them. If they call me to play too, I feel angry and want to hit. I can leave if I want.
- 5. When my colleagues tell stories, laugh and joke louder I feel like I have to scream and cover my ears. What do I do when they talk? I also talk to them about cars, cats, drawings. They pay attention to me. I look at them, they look at me. That's what friends do!
- 6. The best way for me to feel good is to calm down when the anger comes. To ask for a break, to be alone. That's the safest way! If I do this, I will have many friends.

#### 4. Results

In order to identify exactly the stages that generated significant differences, in terms of performance, in the statistical analysis of the data we used the non-parametric Wilcoxon test. Thus, we compared the performance of the three children in the two phases of the experiment. As for making the visual analysis of the graphs, it was done after considering the tendencies of the data (up or down), the magnitude of the data (the numerical difference between the two levels), the latency (the number of sessions needed until the change occurred). The results obtained by all three participants show a visible increase in the

number of correct answers, in the intervention phase (B) compared to the baseline level (A).

Following the statistical analysis and interpretation of the data, a significant difference can be observed between the basic level A and the intervention level B. After the analysis of the measurements with the non-parametric Wilcoxon test, we obtained Z=2.34, p (threshold of significance) = 0.37. After visual analysis of the graph at A, stability

and an upward tendency of the data can be observed. Also, at level B, an upward trend of the data is observed, which shows us a greater number of correct answers in this phase (figure 1). The magnitude shows us a big difference between the two phases from 41 at the A level to 74 at the intervention level. The difference for A.B. is significant by 33. In both A and B, the effects of change appear from the first session, which means a small latency of change.

Figure 1.



Following the final assessment (May 2022) on the social interaction questionnaire, A.B. obtained a score of 81 (10 more than in December 2021) which corresponds to the middle values of the scale. Regarding the aggression test, the score obtained was 60, with 18 (low level) in physical aggression, 11 (low level) in verbal aggression, 20 in the anger factor (medium level), 11 (low level) in the hostility.

Following the statistical analysis and interpretation of the data, a significant difference can be observed between the basic level A and the intervention level B. After analyzing the

measurements with the non-parametric Wilcoxon test, we obtained Z=2.36, p (threshold of significance) = 0.12. After a visual analysis of the graph at A, stability and an upward tendency of the data can be observed. Also, at level B, an upward tendency of the data is observed, which shows us a greater number of correct answers in this phase. The magnitude shows us a big difference between the two phases from 11 at the A level to 32 at the intervention level. The difference for P.R. is significant by 21. In both A and B, the effects of change appear from the first session, which means a small latency of change.

Figure 2.



Following the final evaluation (in May 2022), on the social interaction questionnaire, P.R. obtained a score of 72 (3 more than the assessment carried out in December 2021) which corresponds to the middle values of the scale. Regarding the aggression test, the score obtained was 75, with 22 (medium level) for physical aggression, 17 (medium level) for verbal aggression, 27 for the anger factor (high level), 9 (low level) for the factor hostility.

Following the statistical analysis and interpretation of the data, a significant difference can be observed between the basic level A and the

intervention level B. After the analysis of the measurements with the non-parametric Wilcoxon test, we obtained Z=2.29, p (threshold of significance) = 0.96. After visual analysis of the graph at A, stability and an upward tendency of the data can be observed. Also, at level B, an upward trend of the data is observed, which shows us a greater number of correct answers in this phase. The magnitude shows us a big difference between the two phases from 42 at the A level to 84 at the intervention level. The difference for L.R. is significant by 42. In both A and B, the effects of change appear from the first session, which means a small latency of change.

Figure 3.



Following the final assessment (May 2022) to the social interaction questionnaire, L.R. obtained a score of 92 (15 more than the assessment made in December 2021) and corresponds to the average values of the scale. Regarding the aggression test, the score obtained was 65, with 20 (low level) for physical aggression, 12 (medium level) for verbal aggression, 23 for the anger factor (medium level), 10 (low level) for the factor hostility.

The specific objective for this study was to validate an intervention program aimed at reducing maladaptive behaviors as well as developing social and emotional skills in students with ASD. The independent variable is the intervention program implemented with the help of the social story and the dependent variable refers to the reduction of maladaptive behaviors as a result of the application of the therapeutic intervention. The results obtained by the three participants show us the effectiveness of stories social stories, especially social illustrations. All three participants made progress, which was more notable for the two 9-year-olds boys.

Regarding the continuity of the obtained results, we could estimate that after the withdrawal of the intervention, the desirable behaviors of the participants will reduce their frequency, but not so much as to reach the values recorded in the first basic level, but to stabilize somewhere on these values.

One of the factors that could determine the limitation of the research is the time assigned on one side and the small number of participants on the other. Although we have completed all the proposed sessions, we believe that the research can be long-lasting due to the unique way of children with ASD to progress. Social stories and some other intervention strategies like play therapy, music therapy, drama therapy are the result of years of observation, interaction and involvement.

#### 5. Discussions

Within literature reviews, studies based on the investigation of the effectiveness of social stories in children and adolescents diagnosed with ASD have shown progress in different behaviors. Sunderland

(2001) stated that the central argument is that "everyday language is not the natural language of children. Their natural language is the one of image and metaphor as in stories". The provision of personalized resources is necessary for all individuals to achieve common goals. Thus, we believe that social stories can be used as a behavioral strategy (e.g. what to do when you are angry, how to deal with obsessions). In other studies, Burke and his colleagues (2004) evaluated the use of social stories with typically developing children experiencing sleep disturbances. The results indicated that there was an immediate and significant decrease in sleep-related problem behavior for the four participants within the study. Soenksen and Alper (2006) used social stories to increase prosocial behavior in a 5-year-old child with hyperlexia, while Toplis and Hadwin (2006) reported increased prosocial behaviors in 3 of 5 boys in their study of five children with behavioral difficulties. In other studies conducted by Sansosti Powell-Smith and by Scattone, Tingstrom and Wilczynski, both from 2006, only two of the three participants had increases in the targeted prosocial behaviors.

Benish and Bramlett (2011) emphasized the use of social stories in preschool typically developed children aiming the same aspects as our study that is reducing inappropriate behaviors and stimulating social relationships. Their results were similar to the ones we obtained for the three participants, by using alternatively illustrated social stories and a neutral book, which means that the technique is applicable to children of all kinds when it comes to decrease the intensity of maladaptive behaviors and to improve social skills. Wright and McCathren (2012) wanted also to determine if the use a social story as the only intervention was effective in increasing prosocial interaction and decreasing problem social behavior in 4 preschoolers with autism and obtained modest increases in prosocial behaviors and small decreases of negative social interaction. These findings confirm the fact that the results were not spectacular in none of the studies focused on these two objectives, which is not very uncommon given the numerous deficits in social communication within ASD profile.

Another aspect that would be interesting to determine within future research is the extend to which teachers accept the social validity of social stories, as shown in the study conducted by Wright and McCathren (2012), the authors stating that teachers agreed or strongly agreed (within the Likert-type

rating) that the intervention would be recommended to their colleagues.

On the other hand, stereotypical behaviors are also characteristic for children with ASD, representing frequently a barrier the development of social relationships. All the three participants in our study were often engaged in such behaviors and therefore, an interesting topic for further research would be to determine if the use of social stories could reduce these type of behaviors along with the implementation of an integrative approach as mentioned by Sălăgean and Costea-Bărluțiu (2019).

Research to date suggests that social stories have been used to improve many types of behaviors, including prosocial behavior, social communication, conversational skills, on-task behavior, interactions, appropriate greeting initiatives, and other general social skills. However, it is difficult to determine the role of social stories alone in this progress, or if the progress is also due to other strategies implemented.

The present study is addressed to educational and support staff, their family members in their capacity as co-therapists of the child diagnosed with autism, but also to all people who interact with students diagnosed with ASD.

#### 6. Conclusions

In order to achieve good results in the evolution of children with autism, therapies should be introduced at a very young age. After extensive studies and practice, it has been shown that early intervention can accelerate the overall development of children with ASD, reducing problem behaviors and determining positive long-term outcomes.

The social story presented to the participants, in a friendly and entertaining manner demonstrated the way they could interact with other children, with the teacher and showed different clues about how they can react to some common events in everyday life.

The story we proposed in this study respected the instructions designed by the authors (Gray & Garand, 1993) and contains relevant aspects for the participants translated into images, answering essential questions that give children a better orientation in the environment they live in (where?, how?, when?, who?, what?, why?). We used affirmative, descriptive, perspective, directive and control sentences.

To develop this social story, the first step was to identify the participants' problematic target behaviors,

common points, points to be eliminated and replaced with prosocial behaviors.

This study demonstrated the impact of the intervention through social stories and highlighted the way to obtain a decrease of inappropriate behaviors and an improvement of social skills in children diagnosed with ASD. Studies included in a guide published in 2014 by *Autism Focused Interventions Resources and Modules* are designed to stress out the efficiency of social stories in the social area, in developing communication, in supporting joint attention, in reducing maladaptive behaviors and in the improvement of play and school-related skills.

Uses of social stories can be widespread in therapy and within school curriculum. They are an easy way to learn and the rewards are rich for both children and teachers. Therefore, we consider social stories as an efficient intervention technique, they are not time consuming and children enjoy them as they are individualized for each case according to the level of understanding and of integrating information and, in the same time, for each emotional, social and cognitive development.

**Authors note:** The authors have equal contributions to this article.

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Integrative Psychotherapy - An Important Resource for the Psychophysical Wellbeing of the Person in the 21st Century Society

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Research article

# Integrative Psychotherapy - An Important Resource for the Psychophysical Wellbeing of the Person in the 21st Century Society

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#### **Abstract**

Keywords: psychotherapist; psychotherapy; integrative psychotherapy; education; mental health; person The psychotherapist is an important specialist who makes a major contribution to ensuring the mental health of people in today's society. Unfortunately, however, the psychotherapist is not correctly perceived, or he/she is even unknown to the collective mind, despite the fact that psychotherapy is a valuable resource in today's social context loaded with a multitude of stressful and traumatic factors. Integrative psychotherapy, one of the newest forms of psychotherapy, responds effectively to the challenges of today's society in an integrated way, focusing on the relationship between the therapist and the patient. The integrative psychotherapist is the specialist who, through prevention, diagnosis and intervention, guides the person towards the balance that ensures mental health. The research carried out on a panel of students confirms that the image of the psychotherapist is not known or is perceived in a distorted way, even by a public with a certain level of intellectual background. The integrative psychotherapists involved in the research also highlight that psychotherapy is an important resource in enhancing quality of life, but it is little known and not valued. Therefore, there is a need to promote the image of the psychotherapist at the level of the collective mind, the need for an education to promote mental health, an education that focuses not only on physical health but also on mental health, an education that leads to the psycho-physical well-being of the person.

#### Zusammenfasung

Schlüsselworte:
Psychotherapeut;
Psychotherapie; Integrative
Psychotherapie; Ausbildung;
psychophysischen Gesundheit;
Person

Der Psychotherapeut ist eine wichtige Fachkraft, die einen wesentlichen Beitrag zur Sicherung der psychischen Gesundheit der Menschen in der heutigen Gesellschaft leistet. Obwohl Psychotherapie im gegenwärtigen gesellschaftlichen Kontext, welcher durch eine Vielzahl von Stressfaktoren und traumatischen Faktoren belastet ist, eine wertvolle Ressource ist, wird der Psychotherapeut nicht richtig wahrgenommen oder ist auf der Ebene des kollektiven Bewusstseins sogar unbekannt. Die Integrative Psychotherapie, eine der neuesten Formen der Psychotherapie, reagiert effektiv auf die Herausforderungen der heutigen Gesellschaft auf integrierte Weise und konzentriert sich auf die Beziehung zwischen dem Therapeuten und dem Patienten. Der integrative Psychotherapeut ist der Spezialist, der den Menschen durch Prävention, Diagnose und Intervention zu einem Gleichgewicht führt, das seine psychische Gesundheit sichert. Die in dieser Arbeit an einer Versuchsgruppe bestehend aus Studenten durchgeführten Untersuchungen bestätigen, dass das Bild des Psychotherapeuten selbst von einem Publikum mit einem gewissen intellektuellen Bildungsniveau (Studenten) gar nicht oder nur verzerrt wahrgenommen wird. Die an der Forschung beteiligten integrativen Psychotherapeuten betonen auch, dass die Psychotherapie eine wichtige Ressource zur Verbesserung der Lebensqualität darstellt, die jedoch wenig bekannt ist und zu wenig wertgeschätzt wird. Das Ergebnis dieser Studie unterstreicht die Notwendigkeit, das Bild des Psychotherapeuten auf der Ebene des kollektiven Bewusstseins zu fördern, sowie die Notwendigkeit einer Ausbildung zur abgestimmten Förderung

der psychischen und physischen Gesundheit, also der psychophysischen Gesundheit der Person.

#### 1. Introduction

In Romanian society, psychologists, psychotherapists and psychiatrists are professional figures associated with serious mental problems, and the person who turns to these specialists is often labelled and disregarded by others.

"In Romania, unfortunately, there is still this false idea that attending a psychotherapist implies a mental illness, and the fear of being stigmatized by society with the label "crazy" often makes us mistakenly believe that we can "carry" problems and, implicitly, the suffering ourselves" (Chiriac, 2020, p. 19).

The figures of these professionals operating in the field of interpersonal relationships are often perceived in an undifferentiated way, as the specific skills and roles of each professional figure are not known. "Doing psychotherapy is totally different from going to a psychiatrist ... Many people confuse psychology with psychotherapy" (Chiriac, 2020, p. 22). The

psychotherapist is the least known figure between the psychologist and the psychiatrist, despite the fact that today there is a diversity of psychotherapies.

"Also, while professional psychotherapy associations are multiplying and enriching their work - today the main orientations in contemporary psychotherapy (psychoanalysis, cognitive-behavioral, Adlerian, Reogersian, transactional, Jungian, humanistic, positive, integrative psychotherapy, etc.. ) are represented in Romania by one or more recognized College associations by the Psychologists -, specialized publications, translated and local, do not adequately reflect this reality" (Zamfirescu, 2017, p. 7).

It is therefore necessary, from the very beginning, to clarify the role and mission of each of these three professionals (psychologist, psychotherapist and psychiatrist) in the field of mental health. All three professions are governed by specific legislation and a code of ethics, which define their duties and limits.

The main purpose of the psychologist profession is to prevent psychological discomfort or disorders and to promote the individual's well-being and recovery. The psychologist helps the individuals to improve their ability to understand themselves and others and to behave in a conscious, congruent and effective way. Psychologists can work in the clinical field, as well as in companies, sports field, schools, health field, etc., providing interventions for individuals, groups and also the community. The psychologist's main intervention tool is psychological counselling, which may be accompanied by the administration of psychological tests aiming at establishing a diagnosis and guiding.

Psychotherapy is the clinical tool that allows the psychotherapist to treat psychopathological disorders using non-pharmacological tools. Graduates of psychology, medicine or other related specializations who undergo specific postgraduate training in psychotherapy schools (lasting about five years) may be qualified to practice psychotherapy.

In the field of psychotherapy there are many approaches, involving quite different theories and methods: from traditional psychoanalysis, to cognitive-behavioral therapy or integrative therapy, which is one of the newest and most modern approaches, to which we will offer a particular focus in this research.

Therefore, the psychotherapist – and not the psychologist – is the professional recommended to treat psychopathological disorders.

The psychiatrist is a medical graduate with a specialty in psychiatry. The psychiatrist is primarily a medical doctor, who can prescribe generic and/or psychotropic drugs, who can order and evaluate clinical tests.

Psychiatry is the branch of medicine that deals with the study, prevention, treatment and rehabilitation of mental disorders and pathological behavior. The psychiatrist is able to diagnose all psychopathological disorders. He/she assesses symptoms and clinical course, and proposes treatment which may be targeted towards pharmacological and/or psychotherapeutic intervention.

Even though mental health promotion is a much debated topic and mental health activities are starting to take shape, there is still a need for education to promote the importance of mental health through psychological counselling, psychotherapy and psychiatric support.

The coronavirus pandemic, the war in Ukraine are stressful and traumatizing factors that make people vulnerable and in this current social context it becomes imperative to reconsider what mental health means and to turn to specialists who can promote or intervene on psycho-physical well-being.

The choice of the research topic is not accidental, being linked to my own experience as an integrative psychotherapist, and to the way psychotherapy is understood in the collective mind. I believe that integrative psychotherapy is the answer to the problems and the suffering faced by people in today's society, but unfortunately this resource of integrative psychotherapy is very little known and used.

#### 2. Theoretical foundation

The theoretical framework of reference is built around the approach of integrative psychotherapy, one of the new psychotherapeutic approaches, which uses methods and tools taken from most kinds of existing psychotherapy, focusing on the co-created relationship between therapist and patient.

#### 2.1. Definitions

"Integrative psychotherapy is a unifying approach that brings together the psychological, affective, cognitive, contextual and behavioural systems, thus creating a multidimensional relational framework that can be created anew for each individual case." (Gilbert & Orlans, 2013, p.7).

The integrative perspective proposed by Evans and Gilbert focuses on the therapeutic relationship in all its dimensions, "growth and healing take place in an intersubjective space co-created cooperatively by psychotherapist and client", the patient is seen as the architect of change, and the therapist's presence is honored in the relationship (Evans & Gilbert 2014, p. 13).

Integration in psychotherapy does not mean a new form of eclecticism, a salad with different ingredients, but it means developing a new coherent structure either in terms of technical intervention or in terms of theory. Integration in psychotherapy means to unify knowledge in a systematic, coherent and heuristic way and to arrive at a "whole". (Santostefano 2002).

Integrative psychotherapy is a form of psychotherapy that synergistically draws on several theories and techniques to ensure the effectiveness of the therapeutic process. With a unifying role, integrative psychotherapy takes into account the uniqueness of the person on an affective, cognitive, behavioral and physiological level, but also on a spiritual level.

As for the integrative aspect of psychotherapy, Gilbert and Orlans (2013) define integration in four ways:

- 1. The holistic approach of the individual, whereby the individual is seen as an integrated whole: emotionally, cognitively, behaviorally, physically and spiritually.
- 2. Integration of theories, concepts and techniques from different approaches to psychotherapy.
- 3. Integration of personal and professional issues in psychotherapist development / training.
- 4. Integration of research and practice the psychotherapist studies current research and integrates it into his/her clinical practice.

Talking about integrative psychotherapy, Dafinoiu states that integrative trends in psychotherapy are driven by the needs of psychotherapists "to build flexible curative approaches with great creative potential, able to meet the uniqueness of the problems of patients seeking their help." (Dafinoiu 2001, p. 10).

Analyzing the above definitions we can conclude that integrative psychotherapy emphasizes the intrinsic value of the individual, trying to respond in an effective and flexible way to the needs that the individual has in all dimensions of life.

#### 2.2. Short History

The roots of integrative psychotherapy date back to the 19<sup>th</sup> and 20<sup>th</sup> centuries and can be found in philosophy.

Interest in an integrative approach to psychotherapy has existed throughout the history of psychotherapy, starting from the complexity and uniqueness of the human being with its different psychological and relational needs. The integrative movement in psychotherapy has gradually developed over the years.

The integrative approach proposed by Evans and Gilbert has as its epistemological foundations: phenomenology, field theory, holism and dialogue. These form the foundation of the theory and working method of integrative psychotherapy. Human behavior is seen phenomenologically as determined by personal experience rather than by an external objective reality. Experience is seen as a source of knowledge. Behavior, according to Lewin's field theory, is the result of a set of coexisting events, and these events occur in a field, the state of each part of the field depending on all the others. Awareness is important for field theory, the person becoming aware and being able to select available options (the gestalt notion of figure and background is suggestive in this respect). In the holistic perspective the whole is greater than the sum of the parts, all aspects are important, nothing is ignored. The external world is observed in conjunction with the person's inner world. Holistic observation is an active, attentive and deep search into the whole of the person's existence (cognition, sensation and emotion). The relational perspective brings a new dimension to integrative psychotherapy - the interhuman dimension. Buber emphasizes the construction of relationships. Central the psychotherapeutic process is the co-creation of the therapeutic relationship as an interactive event, in which both patient and therapist participate and are involved. (Evans & Gilbert 2014).

Goldfried has made an important contribution to shaping the integration of psychotherapies, trying to show that the communion between behavioral psychology and psychoanalysis has a long history

starting in 1932. Integrative psychotherapy was born as a search for the integration of perceived deficiencies in the great schools of psychotherapy: psychoanalysis, behavioral psychology and humanistic psychology. Psychoanalysis has helped to understand unconscious processes, which can influence the whole of life. Criticism of psychoanalysis is that it takes too long to treat and lacks specific behavioral changes. Behavioral psychology has helped to understand the process of learning through positive and negative reinforcement, and how behaviors can be learned, unlearned and adaptive. Behavioral therapy focuses on the symptom and does not address underlying structural issues. Humanistic psychology has emphasized confidence in the person's potential and capacity for self-healing. But this direction of humanistic therapies has been criticized as being too optimistic and minimizing the existential realities of the human condition (Evans & Gilbert 2014).

Integration in psychotherapy has manifested itself in several directions, and some of these are worth mentioning: technical eclecticism, common factors, assimilative integration, complementarity, neuroscience (Evans & Gilbert 2014).

Technical eclecticism from a therapeutic point of view means using a set of techniques from other schools or orientations. In eclecticism, techniques are the engine of therapeutic change. The representative of this direction of technical eclecticism is Lazarus, who developed the multi-modal theory, which involves a careful assessment of the patient's problems and the choice of appropriate techniques from different orientations in order to assist the patient as effectively as possible. Critics of eclecticism point out that sometimes the incompatibility of one technique with other aspects of the therapeutic process is not taken into account.

The common factors approach states that therapeutic outcomes are determined by the similarities of different therapies and less by the differences between them. But this would lose the richness of many well-developed theories and techniques.

Assimilative integration involves the gradual assimilation of techniques and concepts from other approaches into the therapist's basic orientation. Imported and pre-existing techniques transform each other into a new end product. The concept of assimilative integration created by Messer in 1992 refers to the process of gradually assimilating

techniques and ideas from other approaches into one's own approach. In integrative psychotherapy this concept of assimilating integration is experienced by psychotherapists through the ongoing training that the profession entails and through the challenges of experience/work with clients. The risk of this approach is the loss of the essence of the original approach.

Complementarity is an approach whereby two or more distinct guidelines can be combined to be effective for the patient. Over the years there have been several complementary combinations as part of the integrative approach (e.g. cognitive-behavioral therapy).

In recent years there has been a major interest in neuroscience and neurobiology, and this interest has created bridges of integration between different therapists. Emphasis on neuro-biological processes such as attunement between child and mother or caregiver can create the biological basis for attachment. Interactions between child and mother or caregiver lead to the construction of neural connections, which form the type of attachment. The interactive and mutual regulatory nature of the parent-child dyad is important and is reflected in the therapeutic dyad (thus underlining the importance of attachment in psychotherapy).

The information underpinning integrative approaches comes from theorists who have compared different hypotheses, clinicians who have experimented with integrative practice, and results from psychotherapy.

#### 2.3. Specifics of Integrative Psychotherapy

Integrative psychotherapy focuses on a relational perspective, and in this sense empathic attunement is very important, the relationship being co-created.

The relational approach to integration means that "the focus on the co-construction of the relationship means that we advocate a dual therapist-client perspective of the therapeutic process, in which both participants are seen as members of a reciprocal relationship, a delicate dance of mutual interactions and influences" (Evans & Gilbert 2014, p.13).

The specificity of integrative psychotherapy in Dafinoiu's opinion is the construction of the therapeutic act, which has two main actors - the therapist and the patient and which generates a

psychosocial reality that determines the change (Dafinoiu 2001).

From the perspective of integrative psychotherapy, the patient is the architect of change and the therapist is present in the relationship, the therapeutic process being a joint effort. This perspective of integrative psychotherapy requires a number of skills necessary for an effective therapeutic process.

An integrative psychotherapist must possess several specific competencies to be a qualified practitioner:

- interpersonal skills and self-discipline, knowledge of the field of mental health and understanding of the concept of caring, all these converge towards the ability to conduct professional psychological assessments;
- ability to maintain appropriate boundaries/limits and ensure privacy;
- ability to create and maintain therapeutic alliance;
- ability to understand psychotherapy and diagnostic systems;
- ability to conceptualize the treatment plan, purpose and processes of change in the context of whole life development;
- the ability to make a commitment with the patient to the purpose of therapy, activities and outcomes;
- the ability to understand relationship dynamics at multiple levels of change in order to manage power dynamics;
- knowledge of theories of development across the lifespan;
- the ability to coherently integrate theories and skills from multiple psychological therapies and appreciate multidisciplinary perspectives;
- ability to participate and work in explicit and implicit communication;
- ability to understand how creativity and art can be used in the therapeutic process;
- the ability to be sensitive to granting/not granting;
- the ability to work with understanding the self in its multiple aspects;

- ability to understand the co-created nature of therapeutic exchange;
- the ability to use the therapeutic self effectively and creatively;
- ability to respond to complex requirements as requested;
- ability to address appropriate psychological, cultural and contextual factors and to work with issues of difference and power in a non-discriminatory way;
- the ability to work for the patient, so that the patient can understand and be aware of the steps towards change;
- ability to assess the effectiveness of interventions;
- ability to assess risk and to pay attention to safety;
- the ability to work with ethical and professional issues;
- the ability to appropriately use professional support to further develop thinking and practice;
- the ability to evaluate therapeutic practice with a view to improving the services provided;
- ability to manage closure of the therapeutic process. (Gilbert & Orlans, 2013).

Integrative psychotherapy combines theory with practice, achieving a unified approach to the individual on a psychological, cognitive, emotional, spiritual level. (Evans & Gilbert 2014).

The specificity of integrative psychotherapy results precisely from the fact that it implies a cocreated relationship in which there is a therapeutic alliance that meets the patient's goals.

#### 2.4. Relationships of the Self

Self is "the organizing principle in the personality that is the heart of the self and uniqueness and it makes the bridge towards others and physical world around us" (Evans & Gilbert 2014, p.13). The integrative perspective proposed by Evans and Gilbert is based on the concept of "self-development"; an individual's self develops and evolves throughout life according to the relationships they have and the stages of development.

The self is the ensemble of body, brain, and mind that interacts and creates the relatively stable internal reference point that experiences life both consciously and unconsciously (Wallin, 2010). Kohut, the founder of self-psychology considers the self as the central core of the personality that organizes feelings, thoughts, and representations of self and others (Kohut 2016).

Integrative psychotherapy looks at the self within the relationship. Six areas of the self within relationship are therefore examined:

- the biological field the self in relation to the body (the relationship with one's own living and breathing body);
- the intrapsychic field the self in relation to the self (dialogues between the different parts of the self, the inner world of the individual);
- the inter-personal field the self in relation to others (interpersonal relationships, ties with others);
- the intercultural and contextual field: the self in relation to the context (experiences of the self, embedded in context);
- the ecological field the self in relation to the environment and nature (relationship between humans and nature, how humans can influence nature);
- the transcendental field: the self in relation to the transpersonal and spiritual world (the man seeks the meaning of his existence, develops his spiritual self). (Evans & Gilbert 2014).

Body image was one of the aspects that psychotherapy addressed because it can influence other dimensions of the person. In this sense the mother/attachment figures in the child's life play a fundamental role in terms of education and body selfawareness. Touching, caressing, holding helps the child to perceive his/her body and its limits. The quality of the parent-child relationship will influence the child's relationship with his or her own body (acceptance and positive attitude towards the body or non-acceptance and dissociated distancing). Body image is formed early through the process of nonverbal communication between parent and child through the process of early mirroring. relationship of the self to the self refers to the way in which each person mentally represents him/herself as he/she functions, how he/she perceives him/herself among other people. The sense of the self emerges from birth and needs others to develop. Psychological literature has paid more attention to the concept of the self as an object. Therapists, however, need to pay attention to both polarities of the self - as subject and

as object, pathology occurs when the balance between these polarities of the self is lost. The self's relationship with others begins in infancy, when as babies they form their attachment style through interactions with their mother/caregiver. The secure or insecure attachment style formed in childhood influences attachment in later relationships. The construction of interactions with others is conditioned by the ability to understand the other's moods - the reflective function as termed by Fonaghy (Fonaghy et al. 2002). The sense of the self is developed in relationships with family, peers and others, being in a continuous relationship with others. The cross-cultural dimension of the self involves an analysis of the relationship of the self to race, culture, and socialpolitical context. Understanding the cultural context in which a person lives means recognizing the person in their complexity. Therapists integrate the patient's cultural, social context into the therapeutic process and this is why this dimension of the self is so important in understanding the person. The integrative psychotherapist is not a detached observer, has a horizontal attitude, perceives the patient in the totality of life situations and adopts a position of acceptance of the patient's subjective reality, respecting the patient's perspective and values. The ecological dimension analyses the relationship of the self with nature, with the environment in which the self is seen as a consumer. Psychotherapists have the mission to awaken consciousness, to offer a different perspective of people's role in the world. The ecological self means taking on professional and personal values such as sustainability, conservation and restoration of life on earth. The relationship of the self to the transcendent involves the search for meaning beyond persons. Through encounter with other people, through an open and vulnerable attitude, through reciprocity and total engagement, a supernatural, mystical experience can be achieved. It is only through this deep contact that one can reach that relationship which Buber describes as I-Thou. In the integrative perspective the transpersonal and the human are connected (Evans & Gilbert 2014).

#### 2.5. Values of Integrative Psychotherapy

Starting from the philosophies underlying the integrative approach to psychotherapy, Evans and Gilbert propose a series of values of integrative psychotherapy:

1. The patient's subjective experience is the starting point in therapy, the therapist's primary

responsibility is to accept what is offered and honor the patient's world.

- 2. The patient's conscious present is the "present moment", which can be overwhelmed by the past or anxiety about the future. In the "present moment " the patient discovers options and values.
- 3. The main agents in determining behavior are people, capable of responding but sometimes too embedded in the context, which can limit them.
- 4. Morality is the knowledge of what it is and not of what others should think or do think, applied to interpersonal relationships, intrapsychic relationships and in the social group.
- 5. The therapist "explores" rather than 'modifies' behaviors, with the patient having a chance to choose the behavior in the "present moment".
- 6. The therapeutic relationship is a micro-cosmos of the patient. The therapist's presence must be active, authentic, energizing, honest and direct. The therapist must be aware of counter-transference and develop self-awareness.
- 7. Choice and learning occur with the natural integration of mind and body, thinking and feeling, the different dimensions of the self through natural self-regulation.
- 8. When a person becomes who and what they are (and does not try to become what they are not), change occurs in a holistic way.
- 9. Therapy is influenced by the world and the world affects therapy, life being a continuous flow. Personal growth and development is possible, but intrapsychic, inter-personal and socio-political awareness is needed.
- 10. Environmental factors are a major source of stress, lack of power and alienation. But integrative psychotherapy fights inequality of opportunity, supporting people's right to be different.
- 11. Dialogue is a manifestation of the relationship; it is based on experiencing the relationship with other people and self-experiencing. "I" only has meaning in relationship with another. Therapy means co-creation; it means a process involving two persons.
- 12. Maturity is not just self-autonomy, but self within the relationship. Health means creative interaction between the individual and the environment.

- 13. The self in isolation or the manipulated self means violence towards oneself or others. Violence hinders the I-Thou dialogue and tries to annihilate the self.
- 14. Curiosity and compassion for self and others are recommended, rather than negative judgment.
- 15. Integrative psychotherapy promotes integration with the aim of maximizing development after the therapy session, supporting the patient's right to self-determination and personal dignity (Evans & Gilbert 2014).

#### 3. Research methodology

The aim of the research was first of all to identify the image of the psychotherapist among a category of people with a certain intellectual background - first-year undergraduate students at the university. Secondly, the research investigated the perception of integrative psychotherapists regarding their perception of the figure of the integrative psychotherapist/integrative psychotherapy.

The research conducted is a quantitative one, using the questionnaire survey method and the questionnaire instrument, and also a qualitative one, using the semistructured interview method and the interview grid instrument.

The quantitative research and the qualitative research used are complementary, being combined to capture both data, factual and numeric information as well as descriptive data, related to the perception of the interviewees. Quantitative data provides the figures that demonstrate the broad points of the research, while qualitative data provides the detail and insights needed to fully understand the implications of the phenomenon being researched. Qualitative research allowed for more exploration, but without reaching precise overall conclusions.

The survey was designed with the aim of requesting information regarding the respondents' perception of the psychotherapist and psychotherapy. Used for exploratory purposes, the survey comprised a total of 15 questions, mostly closed questions but also two open questions. The survey also included two dependent questions, linked to the answer to a previous question.

Thus, the items in the survey focused on: the difference between a psychologist, a psychotherapist and a psychiatrist; the use of psychotherapy services and the reason for seeking such services; the

willingness to seek the services of a psychotherapist if needed; knowledge of the different types of psychotherapies of integrative available and psychotherapy; whether people who seek psychotherapy are ashamed of it or hide it; perception of the psychotherapist today in comparison with the past; the role of the psychotherapist (helping me to find my own resources; guiding me in solving my problems; helping me to reduce stress and live better; taking care of my well-being; he doesn't treat me with medication; he keeps professional confidentiality; he follows a code of ethics: he is a mental health professional; he knows how my mind works); whether the psychotherapist is a specialist who treats problems (corrective intervention) or a specialist who facilitates psycho-physical well-being (preventive intervention); whether the psychotherapist only supports the individual, or also supports the community; whether the psychotherapist is the private specialist or the public specialist; the importance of the presence of the psychotherapist in schools; the reimbursement of psychotherapy services; the effectiveness of online psychotherapy.

The interview was the method used for the qualitative part of the research, being conducted face to face. A semi-structured interview was chosen, which allows for some flexibility, with the topic and questions being pre-set, but allowing for additional questions. The interview grid was structured with 11 questions, to which additional questions derived from the response received from the interviewee were added. For efficient collection of information, the interviews conducted were recorded.

The semi-structured interview items were constructed according to the following themes: experience as a psychotherapist; the category of people, who predominantly seek psychotherapy services; the main problems/conditions with which patients present for psychotherapy; the main benefits of psychotherapy for patients; the opinion related to the statement "all types of psychotherapy generally achieve similar results"; the important element in psychotherapy that facilitates integrative therapeutic process of change/healing; the role of psychotherapy in general, and of integrative psychotherapy in particular, in the context of the problems of today's society; whether integrative psychotherapy can contribute to a better quality of life in Romania; the perception of the psychotherapist in today's society; perception the of psychotherapy/integrative psychotherapy

collective mind in today's Romanian society; the promotion and support of mental health through integrative psychotherapy.

The methods and tools used have been designed to mirror two dimensions: that of the specialist – the integrative psychotherapist and that of the possible patient/the patient. Thus, some of the questions of the survey are found as questions in the semi-structured interview.

The type of sampling used for both the survey and the interview is convenience sampling. The sample used to apply the survey was made up of students of 1 Decembrie 1918 University in Alba Iulia, first year, bachelor cycle, and the sample used for the interview was made up of integrative psychotherapists, trained in the ARPI (Romanian Association of Integrative Psychotherapy) school of integrative psychotherapy.

The use of convenient sampling is easy, even if not representative. However, representative groups were used for the topic of this research, considering that students in a university represent a population with a significant intellectual background, which allows them to more easily come into contact with psychotherapy. The group of integrative psychotherapists was used from the point of view of psychotherapeutic training, considering that this new type of psychotherapy uses a variety of methods and tools, taken from all types of psychotherapy, to respond more effectively to mental problems and disorders existing in today's society.

The people involved in the research freely chose to participate in filling out the survey and carrying out the interview. The request to participate in the research - survey filling, was sent online to a number of 292 students of the 1 Decembrie 1918 University of Alba Iulia, who shall be majoring in Primary and Pre-school Pedagogy, Occupational Therapy and Social Work. Out of the 292 students, 189 students answered the survey freely. The request to participate in the research - carrying out a semi-structured interview was sent online, on the group of integrative psychotherapists to which I belong, to a total of 57 autonomous integrative psychotherapists, of which only 13 integrative psychotherapists freely chose to participate in the interview. All research participants expressed an interest in the research conducted, being interested in the field of mental health (either the students who completed the interview or the psychotherapists who conducted the interviews), with some requesting access to the research results.

In applying the surveys and conducting the interviews, any risk of mental, emotional or physical harm to individuals was excluded. Important guiding principles for researchers were also respected: respect for participants' autonomy, fairness by including all those who wished to participate in the research, integrity and dignity by being sensitive to participants' sensitivity to any impact the research might have.

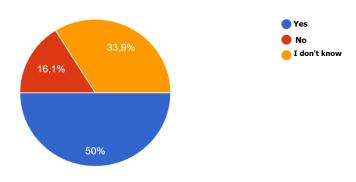
#### 4. Results

#### 4.1. Results Obtained from the Survey

The sample used to apply the survey consisted of 189 people, aged between 18 and 52 years, students of the 1 December 1918 University of Alba Iulia, first year of study, bachelor cycle, using a convenience sampling. 68% of the respondents were women and 32% were men. In terms of social status 83% are only students and 17% are also employees. The high number of female students is noticeable, which can be explained by the fact that most of the students come from the Primary and Pre-school Pedagogy major, in addition to other majors, and this major is chosen mainly by women who want to become primary school teachers and educators.

To the first question of the survey: Do you know the difference between a psychologist, a psychotherapist and a psychiatrist?, it is noted that 50% of respondents do not know this difference, while 50% know the difference between a psychologist, a psychotherapist and a psychiatrist.

Image 1. Knowing the difference between a psychologist, psychotherapist and psychiatrist

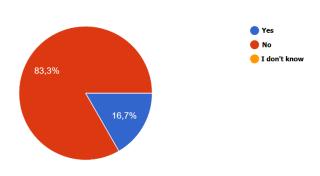


It is noteworthy that half of the respondents do not know the difference between a psychologist, a psychotherapist and a psychiatrist, a relatively high percentage, given that the respondents represent a category of people with a certain intellectual level, who are following a university training path, although they are at the beginning of it.

Of the 50% who answered Yes to question number 1, the majority know the difference between a psychologist, a psychotherapist and a psychiatrist, but there is a significant percentage of responses that show that there is confusion in differentiating the competences of the three specialists, especially the psychotherapist ("The psychologist - helps us to solve emotional psychological, problems. through communication, trust. The psychotherapist - helps us overcome certain fears, vices. The Psychiatrist - helps in depression"; "The difference is the method of treatment"; "The Psychologist is the one who helps you to overcome some things through therapy, and the psychiatrist is a doctor"; "The Psychologist deals with giving advice to rehabilitate the patient towards the psychological side. The psychotherapist deals with patients who need therapy, for example those who have had an accident and need both physical and mental rehabilitation. The psychiatrist is the only one who can give medication, having a medical degree. Etc.").

To the question *Have you ever used the services of a psychotherapist?*, 83.3% say they have never used the services of a psychotherapist, and 16.7% have used this type of service.

Image 2. Persons who have used the psychotherapist's services



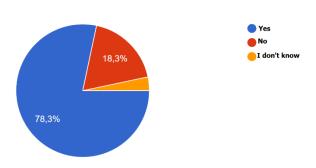
The percentage of people who never used the services of a psychotherapist leads us to two hypotheses: either these people did not need a psychotherapist, or they did not use a psychotherapist, despite having problems that required psychotherapeutic intervention.

Reasons for seeking the services of a psychotherapist (16.7%) included: depression, interpersonal relationships, stress, anxiety, rape, physical abuse, child with autism, child with

behavioral disorders, mistrust and problems with selfimage and self-esteem, mourning, etc. The diversity of problems for which a very small percentage of people have turned to psychotherapy services is noticeable.

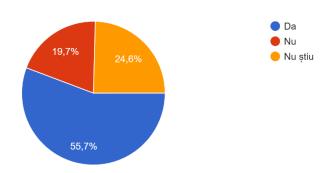
To the question *Would you seek the services of a psychotherapist, if needed?*, 78% of respondents indicated that they would seek the services of a psychotherapist if needed, 18.3% would not seek such services, and 3.3% did not know if they would seek psychotherapy services. The percentage of people who would use the services of a psychotherapist is high, which illustrates a willingness to use this type of service, despite the fact that the skills of this specialist are not well known.

Image 3 – Willingness to seek psychotherapy if needed



In terms of shame or reluctance to seek psychotherapy, more than half of those surveyed believe that people who seek psychotherapy are ashamed or hide it. Thus, to the question *Do you think that people who seek psychotherapy are ashamed or hide this fact?*, 55.7% answered *Yes*, 19.7% *No* and 24.6% *I don't know*.

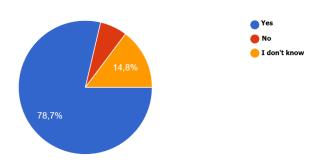
Image 4 – Shame and reluctance to acknowledge psychotherapeutic help



The interviewees illustrate that there is shame and reluctance to seek the services of a psychotherapist, which is why they often do not seek specialized help, despite the fact that they need it.

In the respondents' opinion, the figure of the psychotherapist is perceived differently today than in the past. Thus, to the question *Do you think that the image of the psychotherapist is perceived differently today compared to the past?*, 78.7% think that the image of the psychotherapist is changed compared to the past, 14.8% do not know if this image is perceived differently today, and 6.6% think that there is no difference between past and present in relation to the perception of psychotherapy.

Image 5 – How the perception of the psychotherapist's image has changed as compared to the past



The figure of the psychotherapist is perceived differently today than in the past, which may help psychotherapy services to be used in the future by a wider public, with an openness towards solving psychological problems, which could lead to an improvement in the mental health of the population.

Respondents consider that the psychotherapist has different roles:

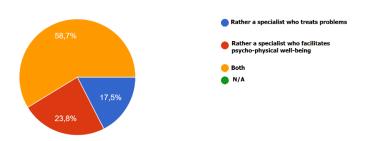
- He guides me in solving my problems 79,4%
- $\bullet$  He helps me reduce stress and live better 66,7%
  - He keeps the professional secret 60,3%
  - He helps me find my own resources 54%
  - He is a mental health professional 50,8%
  - He does not treat me with drugs 47,6%
  - He takes care of my well-being 44,4%
  - He complies with a code of ethics 39,7%
  - He knows how my mind works 27%

Problem solving is seen as the primary goal of psychotherapy, or the primary role of the psychotherapist, along with stress reduction and better living. Keeping professional secrecy and identifying

one's own resources is also important to respondents, along with protecting mental health. It is thus noted that mental health is seen as important to the respondents surveyed, through problem solving, stress reduction and better living. It is also noted that respondents feel the need for confidentiality by keeping professional secrecy. The code of ethics and skills in terms of the functioning of the mind are not considered to be very important, in terms of the role of the psychotherapist.

To the question *Is the psychotherapist a specialist* who treats problems (corrective intervention) or a specialist who facilitates psycho-physical well-being (preventive intervention)?, 58.7% of respondents see the psychotherapist as having both roles, 23.8% see the psychotherapist as the specialist who facilitates psycho-physical well-being, and 17.5% see the psychotherapist as a specialist who treats problems.

Image 6 – How the perception of the psychotherapist's image has changed as compared to the past



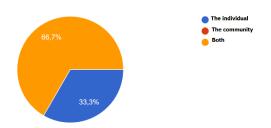
The psychotherapist's intervention is seen from both a corrective and a preventive perspective by the vast majority of respondents, which illustrates the importance of prevention in psychotherapy services.

To the open-ended questions Are you aware that there are several types of psychotherapy? And Do you know what integrative psychotherapy is, only 3.78% say they know about the existence of several types of psychotherapies and 1.89% say they know what integrative psychotherapy is. These percentages illustrate that psychotherapy in general, and integrative psychotherapy in particular, are not well known, although each psychotherapy has an important role in specific pathologies, and integrative psychotherapy fits any type of pathology.

According to the respondents, the psychotherapist supports both the individual and the community through psychotherapeutic interventions. Thus, to the question *Does the psychotherapist support only the person, or does he/she support the community as* 

well?, 66.7% say that the psychotherapist supports both the person and the community, and 33.3% say that the psychotherapist supports only the person.

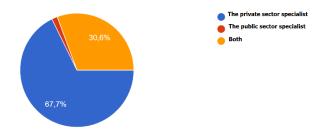
Image 7 – Does the psychotherapist support only the person, or does he/she support the community as well?



The role of the psychotherapist is also perceived at the community level, not just at the individual level, which illustrates that respondents understand the link between a person's mental wellbeing and the community.

To the question When you think of a psychotherapist, do you think of a private sector specialist or a public sector specialist? 67.7% of respondents say they think of a private sector specialist, 30% think of both, and 1.6% think of a public sector specialist.

Image 8 – The psychotherapist is the private sector specialist or the public sector specialist.



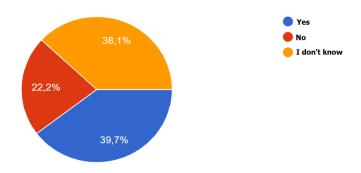
The psychotherapist is seen, by a large percentage of respondents, as a private specialist, which corresponds to reality, and despite the fact that there is a need for this specialist, few public institutions employ psychotherapists.

Regarding the importance of the presence of the psychotherapist/psychologist in schools, all respondents consider the psychotherapist and psychologist to be important in the school environment. The importance of the psychotherapist's presence in schools is noted, as the psychologist's skills are often outweighed by the multitude of problems in the school context. Also, 81% of the respondents think that the State should pay for

psychotherapy services, 7.9% think that these services should not be paid for, and 11.1% do not know whether these services should be paid for. Respondents illustrate that the reimbursement of psychotherapy services by the State is important, most likely facilitating access to these services and thus contributing to a better knowledge of these types of services.

To the question *Do you think online psychotherapy is effective?*, 39.7% think online psychotherapy is effective, 38.1% do not know if online psychotherapy is effective, and 22.2% think online psychotherapy is not effective.

Image 9 – Effectiveness of online psychotherapy



It is noted that the majority of respondents do not consider online psychotherapy to be effective or cannot comment on the effectiveness of this type of therapy, despite the fact that during the pandemic online psychotherapy was successfully used.

#### 4.2. Results of the Semi-Structured Interview

The panel used for the semi-structured interviews consisted of 13 psychotherapists trained in integrative psychotherapy, mostly women (11 women and 2 men), aged between 32 and 54. 80% of the psychotherapists interviewed had between 1 and 5 years of experience, 20% between 5 and 10 years and none over 10 years.

As for the category of people who predominantly use psychotherapy services, respondents indicated that they work with children, teenagers and adults and less with elderly people. All psychotherapists said that both women and men use psychotherapy services. There is a diversity of categories of people who use integrative psychotherapy services (the elderly being the least likely to use these services). It is interesting to note that one category of people who use psychotherapy consists of children, which illustrates the importance of intervention in childhood (for harmonious personality development - the foundations

of the personality are laid in the first 6-7 years of life, and it continues to develop until adolescence).

The main problems/disorders patients present with for psychotherapy are related to depression, anxiety, couple problems, relationship problems, panic attacks, behavioral disorders, mourning, divorce, stress management, various children's problems (autism, ADHD, school integration difficulties), personality disorders, etc. People who seek psychotherapy do so for a range of problems that can be mild (stress management) or serious (personality disorders). Mild problems such as stress management, anxiety or relationship problems can be dealt with through psychological counselling by the psychologist, but dealing with serious problems such as personality disorders or depression is the responsibility of the psychotherapist.

The interviewees consider that benefits of psychotherapy for patients are related to their personal development, the patients gain emotional balance, the quality of their life is improved, they are regaining their well-being, their psycho-physical balance, they live a harmonious life, they become aware of the importance of childhood for the development of their personality, they integrate the physical, cognitive and psycho-social dimensions of development, congruence of thoughts, emotions and behaviors, etc. It is clear from the respondents' statements how important psychotherapy is, and what the outcomes of integrative psychotherapy are. This is where the importance of promoting psychotherapy as important resource for a person's psychophysical wellbeing comes from.

In relation to the statement "all types of psychotherapy generally achieve similar results", the psychotherapists interviewed consider that "effective psychotherapy is that which is tailored to the needs of the patient"; "all therapies aim at the psycho-physical well-being of the patient, but achieve their goals by different methods"; 'each type of psychotherapy has its own methods and tools'; 'integrative psychotherapy brings together many of the approaches of the other types of psychotherapy, so uses a variety of tools'; all types of psychotherapy must take into account the goals set with the patient", etc. These responses of the psychotherapists interviewed show that all types of psychotherapy aim to help people identify and achieve psychological balance, but integrative psychotherapy has added value because it uses tools, methods and techniques from all existing psychotherapies.

Regarding the important element in integrative psychotherapy that facilitates the therapeutic process of change/healing, all respondents agree that the therapeutic relationship and alliance is the central aspect of integrative psychotherapy that helps the patient in psychotherapy. The relationship, as the scholarly literature also points out, is the important element that integrative psychotherapy uses as an compared other added value to types psychotherapy, along with other important elements and aspects that derive from the specifics of each type of psychotherapy.

According to the interviewees, the psychotherapy's role in general, and of the integrative psychotherapy in particular, in the context of problems from today's society, is: prevention and intervention in psychiatric disorders; support and guidance (the role of integrative psychotherapy in society is more complex due to the diversity of methods and techniques); emotional support, replacement of irrational thinking with rational thinking, correction of behavioral disorders, etc. It can be said that psychotherapy in general and integrative psychotherapy in particular have the role of prevention and intervention, along with that of diagnosis, in close collaboration with the psychiatrist, monitoring the well-being of the person seeking psychotherapy services.

All respondents interviewed believe that integrative psychotherapy can contribute to improving the quality of life in Romania. These conclusions show the importance of integrative psychotherapy and the need to promote integrative psychotherapy, to contribute through this type of services to increase the quality of life of people living in Romania.

The image of the psychotherapist in today's society, in the opinion of the psychotherapists interviewed, is unclear, as many people do not differentiate between a psychologist, psychotherapist and a psychiatrist ("I have patients who come to me and ask for psychiatric medication"). Most of the respondents believe that the figure of the psychotherapist is not sufficiently well known and that education of the general public is needed. The image of the psychotherapist will change in the future, especially if there are promotional actions in this respect. It is therefore necessary to inform, to promote the figures of specialists involved in the field of mental health, because they are little known or wrongly perceived. Each specialist (psychologist,

psychotherapist or psychiatrist) has a specific, distinct role in ensuring a person's mental health.

terms of how psychotherapy/integrative psychotherapy is perceived by the collective mind in Romanian society today, respondents claim that it is an unappreciated resource because it is not known and because there is reluctance to seek psychotherapy. An insignificant percentage of people know about psychotherapy and very few know about integrative psychotherapy. Psychotherapy, despite being a resource, is not known and used. Again it is important to educate, to make known this resource of psychotherapy in general and integrative psychotherapy in particular.

Promoting and supporting mental health through integrative psychotherapy, according to respondents, can be achieved through: public mental health promotion and support programs; educating children and young people about mental health; more exposure consideration psychotherapy for psychotherapy through settlement of psychotherapy services. The majority of respondents agree that mental health promotion and support should be a collective effort, undertaken by different actors in the private sector as well as the public sector. Concrete, specific actions and activities are needed to promote and support mental health through a joint effort of different public and private actors. Integrative psychotherapy has a major role and contribution to make in ensuring and supporting mental health.

#### 5. Discussions

The information obtained by using the two research methods: the questionnaire survey and the semi-structured interview were built around a common theme: the image of the psychotherapist today. This is why the analysis of the information obtained by applying the two methods was carried out in a mirror image. The perspective of the image of the psychotherapist today as seen by the respondents interviewed was complemented by that of the interviewees, looking for similarities and differences in the responses of the two types of people in the panel.

The psychotherapist is a lesser-known specialist, either in the opinion of the respondents interviewed or in the opinion of the psychotherapists interviewed. Although the psychotherapist is clearly distinct, in terms of role and skills, from the psychologist and the psychiatrist, there is confusion between these specialists.

As stated in the literature (Chiriac, 2020) physiotherapists, regardless of their training, are not known, and there is confusion in distinguishing the role and competences of the specialists involved in the health. The figure of field of mental the psychotherapist, development despite the of psychotherapy in recent years and the existence of numerous types of psychotherapy, is the least known.

It follows from this that it is necessary and important to promote the figure of the psychotherapist, who, through the specific skills he or she possesses, can even treat serious disorders, such as personality disorders (borderline personality disorder, bipolar personality disorder, etc.), which are skills that the psychologist does not possess. It is necessary here to mention the specific competences of the integrative psychotherapist which start from interpersonal skills and self-discipline, knowledge of the mental health field and understanding of the concept of caring; the ability to create and maintain the therapeutic alliance; the ability to address appropriate psychological, cultural and contextual factors and to work with issues related to differences and power in a nondiscriminatory way; etc.

In the respondents' opinion the psychotherapist is specialist who treats problems (corrective intervention) and facilitates psycho-physical well-(preventive intervention). being Hence, importance prevention, achieved of through psychotherapy. Prevention is an essential component of psychotherapy, which, together with diagnosis and therapy, are the tools the psychotherapist uses to help the patient achieve physical, cognitive and psychosocial well-being. This highlights the importance of prevention and intervention through integrative psychotherapy, which has a unifying approach that brings together the psychological, affective, cognitive, contextual and behavioral systems.

The psychotherapist is seen by the respondents as a resource for the individual, but also for the community, which shows the importance of group interventions that this specialist can carry out. The psychotherapist is also seen as a resource at school level, where there can be problems that can only be solved through psychotherapy. It is noted the importance of integrative psychotherapy that emphasizes the intrinsic value of the person, individually or collectively, which seeks to respond in an effective and flexible way to the needs that the person has in all dimensions of life. It is also through

the values of integrative psychotherapy, and through the dimensions of the self that integrative psychotherapy considers, that the person is seen in relation to others and in relation to the environment. It is thus understood that the integrative psychotherapist is a resource for either the person or the community.

A large percentage of the people surveyed, namely 83.3%, have not turned to psychotherapy, although 78.3% say they are willing to use this type of service, and 55.7% consider it shameful to do psychotherapy. These percentages illustrate reluctance to seek specialist help from psychotherapists, although there is a willingness to seek this help. The psychotherapists interviewed confirmed that patients have difficulty and reluctance to seek psychotherapy services. There and prejudices stereotypes in seeking psychotherapeutic services, with many people avoiding this support because of society labeling. The psychotherapist, in the collective mind, is seen on the one hand as a useless figure and on the other as a specialist to whom the 'crazy people' turn. The psychotherapist does not have a magic wand, nor does he claim to predict the future and offer immediate solutions or passive healing. He is not a figure to replace that of a friend or a simple confessor, but is a professional and, as such, guides the patient towards the change that ensures his well-being.

why reasons respondents went psychotherapy (a relatively small percentage of 16.7%) ranged from milder problems such as stress or anxiety to more serious problems such as depression or sexual abuse. The interviewed psychotherapists confirm that people who seek psychotherapy do so for various problems ranging from mild to very serious ones (such as various personality disorders). It goes without saying that the range of problems that can be resolved in integrative psychotherapy is vast, with the patient being able to be supported in a multitude of issues from simple "mental hygiene" to trauma that can profoundly affect the personality. Through the various specific skills they possess, integrative psychotherapists can respond to the various mild or serious problems for which the person seeks psychotherapy services.

All respondents, both respondents to survey and interviewees, believe that the image of the psychotherapist will change over time, but this change requires education and specific and clear interventions. In this respect, a specific intervention, supported by both respondents and interviewees, is the

payment of psychotherapy services by the State. Evans and Gilbert (2013) support the idea of creating a national psychotherapy service to facilitate access to psychotherapy services, although such a national service requires substantial financial resources.

The role of psychotherapy in today's social context, where there is a multitude of stressors, is seen in the dimension of prophylaxis, but also of intervention. Integrative psychotherapy, with its integrated approach and the diversity of methods and techniques used, can respond effectively to the needs of people in today's society. The relationship is the central point of integrative psychotherapy, which responds in a complex way to the needs of the person as a whole, creating a multidimensional relational framework.

"Through our professions, whatever they may be, we all have a role to play. Each of us, in our place, can lay a cornerstone in building a better society" (Andre, 2016, p. 65).

#### 6. Conclusions

"Psychotherapy is about learning to love ourselves and those around us. It also means enriching our relationships with an extra measure of respect and joy." (Chiriac 2011, p. 22).

The majority of the respondents surveyed indicate that they are willing to go to psychotherapy in case of need, so this availability results in a positive image of the psychotherapist, and implicitly a validation of the competence and trust in this specialist.

From the research carried out, the need for education in order to reach well-being, the need to make known the figure of the psychotherapist who accompanies the person towards wellness is definitely and clearly highlighted. Psychotherapy is unfortunately undervalued resource, a resource for individuals, for groups and for society. The aim of the article and of the research carried out is precisely to raise people's awareness of the importance of mental health and promote the figure to of the psychotherapist.

There is a need for a mental health promotion culture that is able to overcome prejudices about the images of specialists and to stop the stigma that still exists today towards people suffering from mental disorders. Promoting mental health culture also means making people aware of their choices and ensuring

that mental health and psycho-physical well-being become priorities in life.

Mental health in childhood is a fundamental condition for psycho-physical well-being in adulthood. One should understand the importance of prevention, diagnosis and intervention at the earliest stage of a person's development, in childhood, as these elements of mental health fall within the task and competence of the psychotherapist, who works with people at all stages of development (children, pubescents, teenagers, adults and the elderly).

The psychotherapist is a specialist in the "supportive relationship", who aims to improve the quality of life of people who turn to psychotherapy, who with the help of the specialist find within themselves the resources and potential to help themselves.

"... psychotherapy is also one of the most striking and widespread cultural phenomena of the contemporary world" (Zamfirescu, 2017, p. 8). One understands the development that psychotherapy is undergoing today and the importance of making this phenomenon known.

Integrative psychotherapy is a form of psychotherapy that is based on several theories and techniques in a synergistic way, thus ensuring the effectiveness of the therapeutic process. With a unifying role, integrative psychotherapy takes into account the uniqueness of the person.

Starting from an integrative and unifying vision of the individual, integrative psychotherapy takes into account the uniqueness of the individual on an emotional, cognitive, behavioral and physiological level, but also on a spiritual level. The value of this of psychotherapy derives from multidimensional approach, which responds in an integrated way to the needs of the individual in today's society. Integrative psychotherapy today responds to the need for a culture of prevention, a culture which places the emphasis primarily on the well-being of the individual, the protection of the environment (understood not only as nature), the value of life, joy, serenity, the enjoyment of social relationships, etc.

#### **Authors note:**

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and pedagogy. Her research has focused on child psychology, family, adoption, intercultural education and educational process. As a psychotherapist, Rosu Camelia Augusta is especially dedicated to child psychotherapy, considering that during the first years of life the child must be protected and educated in order to harmoniously develop and not to compromise the future of the soon-to-be adult.

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Factors of Pre-service English as Foreign Language (EFL) Teachers' Choices to Pursue a Teaching Career

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Research article

# Factors of Pre-service English as Foreign Language (EFL) Teachers' Choices to Pursue a Teaching Career

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#### **Abstract**

Keywords: pre-service teachers; career choices; initial motivation; self-efficacy; support; teacher satisfaction Teacher shortage is severe around the world and this dearth is also strongly felt in core subjects in Israel, specifically in English and Mathematics. As a result, efforts should be made to guarantee that the majority of pre-service teachers choose to pursue a teaching career upon graduating from their teacher education program. This study investigates the main motives of pre-service EFL teachers to enroll in teacher education and their perceptions about the importance of a set of internal and external factors, namely, self-efficacy, availability of a support system and satisfaction from their teacher education program regarding their decision to pursue a teaching career. In this qualitative study, 24 pre-service EFL teachers in a teacher education college in Israel were interviewed in semi-structured interviews. The results yielded evidence for perceived teaching ability being the most substantial initial motive for choosing a teaching career, and for the significance of the specifically explored internal and external factors in the decision of pre-service EFL teachers to pursue a teaching career. The results and their implications on teacher education are discussed.

#### Zusammenfasung

Schlüsselworte: angehende Lehrer; Karrieremöglichkeiten; Ausgangsmotivation; Selbstwirksamkeit; Unterstützung; Lehrerzufriedenheit Der Lehrermangel ist weltweit groß und dieser Mangel macht sich auch in Israel in den Hauptfächern, insbesondere in Englisch und Mathematik, stark bemerkbar. Daher sollten Bemühungen unternommen werden, um sicherzustellen, dass sich die Mehrheit der angehenden Lehrkräfte nach Abschluss ihrer Lehrerausbildung für einen Lehrberuf entscheidet. Diese Studie untersucht die Hauptmotive von angehenden EFL-Lehrkräften, sich für eine Lehrerausbildung anzumelden, und ihre Wahrnehmung bezüglich der Bedeutung einer Reihe interner und externer Faktoren, nämlich Selbstwirksamkeit, Verfügbarkeit eines Unterstützungssystems und Zufriedenheit mit ihrem Lehrerausbildungsprogramm, bei der Entscheidung eine Lehrtätigkeit nachzugehen. In dieser qualitativen Studie wurden 24 angehende EFL-Lehrkräfte an einer Pädagogischen Hochschule in Israel in halbstrukturierten Interviews befragt. Die Ergebnisse lieferten Hinweise darauf, dass die wahrgenommene Lehrfähigkeit das wesentlichste Ausgangsmotiv für die Wahl eines Lehrberufes ist, sowie für die Wichtigkeit der speziell untersuchten internen und externen Faktoren bei der Entscheidung von angehenden EFL-Lehrkräften, einen Lehrberuf einzuschlagen. Die Ergebnisse und ihre Implikationen für die Lehrerbildung werden diskutiert.

#### 1. Introduction

In an era when teacher shortage is exacerbating and with a worldwide need to recruit over 5.2 million teachers (UNESCO Institute of Statistics, 2016), attempts must be made so that all pre-service teachers who graduate from their teacher education programs opt for a teaching career. This dearth is also strongly felt in Israel, particularly among English as a Foreign Language (EFL) teachers. According to the 2019 State Comptroller Report there was a shortage of 626 EFL teachers and currently the numbers have increased and now stand at 871(CBS, 2022). To date, there are various studies on teacher attrition and teacher retention (Arnup & Bowles, 2016; Akram, 2020; Carmel & Badash, 2018; Klassen & Chiu, 2011;

Reyneke & Botha, 2020); however, not many studies exist regarding the determinants of pre-service teachers' intentions to pursue a teaching career upon graduation.

Initial teacher education, also referred to as preservice teacher training (UIS, 2021) denotes controlled, private and public educational programs that aim to prepare future teachers to officially enter the profession after receiving a government recognized teaching qualification. However, since different countries have different needs, policy makers are required to design teacher training programs that specifically cater to the needs of their own educational system, and thus, teacher training programs may vary

from country to country, not only philosophically and theoretically, but also in terms of content and length (Farrell, 2012). Most of the pre-service teacher training programs offered in Organization for Economic Co-operation and Development (OECD) countries, including Israel, include content knowledge and pedagogical knowledge (Shulman, 1986) in addition to techno-pedagogy (Gurukkal, 2021). According to Eren and Tezel (2010), pre-service teachers' motivation, effectiveness and commitment to a teaching career are largely affected by the quality of this initial training. Although a lot of effort is put into designing teacher education programs, there is still evidence showing that many programs do not prepare pre-service teachers for the realities in the field (Crandall, 2000), and specifically in the field of English as a Foreign Language (EFL) many of the programs over-emphasize theory and understate the practical components of teaching (Agudo, 2017; Akcan, 2016; Farrell, 2012; Karakas & Yavuz, 2018; Karim et al., 2019; Seferoglu, 2006; Yin, 2019).

#### 2. Theoretical foundation

Not much attention has been given to the factors that influence pre-service teachers' decisions to pursue a teaching career upon graduating from their teacher education program (Rots et al., 2014; Sinclair, 2008; Watt & Richardson, 2008). However, studies have shown the importance of both internal factors, such as initial motivation (Brookhart & Freeman, 1992; Kyriacou & Coulthard, 2000) and self-efficacy (Lavrenteva & Orland-Barak, 2019; Pfitzer-Eden, 2016; Tschannen-Moran & Woolfok Hoy, 2001) as well as external factors, such as mentor and faculty support (Rots et al., 2007; Rots et al., 2012) and satisfaction from the teacher education program (Seker et al., 2015; Zientek, 2007) on the decision to pursue a teaching career.

2.1 Internal factors as predictors of pre-service teachers' intentions to pursue a teaching career: motivation and self-efficacy

Initial motivation as a predictor of pre-service teachers' intentions to pursue a teaching career after finishing their teacher education program has been reviewed in many different countries. Three main types of motivation have been identified: intrinsic, associated with the positive aspects of the job, driven by internal rewards and promoted by personal satisfaction; altruistic, which focuses on identifying teaching as socially worthwhile and a desire to make a social contribution; and extrinsic, which relates to the

external aspects of the job that are not related to teaching, such as the long holidays (Azman, 2013; Balyer & Ozcan, 2014; Kyriacou & Coulthard, 2000; Saban, 2003).

Some studies have even indicated that when preservice teachers hold more than one motive for choosing to enroll in teacher education, there is a higher chance they will choose to follow a career in teaching upon graduating from their studies, since they can rely on other ambitions, in case one motivation is not fulfilled (Bergmark et al., 2018). Bergmark et al. (2018) have thus related to the value and significance of teacher education programs that draw on various motivation types in order to positively impact students to complete their studies and begin a teaching career. Nevertheless, other studies have also found that intrinsic motivation is the most prominent motivation type and the most significant predictor for pre-service teachers to pursue a teaching career upon graduation (Deci & Ryan, 2000; Goller et al., 2019; Johannes & Rothland, 2012; Nachmani & Ben Horine, 2018; Rahmani & Abadi, 2014). Furthermore, Domenech-Betoret and Gomez-Artiga (2013) provided evidence that the intrinsic motivation of pre-service teachers also contributed to more meaningful learning and academic achievement, and in a recent study in China, An et al. (2021) uncovered that intrinsic motivation was found to be the strongest predictor of pre-service teaches career choice satisfaction. Evidence has also been presented to show that altruistic motivation, such as the wish to shape the future of children and adolescents, is the best predictor for completing a teacher education program (Fokkens-Bruinsma & Canrinus, 2015), the most powerful motivator for opting to pursue a teaching career (Davis et al., 2019; Hennessy & Lynch, 2017; Jungert et al., 2014; Pop & Turner, 2009) and the most significant forecaster for satisfaction with career choice (Hennessy & Lynch, 2017).

Nonetheless, researchers have not always agreed on what constitutes each of the motivation types and this lack of clarity has often led to overlapping categorization in studies. As such, Richardson and Watt (2006) presented the Factors Influencing Teaching Choice (FIT-Choice) model and its scale, based on Eccles et al.'s (1983) expectancy-value theory. This theory asserts that there is a link between career choice and an individuals' expectations and success; ability beliefs and the subjective value of the career (Wigfield & Eccles, 2000). The FIT-Choice model is a multi-dimensional theoretical and

framework which comprises analytical both motivational factors, and self and task perceptions (Watt & Richardson, 2007). The motivational factors include intrinsic values, personal utility values, and social utility values, whereas the perceptions include perceived teaching abilities, task demands and task returns, socialization influences and teaching as a fallback career. Various studies using this model have found that the intrinsic value and perceived teaching ability were the most prominent motivations at the point of entry into teacher education in the Dutch context (Fokkens-Bruinsma & Canrinus, 2015), in Turkey (Kilinc et al., 2012) and in Australia (Watt & Richardson, 2007). Suryani et al. (2016) also provided evidence for perceived teaching ability being the most important factor in determining career choice in Indonesia. Other studies employing the FIT-Choice model have also identified social influences and choosing teaching as a fallback career as factors that are negatively related to a teaching commitment (Almulla, 2020; Richardson & Watt, 2006; Suryani et al., 2016). Wong et al. (2014) have however shown that there is a possibility of obliterating the negative effects of the fallback career if pre-service teachers are nurtured and sustained by role models with intrinsic and altruistic motivations.

A further internal factor revealed in the literature as a sound predictor of pre-service teachers' intentions to follow a teaching career upon graduation is their self-efficacy, or "the belief in one's capabilities to organize and execute the course of action required to produce given attainments" (Bandura, 1997, p.3). Tschannen-Moran and Woolfok Hoy (2001, p.783) defined teacher self-efficacy as "the judgment of his/her capabilities to bring about desired outcomes of engagement and learning, even among those students who may be difficult or unmotivated" and claimed that this judgment has a positive influence on teachers' enthusiasm, teaching commitment and teacher retention. Several other studies worldwide have provided evidence linking pre-service teachers' selfefficacy beliefs to their intentions to pursue a teaching career and highlighting the critical role that selfefficacy plays on predicting pre-service teachers' actions and behaviour regarding their future career intentions (Bruinsma & Jansen, 201; Chestnut & Cullen, 2014; Lavrenteva & Orland-Barak, 2019; Pfitzer-Eden, 2016; Poulou et al., 2019; Rots et al., 2014; Tschannen-Moran & Woolfok Hoy, 2001).

2.2 External determinants of pre-service teachers' intentions to pursue a teaching career

Regarding the external factors which impact preservice teachers' decisions to pursue a teaching career, Rots et al. (2014) have discussed the significance of both the faculty support provided by the training institutions, and the mentor support provided by the mentor during the practicum. They reported that both these factors are positively linked to graduates' perceptions of the teacher education program. The support from the faculty staff, referred to as "the significant others", has also been shown to give the pre-service teachers a sense of validation and is a way to certify their efficacy (Rots et al., 2012). Thus, the importance of receiving positive feedback, high evaluations and feeling appreciated by the members of the faculty. Other studies have also provided evidence for the impact that the faculty and mentor support have on the pre-service teachers' commitment and their entrance into the teaching profession (Rots et al., 2007; Stokking et al., 2003).

The practicum offers the pre-service teachers the opportunity to build their confidence as teachers in the classroom and practice what they learn in their teacher education program. Nevertheless, there is often an enormous gap between the theory taught and the practice in the field, which causes tension and power struggle especially when the pre-service teachers are required to choose who they wish to comply with: the requirements of the teacher education program or the mentors in the field (Nguyen, 2020). In terms of mentor support, Ingersoll and Strong (2011) have reported that the support pre-service teachers receive during their practicum is very meaningful to them and can encourage retention of novice teachers, especially when the mentors are viewed as positive role models.

An additional factor that plays a fundamental role in determining whether pre-service teachers will or will not pursue a teaching career upon graduation is their *level of satisfaction from the teacher education program* (Rots et al., 2007; 2010; 2014). Darling-Hammond et al. (2002) and Zientek (2007) testified that the more pre-service teachers feel the program has prepared them for the demands of teaching and the more satisfied they are with the program, the higher the chance they will opt to pursue a teaching career. Seker et al. (2015) further reported that emphasis on practice rather than theory has an immediate impact on the decision to go into teaching. In a recent study in Pakistan, Akram et al. (2020) provided evidence that

one of the main reasons for their teacher shortage is inadequate teacher training.

The present study attempts to explore the stated motives of pre-service EFL teachers to enroll in a teacher education program and to examine which internal and external factors can impact their decisions to pursue a teaching career upon graduation. This study is an exploratory study aiming to explore emotional and cognitive processes that lead preservice EFL teachers to pursue a teaching career (Creswell & Creswell, 2018).

The research questions framing this study are: 1) What are the main stated motives of pre-service EFL teachers to enroll in teacher education?; 2) With regard to their decision to pursue a teaching career, how do pre-service EFL teachers view the importance of self-efficacy, availability of a support system and satisfaction from the teacher education program?

#### 3. Research methodology

#### 3.1. Participants

Semi-structured interviews were conducted with 24 preservice EFL teachers studying in the largest teacher training college in the center of Israel. The four-year teacher training program at this college grants students a B.Ed. diploma and a teaching certificate. Students wishing to pursue a teaching career are also required to do an Induction year during their fourth year at the college so they can receive a teaching license, required to teach in Israel. The interviews were conducted prior to the beginning of the academic year, and the participants were students starting their third or fourth year at the college. The sampling strategy used in this study was a non-random purposive sampling (McBride, 2016), specifically, the criterion sampling to allow for participants to be chosen according to the criteria that best met the requisites of the study (Crewell & Poth, 2017): six students starting the third year who intend to do the induction year and pursue a career in teaching; six students starting the third year who are still ambivalent as to their decision to do the induction year and pursue a teaching career; six students starting the fourth year who chose to go into the induction year and pursue a teaching career; and six students starting the fourth year who chose not to go into the induction year and decided to finish their B.Ed. without pursuing a teaching career.

#### 3.2. Instrument

The semi-structured interview was chosen in order to allow for richer, more genuine and more realistic data to be generated (Coolican, 2019) and the interview guide was devised based on the literature review and the research questions. It included questions such as: Why did you decide to become a teacher? What were your main motives to pursue a teaching career and what influenced your decision to enroll in teacher education? How do you think the support you received during your studies at the college affected/ will affect your decision to pursue a teaching career?

#### 3.3. Data collection and ethical considerations

To increase validity and reliability, also known as truth value and consistency in qualitative studies (Guba & Lincoln, 2005), the researcher recorded and transcribed the interviews, which allowed for repeated revisiting of the data. The researcher was granted permission to conduct the study in the teacher training college by the Ethics Committee of the College. In addition, in order to adhere to the code of ethics in the American Educational college, the Research Association's (AERA) code of ethics, all the information pertaining to the study was presented to the participants and the participants were asked to sign a consent form prior to beginning the study. This allowed them to make an informed decision and freely decide whether or not they wanted to participate in the study. Participants were informed that they could withdraw from the study at any given stage with no consequences. To protect students' anonymity and confidentiality, necessary measures were taken.

#### 3.4. Data analysis

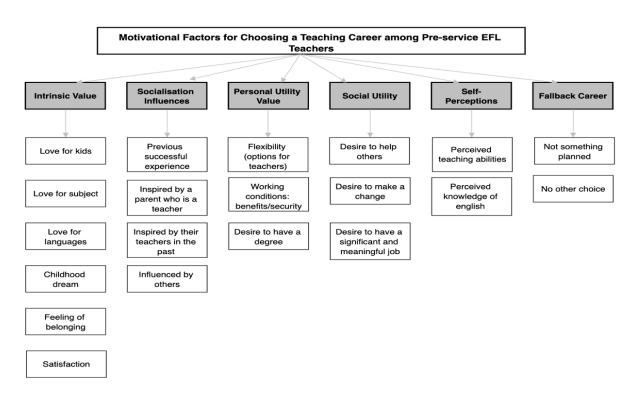
The data were analyzed using *Atlas.ti*, which enabled the data to be more organized, and to discover themes and relationships that might have otherwise been neglected. In addition, the themes were discussed with another researcher working in the field of teacher training, to reduce bias and yield the most inclusive findings. The first research question was analyzed using a data-driven thematic analysis, known as the bottom-up approach, which is beneficial when the coding of the data doesn't try to fit into pre-existing codes (Braun & Clarke, 2012). The data from the second research question were analyzed employing the deductive or top-down approach, also known as driven thematic analysis (Braun & Clarke, 2012). According to Sullivan and Forrester (2019), this

approach is favorable when the researcher wishes to investigate a fixed set of theoretical concepts.

#### 4. Results

Participants were asked about their main motives and the factors that played a role in their decision to choose to enroll in a teacher education training program. The data were analyzed inductively, based on generated codes and categories. During the inductive data analysis, consistency was found with the FIT- Choice model (Watt & Richardson, 2007). The categories identified included not only the three motivation types ('nodes'): altruistic, intrinsic and extrinsic, but also other categories as can be seen in Figure 1 (all figures were redesigned based on original *Atlas.ti* outputs).

Figure 1. Categorization of Motivational Factors for Choosing a Teaching Career



The "Intrinsic Value" factor included all the intrinsic motivations: love for kids, love for the subject, love for languages, teaching as a childhood dream, a feeling of belonging and satisfaction. The "Personal Utility Value" comprised of a desire to have a degree, the flexibility of the teaching profession and the options teachers have, and working conditions: job security and benefits. The "Social **Utility Value**" integrated altruistic motives such as a desire to help others, a desire to have a significant and meaningful job and the desire to make a change. Other categories found were "Self-Perceptions" consisting primarily of perceived teaching abilities and knowledge of English and "Socialization Influences" including being influenced by others, being inspired by teachers' in the past, being inspired by a parent who is a teacher and having previous successful experience. Lastly, the "Fallback Career" category reflected choosing teaching as a result of having no other choices or simply not something planned. The

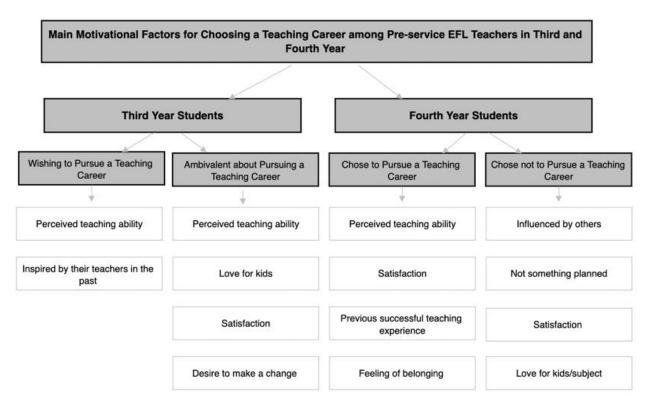
data from the interviews did not provide evidence for "task demands" and "task returns".

The participants were divided into four groups depending on their status at the time of the research:

- 1) Third Year A: Students commencing third year at the college who were considering pursuing a teaching career (*NI*=6).
- 2) Third Year B: Students commencing third year at the college who were still ambivalent as to whether they want to pursue a teaching career (N2=6).
- 3) Fourth Year A: Students starting their fourth year who had chosen to pursue a teaching career and were doing their induction year (N3=6).
- 4) Fourth Year B: Students starting fourth year who had chosen not to pursue a teaching career and were not doing the induction year (*N4*=6).

The main motivational factors for choosing a teaching career for each of these groups can be seen in Figure 2.

Figure 2. Main Motivational Factors for Choosing a Teaching Career among Pre-service EFL



The third-year participants' **perceptions of their teaching ability** were found to be the most prominent motive for choosing to enroll in teacher education training both for those who want to pursue a teaching career (NI=4) and those who are still ambivalent (N2=4). Their comments included, for example: "...and then I began to understand that I was quite good at what I was doing ...and so why not have a career...and so I began my degree" (John, 28, third year A); and "I enjoyed explaining things to others and helping them understand and I did it well." (Tali, 24, third year B).

For the third-year students who do want to pursue a teaching career the fact that they were **inspired by their teachers in the past** was the second most common motive for choosing a teaching career (N1=3): "I enjoyed my experiences in school and the changes the teachers did for us." (Katie, 23, third year A); "My teachers really influenced me." (Gil, 23, third year A); and "I really loved my English teacher, and she inspired me to choose teaching as job for my life." (Sally, 23, third year A).

Other motives which were also prominent with the third-year students who were ambivalent about

pursuing a teaching career included their 'love for kids' (N2=4): "I really love kids and everything about them" (Roni, 25, third year B), "I was interested in the relationship with kids and I have a good connection with them" (Danny, 28, third year B); 'satisfaction' (N2=3), "the satisfaction from this profession is very high" (Noa, 25, third year B); "I know it's not the best salary in the world, but I prefer enjoying what I do" (Guy, 26, third year B); and 'the desire to make a change and influence the next generation' (N2=2): "I want to know that I am making a difference." (Guy, 26, third year B); "I think about the future children." (Noa, 25, third year B).

For the fourth-year students who did pursue a teaching career and are currently doing their induction year, the most popular motives included their **perceived teaching abilities** (N3=4): "I tried to think of my strong qualities and what I did well....and then I remembered helping friends and family and they improved their abilities in English." (Amit, 25, fourth year A) and **satisfaction** (N3=4) with comments such as: "I chose what would make me feel good; what I would like to do every day." (Amit, 26, fourth year A); and "It is very satisfying to me...It's like that one thing that fulfills me." (Yoav, 26, fourth year A). Other

common motives included having **previous** successful teaching experience (N3=3): "I practiced teaching in the army and I loved it." (Dana, 27, fourth year A); "I was a teacher aid in a Hebrew school and there I helped the teachers and the students and they really liked me...I also really liked it." (Emma, 26, fourth year A); and a feeling of belonging (N3=2): "It's the best fit for me and the best place for me to feel comfortable." (Ori, 27, fourth year A).

The results of the fourth-year students show that the most common motives for those who chose not to pursue a teaching career upon finishing their studies include the fact that they were influenced by others to start studying in a teacher education program (N4=5). This included being influenced by a family member: "It was my mum's wish." (Andy, 29, fourth year B); or being influenced by a boyfriend: "I was dating a guy and he spoke so passionately about teaching; it wasn't even a direction I thought about in the beginning."(Liat, 27, fourth year B), or even listening to random people: "A lot of people told me I should have a profession and not just study English Literature and since I wasn't sure what I wanted, I listened to people around me." (Maya, 29, fourth year B)"; and that it was not something they planned (N4=5): "I didn't really want to be a teacher...I just ... I don't know even how I got to this degree." (Eden, 28, fourth year B) and "So actually, my decision to start the degree was kind of spontaneous...I just wanted to start studying." (Michal, 29, fourth year B). Other motives that emerged from the data for these fourth-year students but were less common included **satisfaction** (N4=4): "I wanted the satisfaction of having kids happy and educated." (Rotem, 26, fourth year B), love for kids (N4=4): "I knew I was good with kids and I like them." (Andy, 29, fourth year B) and love for the subject (N4=4): "I think first of all I really love the subject matter, I love English and everything we did with English and English literature." (Maya, 29, fourth year B).

In conclusion, perceived teaching abilities was found to be the most substantial motive for choosing to enroll in teacher education among those in wishing to pursue a teaching career and those who are still ambivalent. The intrinsic value was also found to be a prevalent motivator type for the majority of preservice EFL teachers. Other motivations that emerged included altruistic motivators, being inspired by previous teachers (for the third-year students who wish to pursue a teaching career) and previous experiences

being successful (for the fourth-year students who pursued a teaching career).

Self-Efficacy. To check how pre-service EFL teachers view the importance of self-efficacy in relation to their decision to pursue a teaching career upon graduation, participants were asked about their teaching abilities.

The third and fourth-year pre-service teachers wishing to pursue a teaching career related extensively to their teaching abilities (NI=4, N3=4) and their ability to build a rapport with the students (NI=5, N3=3) as the most significant factors shaping their self-efficacy. Their comments for their teaching abilities related extensively to their self-confidence and included comments such as: "because I started off as someone that didn't have much confidence and I wouldn't have been able to teach and handle even a single student...and I think that's where the selfimprovement aspect comes in..."(Ori, 27, fourth year A); "I learned many specific things, like how to teach vocabulary and grammar." (Dana, 27, fourth year A). Regarding their ability to build a rapport with the students, students related to feelings of empathy, caring, and the importance of building strong and positive relationships with their students in school, as can be seen in the following examples: "I was once shy and introverted so I know how to reach those students as well."(Nir, 26, third year A); "The most important thing, honestly, is having the relationships with the students and getting to know the students – and only then comes the teaching English." (Emma, 26, fourth year A). These students also related to the importance of having patience (N1=3, N3=3): "You need to have patience, even when things take a little more time than you though it would" (Ori, 27, fourth year A).

Those in third-year who are still ambivalent regarding pursuing a teaching career also related to the **importance of their teaching abilities** (*N2*=4) and **their English proficiency** (*N2*=3) with comments such as, "in my report card from high school English is located pretty on top..." (Dani, 29, third year B), however, they did not relate to their abilities to build a rapport with the students at all. The fourth-year students who have already decided not to pursue a teaching career did relate to the importance of **building a rapport with students** (*N4*=5), however, they did not relate to their teaching abilities. Instead they related to **their lack of self-confidence** (*N4*=4): "It was my choice not to teach during practicum and

it was because of my self-confidence...I wanted to take a class and teach them every week and see the progress and get to know the students...but I never did it and I didn't even have the courage to tell it to my host teacher."(Andy, 29, fourth year B).

**External Factors**. The significance of the external factors also emerged in the discourse of the pre-service EFL teachers.

Support System –Mentor and Faculty Support. When questioned regarding the mentor's support in the practicum and the faculty support provided by the training institution, pre-service EFL teachers related to their experiences in the practicum with the mentors and their satisfaction from the support they received from the faculty at the college.

Mentor Support and Practicum Experiences. Both third and fourth-year students who chose to pursue a teaching career related extensively to positive experiences with their mentors during their practicum (N1= 3, N3=4) in terms of having someone to look up to – a role model: "The host teacher I am working with...she's amazing and she makes me want to be a teacher because she is enjoying every moment of it...She's like a role model and someone I can look up to..." (Amy, 25, third year A); and getting the needed support and help: "My experience with my host teachers was great... and they really helped me and were very practical." (Ori, 27, fourth year A).

In contrast, the majority of the fourth-year students who chose not to pursue a teaching career (N4=5)expressed disappointment and reported negative experiences in the practicum. They depicted mentors as not being available or offering no support: "In my second year I had an incident with a student and I didn't really know what to do and I asked the mentor for help but she didn't come..." (Maya, 29, fourth year B). They also related to the professional attrition in the field, teachers being burnt and mentor teachers who were emotionally exhausted. These mentors were less sympathetic towards the pre-service teachers and their own students, as can be seen in the following quote: "In my third year, I had a really bad teacher...I didn't understand her methods and she was cutting slack a lot and maybe that's something that happens when you've been in the system for like...I don't know...30 years...you just don't care and I decided that I don't want to be in such a system." (Liat, 27, fourth year B), they were also less productive and less tolerant to problems that arose as can be seen in the following comments: "I think that the teachers in

the practicum were so exhausted, and they had no power to do anything." (Eden, 28, fourth year B).

The third-year students who are still ambivalent related both to negative experiences in the practicum and positive ones. Some described mentors as not being available or offering no support (N2=3), just like the fourth-year students who did not pursue a teaching career. such as in the following comment: "There is no real support...I don't know what mentor you are talking about...there is a teacher in the school and she is doing her best... no criticism... but she is overworked and over tired..." (Dani, 29, third year B). On the other hand, there were also comments relating to **the support** (N2=3) received by some of these students: "I, personally, like many of my classmates, had a few difficulties throughout the year and we felt less confident and when we turned to our pedagogical advisors or our mentors... they were willing to listen to us and to help us...that gave me more faith and even more energy to teach."(Tali, 24, third year B).

Faculty Support. The majority of the fourth-year students: both those who chose to pursue a teaching career (N3=6) and those who chose not to pursue a teaching career (N4=4), and those in third year (N1=5for those wishing to pursue a career, and N2=4 for those who are still uncertain) reported being very satisfied from the support they received from the faculty at the college. Their related to the availability of the staff: "I definitely think all my pedagogical advisors and the head of the department helped me with every single problem or issue that I had and they put 100% of themselves in order to help me...and if I didn't have those people I think I would have felt that this is not a system I want to be in." (Emma, 26, fourth year A); inspiration: "I feel like I love being there...I mean truly I love being there and I love the inspirational aspect of the college." (Rotem, 26, fourth year B); and in terms of **professionality:** "Oh my God! First of all, I truly think the faculty members are like...each one of them is a diamond...each one of them is amazing...It's not only about how they teach or the syllabus...it's how they open the lessons, how pleasant they are to us and each other..." (Sally, 23, third year A).

**Satisfaction from the Teacher Education Program.** Regarding their overall satisfaction from the teacher education program, most of the students in third and fourth year (N=18), both those who want to pursue a teaching career and those who don't (N1=4, N2=4, N3=5, N4=5) reported feeling that the program

was **effective**, **comprehensive** and **relevant** and that they felt it prepared them for the profession (*N1*=3, *N2*=2, *N3*=4, *N4*=5). Their statements included: "Yes, I am so satisfied because I never encountered anything that I am not familiar with and I think the college really did teach us a lot."(Eden, 28, fourth year B).

Although the pre-service EFL teachers were mostly satisfied with the program offered by the college, when asked if anything was missing, two aspects that emerged were the need to bridge the gap between what students learn in the college and what they experience in the field (N=2) for each group) "We were taught literature and it was very inspiring and I could implement that in my theoretical lessons, but I can't be creative in such a way in the school."(Rotem, 26, fourth year B) and the importance of focusing more on the practical aspects and less on theories: This emerged mainly from the data of the third year students who are still debating (N2=4) and those in fourth-year who pursued a career (N4=3). "I think there was a lot of theory in the courses and not enough practice." (Afik, 25, fourth year A). "I think we should be given more tools, like more courses in how we perform as teachers and most courses check how we perform as students in the college."(Amit, 25, fourth year A).

Some of the fourth-year students who pursued a teaching career (N3=4) also related to the importance of **learning more about the bureaucracy in the system** and that includes the need to understand how the system works, The Ministry of Education, teachers' rights, the salary, joining the teaching unions, and about the paper work and the required documents they will need to submit: "It's more connected to the professional side of the job, exactly what documents I need, how the municipality and the ministry of education work, how the unions work..." (Afik, 25, fourth year A).

#### 5. Discussions

The purpose of this study was to investigate the stated motives of pre-service EFL teachers to enroll in a teaching education program and explore the internal and external factors that they perceive as significant regarding their decision to pursue a teaching career upon graduating from the program. Studies conducted previously have shown that both internal factors such as initial motivation (Rots & Aelterman, 2009; Rots et al., 2014); and self-efficacy (Lavrenteva & Orland-Barak, 2019; Pfitzer-Eden, 2016, Rots et al., 2014) and external factors such as faculty support, mentor

support, positive practicum experiences (Rots et al., 2007) and satisfaction from the teaching education program (Rots et al., 2007, 2014) are each a strong indicator of pre-service teachers' choices to pursue a teaching career upon graduation. The findings of the present study suggest the significance of a combination of the internal and external factors when planning and designing an EFL teacher education program for third year pre-service EFL teachers, to ensure maximum entrance into the teaching profession upon graduation.

According to the pre-service EFL teachers, the motivation to enroll in a teacher training program corresponds to the FIT-Choice model (Richardson & Watt, 2006) and is in line with the literature regarding the existence of more than one motivation type for enrolling in teacher education (Pop & Turner, 2009; Richardson & Watt, 2006; Sinclair, 2008; Watt & Richardson, 2008). The most substantial initial motive indicated by the participants in the third year, both those who want to pursue a teaching career and those who are still ambivalent, and the fourth-year students who chose to pursue a teaching career, was their perceived teaching ability, prior to enrolling in the program. This result aligns with other studies dealing initial motivation (Fokkens-Bruinsma Canrinus, 2015; Hennessy & Lynch, 2017; Richardson & Watt, 2006). Perceived teaching ability is a significant and important element of various motivation theories and has been found to have positive motivational implications (Wigfield & Eccles, 2000).

Intrinsic motives, including love for kids, satisfaction and a feeling of belonging, and some altruistic motivation, such as the will to make a change, were also included in the pre-service EFL teachers' responses. Similar results were found in previous studies that reported that the majority of the students that enroll in teacher education do so as a result of intrinsic or altruistic motivations (e.g., Nachmani & Ben Horine, 2018; Watt & Richardson, 2012). According to Deci and Ryan (2000), intrinsic motives can be strong predictors of commitment to a teaching career.

The findings of this study also provide evidence for the motives for not choosing to pursue a teaching career. The fourth-year pre-service teachers who had already decided not to pursue a teaching career reported that their motivation to enroll in teacher education was largely a result of social influences or

choosing teaching a fallback career. Studies in the past have shown that these kinds of motives have been found to lead to dissatisfaction and as such to disengagement, superficial engagement in the task, or to complete lack of commitment to the teaching profession (Almulla, 2020; Bruinsma & Jansen, 2010; Suryani et al., 2016; Watt & Richardson, 2006, 2007). It seems, therefore, that these motives will have a negative effect on teaching commitment as the preservice teachers who chose to enroll in teacher education as a result of social influences or as a last resort option were not committed to begin teaching. Nevertheless, exposing such pre-service teachers to mentors who are intrinsically and altruistically motivated may help deactivate the negative effects of the fallback motivation, and as a result promote and nurture other types of motivations, as was seen in Wong et al. (2014).

**Self-Efficacy.** The findings of the present study emphasize the extent in which pre-service EFL teachers feel their perceived teaching abilities, namely their self-efficacy levels play a significant role in their decision to pursue a teaching career. Similarly, previous studies have provided evidence for the significance of teacher self-efficacy as an influencer and predictor of teacher commitment and intentions to pursue a teaching career upon graduation (Bruinsma & Jansen, 2010; Chestnut & Cullen, 2014; Lavrenteva & Orland-Barak, 2016; Pfitzer-Eden, 2016; Rots et al., 2014; Tschannen-Moran & Woolfolk Hoy, 2001). The third-year students who want to pursue a teaching career and the fourth-year students who chose to pursue a teaching career, as well as the third-year students who are still ambivalent about their decision to pursue a teaching career all spoke extensively about their perceived teaching abilities. On the contrary, the fourth-year students who chose not to pursue a teaching career, spoke extensively about their lack of confidence and their negative practicum experiences. These findings are in line with the findings of Rots et al. (2014) who showed that motivations and the intents to start a teaching career are prone to decrease with negative experiences. These students remarked that they felt they had no real role model to learn from and that the host teachers weren't available for them when they needed help and support. This also aligns with Bandura (1997) who stated that mastery experiences, vicarious experiences, verbal persuasion and the psychological and emotional states are the sources that will influence the pre-service EFL teachers' selfefficacy.

Mentor and Faculty Support, and Teacher Education Programs. According to pre-service EFL teachers these external factors were perceived as important factors in relation to their decision to pursue a teaching career. Except for the pre-service EFL teachers who chose not to pursue a teaching career, all the other participants related to the mentors as role models, who were available and supported them. They expressed satisfaction and contentment from the positive encounters they experienced during the practicum. As was seen in Rots et al. (2014), such factors may promote more commitment and a more tranquil entrance into teaching. However, the preservice EFL teachers in the fourth year who chose not to pursue a teaching career expressed disappointment, dissatisfaction, and a feeling that they never got the support they needed. They depicted the mentors they were assigned to as burned out and emotionally exhausted. Pre-service EFL teachers in third year who are still ambivalent about whether to pursue a teaching career or not, related both to positive and negative experiences in terms of mentor support.

Concerning the faculty support, regardless of whether the pre-service EFL teachers want to pursue a teaching career or not, 80% expressed that the staff in the faculty is professional, inspiring and offer full support to their students. In addition, 75% reported feelings of satisfaction regarding their teacher education program in the college and feeling that the program is effective. These results could point in the direction that faculty support on its own may not be sufficient to impact pre-service EFL teachers and predict their entrance into the teaching world. It seems that a combination of the internal (initial motivation and self-efficacy) and external factors (mentor and faculty support and satisfaction of the program) must be taken into consideration when designing teacher education programs so that more graduates feel the crave to enter the teaching profession once they graduate from the program.

The present study also highlights the significance of the EFL teacher education program for the third-year students. The third-year pre-service EFL teachers who were still ambivalent regarding their decision to pursue a teaching career, reported different responses in comparison to the students who were in fourth year and had already decided not to pursue a teaching career. Those in third year reported not only negative experiences in the practicum, but also positive practicum experiences and faculty support. They expressed feeling more faith and more energy to teach

as a result of the positive exposure to mentors. On the contrary, the fourth-year students barely related to any positive experiences from their practicum. These findings may lead to an understanding that the third year of the education program could be a critical year in shaping the pre-service EFL teachers, who have still not made a final decision regarding pursuing a teaching career.

Even if one cannot foresee whether pre-service EFL teachers who opt to pursue a teaching career will remain in the system once they finish the induction year, raising the number of motivated graduates of EFL teacher education programs, with high levels of self-efficacy who choose to do their induction year in their fourth and final year, may be a leap in the direction of increasing teacher retention, reducing teacher attrition and as such decreasing teacher shortage.

#### 6. Conclusions

This study has brought to light some significant perceptions regarding EFL teacher education and these findings may have implications for EFL teacher education programs, locally and worldwide. It seems that the third year of the teacher education program is a turning point and a very influential year for the students in terms of whether or not they decide to pursue a teaching career. It also reinforces the importance of comprehending initial motivation among pre-service teachers. Failing to consider the pre-service EFL teachers' initial motivation in teacher education programs, may result in loss of interest and less satisfaction, and consequently lead the pre-service teachers to choose not to pursue a teaching career. As such, the findings of this study may facilitate the development of an innovative EFL teacher education program for students in the third year of their EFL teacher education

The main limitation of this study that should be taken into consideration for future research is that all participants come from the same teacher training college and thus there is a need for further research involving preservice EFL teachers from other institutions, both in Israel and abroad, before any generalizations can be made.

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# Mechanisms for Objectivity Ensuring and Fraud Prevention in the Online Academic Assessment

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Research article

## Mechanisms for Objectivity Ensuring and Fraud Prevention in the Online Academic Assessment

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#### **Abstract**

Keywords: academic assessment and evaluation; evaluation strategy; assessment methodology The recent online teaching experience we all were forced into during the pandemic period made us reflect on the existing teaching practices and their efficacy, while imposing on finding new ways, roles and functions for the classical teaching, learning and assessment activity. Academic assessment in particular proved to be a challenge in the sense that new and unexpected isses had to be managed. While the use of digital platforms offered support for new assessment and evaluation strategies, including improved feedback and ways of tracking students' development, sensitive issues such as that of avoiding exam fraud risks, and the need for improving evaluation validity and authenticity appeared. The present paper offers an insight on university students' and teachers' perception on academic assessment, its added value and risks. It also provides some empirical proves for the need of integrating valuable lessons from the online evaluation experience and transfer them in hybrid and onsite academic education process.

#### Zusammenfasung

Schlüsselworte: wissenschaftliche Beurteilung und Bewertung; Bewertungsstrategie; Bewertungsmethodik Die jüngsten Online-Unterrichtserfahrungen, zu denen wir alle während der Pandemie gezwungen wurden, veranlassten uns, über die bestehenden Unterrichtspraktiken und ihre Wirksamkeit nachzudenken, während wir gleichzeitig neue Wege, Rollen und Funktionen für die klassische Lehr-, Lern- und Bewertungstätigkeit finden mussten. Es liefert auch einige empirische Beweise für die Notwendigkeit, wertvolle Lehren aus der Online-Evaluierungserfahrung zu integrieren und sie in hybride und vor Ort stattfindende akademische Bildungsverfahren zu übertragen.

#### 1. Theoretical background

In the educational use of the computer and of the Internet, the main challenge is that of developing an adequate context of learning. In fact, the recent literature on the topic (UNICEF) is unanimous is arguing that the educational use of the new technologies of information and communication has the potential of facilitating an accent shift from the teaching and teacher's work on a learning and learner-focused approach. This potential must be considered in the design of technology-based teaching situations.

One of the main advantages of the technology-based education is that in the remote teaching the school is the one that comes towards the learner with its offer of learning contents and activities that cand be delivered in a technology mediated manner. The virtual classroom that is created (Glava, 2009) includes the means for fostering the students' communication and cooperation as well as the

classical learning behaviors such as extensive reading and abilities exercising (Raes et al., 2020).

The digital platforms as milieus of virtual classrooms redefine the roles teachers and students undertake. The student's activity modifies mainly from the perspective of the degree of their direct involvement and self-management. The at-distance presence of the teacher implies a higher degree of selfresponsibility at students' part. Teacher's role is also changing towards the teacher as the leader of student's learning activities, coordinator and moderator, administrator of the virtual learning environment and supervisor of students' increasingly autonomous Compared with the computer assisted learning. instruction, the e-learning offers a whole new interface of the teacher-student- learning contents interactions and connections. (Leinenbach, 2007).

It is the new computer - facilitated learning that urges teachers to reconsider and renew their educational design abilities as well as to enrich their classroom management skills (Glava, 2009). A new habilitation of teachers on digital skills is an imperative. The new expertise must lead to the reconsideration of some of the characteristics of all the other didactic actions and components. This is the vision promoted by the recent DigCompEdu (2017) model (Redecker, C., 2020) which offers new benchmarks for teaching, learning, evaluation, institutional and classroom organization, in the light of digital competences use.

Moreover, after the integration of Covid 19 pandemic and of the remote teaching experience, the need to reconsider the initial and the continuing teacher training for insuring their much-needed digital expertise (Adăscăliței, Dumitrescu & Brașoveanu, 2004) becomes even more obvious.

One of the most debated actions that are significantly altered in the online teaching is the academic evaluation. More precisely, there is a great debate on the functions, principles and practical solutions for insuring an objective evaluation in the online conditions. In higher education, the debate is even more relevant as most of the academic disciplines include a final examination that is usually undertaken in a written or oral form. The portfolio or practical tasks based academic evaluation is rarer and considered usually as a complementary form of assessment. Moreover, the academic evaluation is focused on the assessment of specific professional skills that impose particular forms of evaluation, and the switch to the online evaluation may rise difficulties in the appreciation of some of the professionally required knowledge and skills, a situation that imposes a special attention on the design of the online evaluation situations.

Despite the precautions related to the topic, we observed the development of a tendency for understanding and using the main characteristics of the online academic evaluation that are:

- The interface with the students is a mediated one. The mediators are the virtual milieu, the physical distance, the limited control over the evaluation context, the limited options for a visual and auditory feedback.
- The connection with the student is dependent of concrete technical conditions and skills of the users

- The awareness of the inherent risks of evaluation induces sometimes an exaggerated precaution with possible negative effects on the actual conditions of evaluation.
- The online evaluation is an opportunity for the development of the digital and pedagogical competences
- Certain advantages of the online evaluation should be valued (the centralized delivery of evaluation items, transparency of the evaluation procedure, the options for the evaluation data and proves preservation and use, more options for the formulation of evaluation tasks by including authentic texts and data, different ways and types of providing feedback, option for tracking students' progress etc. JISC-Joint Information Systems Committee, UK, 2010; MeritTrac, India, 2020).

As a response to this tendency, we argue for the necessity of redefining the traditional academic evaluation strategy. Namely, we support the idea of a strategic approach to the online academic evaluation by devising a specific functional vision that has as a central element the integration of evaluation with teaching and learning.

#### 2. For an online academic evaluation strategy

The strategic approach of the evaluation in higher education represents a quality principle attentively approached in the international and national institutional and programs of study appreciation (eg. National Agency for Quality Assurance in Higher Education). By defining an evaluation strategy for his/her courses, the university teacher declares own understanding on the status and rigors the evaluation must illustrate. The evaluation strategy may lead the evaluator in being consistent and coherent in the decision-making process related to the assessment of students' performances. Moreover, once defined, the evaluation strategy may be promoted at the level of students with important consequences for encouraging their self-regulation and self-evaluation.

The assessment strategy must include elements grouped in two dimensions: the concept dimension and the structural dimension.

The *concept dimension* is a vision based one and includes the believes and understandings of the teachers on the relevance and status of the assessment actions and processes. It defines the values and main

principles the teacher understands to follow in the evaluation and students' assessment actions.

The vision on evaluation is made operational through its *structural dimension* (fig. 1) that includes the forms, methodology, actions and benchmarks according to which the evaluation actually takes place.

Figure 1. Evaluation concept and dimension



# axiologic

## pragmatic

The elaboration of a personal assessment strategy implies the self-questioning of own conceptions on the relevance and significance of the academic evaluation. Thus, at the conceptual level relevant questions are: Why do I evaluate (in an online setting)? And What learning outcomes do I assess (in an online setting)? The first question implies defining the roles of evaluation. In the university evaluation must go beyond the immediate role of marking students' performances and making hierarchies, towards supporting and forcing students' learning and helping self-regulation of learning. Second question refers to the types of learning outcomes we intended and must or prefer to evaluate. On this topic, special attention must be directed towards harmonizing teaching with evaluation as performances on certain intended learning outcomes must be prepared through adequate teaching and support for learning. Evaluation must be regarded as a intrinsic part of the educational process. Using it just as a final sequence implies giving it a marginal role. Another topical issue in this context is the evaluation of the transversal competences together with the professional learning outcomes, as the professional profiles of most of the academic training programmes include both professional and transversal knowledge and skills.

One option that seems to have more potential in the online teaching context is to increasingly focus the evaluation on assessing students' capacity to use their learning acquisitions in problem solving and authentic tasks. In this respect, the good use of digital applications may lead to formulation of evaluation tasks that put students to group work, to compete or to prove their soft skills together with their professional knowledge. William Daggett's Framework of Learning Rigor and Relevance (2016) offers a good structure for reflecting on both the depth of knowledge and the applicative power of the acquired knowledge. Thus, the self-questioning action receives a topical nuance, that of shifting towards an actual perspective supported by Webber (2012) of the **evaluation as a means for supporting students' learning.** 

As for the structural dimension of the evaluation strategy, the literature insists on ensuring what Biggs (1983) developed as the *constructive alignment*, by targeting the evaluation of the intended learning outcomes. The current approach to the learning outcomes (CEDEFOP, 2017) describes the intended results in terms of competences: 'statements of what a learner knows, understands and is able to do on completion of a learning process, which are defined in terms of knowledge, skills and competence' (CEDEFOP, 2017. p. 29). Consequently, the academic evaluation should be competences focused, an approach that implies involving different forms of evaluation with a special accent on the formative and continuing evaluation.

The question *How do we evaluate (in an online setting)?* highlights the key element of the evaluation strategy that is the **assessment methodology**. The general recommendation for using a diversity of evaluation methods and instruments that could support different forms of assessment becomes increasingly possible in the online context. The various digital applications that are open for free use offer relevant frames and functions that may be crafted to support different evaluation tasks that add value to the assessment strategy by:

- Allowing for the evaluation of new learning outcomes such as personal points of view, attitudes and emotional responses to professional topics. A good example in this respect could be using the functions of Mentimeter, Socrative or Slido for" hearing" students' voices.
- Offering support for creative evaluation tasks and products: StoryBoard: https://www.storyboardthat.com/ro, Dotstorming www.dotstorming.com

• Providing cognitive organisers for elaboration of mind maps: reasons.io, http://www.mindmup.com, Thinglink https://www.thinglink.com/

Involving students in deeper information processing and in elaboration on knowledge: Miro www.miro.com.

#### 3. Method

Given the potential advantages, limits and risks of the online evaluation, we initiated an exploratory study with the intention to explore both university teachers' and students' perception on the specificity academic evaluation has when implemented in a virtual environment. The research design was mixt with quantitative and qualitative actions that implied a questionnaire-based survey addressed to both teaching staff and students of different academic level: bachelor, masters and doctorate. The questionnaire was meant to target participants' opinion on the entre didactic activity delivered online. Out of the 21 items of the questionnaire we focused on the three items that referred to the online evaluation:

- Q13: Give some concrete examples of good practices that could ensure the objective online evaluation of students' performances;
- Q14: In your opinion, which would be the most effective measures that could help avoiding the fraud in the online exams?
- Q15: Give examples of effective feedback messages for the students after the online examinations.

The convenience sample was randomly selected to represent the entire country and included a number of 1245 answers. The respondent participants were in a proportion of 11.49 teaching staff, and 88,51 % were represented by students in all three levels of academic education> bachelor, masters and doctorate. Both teaching staff and students represented a total of six academic fields> Mathematics and Nature Sciences, Engineering, Biology and Biomedical Science, Social Sciences, Humanities and Arts, Sport Science and physical education.

#### 4. Findngs

We selected three open questions and we performed a qualitative analysis of the answers, aiming for delineating the general tendencies and for capitalizing on the most frequent solutions and examples mentioned in the answers.

A large majority of answers regarding the risk of exam fraud referred to solutions of technical and pedagogical nature. 92% of students offered practical fraud avoidance solutions that we will synthetically present further on in the text. The percentage of teachers that offered solutions for the reduction or removal of the exam fraud was of 85%. The difference between students and teachers in the number of answers is probably related to the fact that teachers are more reluctant and reserved on discussing the efficacy of the online evaluation while students approach the subject with enthusiasm and sometimes constructively.

Answers registered in Q15 that referred at the use of assessment results in providing feedback for students. In a significant percentage of 96%, students and 91% teachers stated that feedback delivery is very much facilitated by the online use of teaching platforms The majority of students' answers (72%) included concrete examples of feedback received form teachers via the electronic platform, while in the traditional situations sometimes the feedback was totally absent, except the actual mark awarded.

In their turn, teachers mentioned the facilities platforms have for offering constructive feedback in a simpler and more direct way then in the traditional situations. This is regarded as a way of increasing their use of post-evaluative feedback.

Teachers included reflections in their answers on the risks that the online evaluation imply and this is a side information which we considered relevant. Some of the risks mentioned, apart from, but in relation with the exam fraud were:

- Technical problems that can facilitate the fraud;
- The increased exposure of teachers that may be registered, of have the message altered or distorted;
- The cyber-bullying risks related to the behaviors of students on the exam;
- The transparency of the evaluation procedure that can be speculated in negative purposes.

These risks have the potential to put teachers in the position of being excessively cautious and apprehensive or, on the contrary, too permissive. They also are in the risk of exclusively using close, objective evaluation items that would only test the recognition of the right answer capacity. Teachers experience the

frustration of not being in control and of not having a complete sense of coherence in their didactic activity.

Students and teachers answer on increasing the objectivity of evaluation and reducing the risk of exam fraud included very useful solutions oriented more on the technical measures that could be undertook in managing the exam itself, in case of the students and on different type of evaluation methods and tasks, in case of teachers.

Mainly answers referred to an increased rigor in the technical delivery of the exam: implementing solutions of eye-tracking, sound-catcher type or solutions of technical backup such as alternative ways of sending the answers, communicating, or ensuring the energy supply for the electronic devices.

Answers included practical technical solutions such as:

- Removal of the thinking time prior to an oral online examination;
- Option of handwriting in answering the redactional items, for a better time use in written online examination;
- Use of continuing evaluation along the semester with mark points awarded for activism during courses, study initiatives and classroom presentations etc;
- Use of" open books" evaluation where students must prove the capacity to strategically use their knowledge and skills for problem solving and other application tasks;
- Use of oral evaluation through direct questioning and instant answers that allow for a permanent video and audio connection;

In their turn, teachers focused their answers mainly on different methods of assessment. The most frequent answers were related to evaluation tasks that ask for elaboration of answers in new forms or/ and their application in relevant and authentic situations. By avoiding reproductive and subjective items some of the important learning outcomes could be tested. Online quizzes with time limit, randomized questions and rapid answers required is also a solution in the view of teachers.

A particular answer had a higher frequency between the contributions of teachers. The portfolio evaluation and the project-based assessment were considered solutions that allow for a continuing construction of answers and involvement of students during the whole semester.

A more controversial, yet very valuable answer was that related with the necessity of developing a new culture of trust and ethical approaches in the university.

Answers of teachers allow us for drawing a conclusion on the need of increasing the validity of the evaluation in the academic context, and promote what Herrington, Oliver, & Reeves (2006) named authentic evaluation tasks. Thus, the academic assessment could be focused on a strategy that allows for:

- the assessment of different types of learning outcomes (knowledge, skills, attitudes level of responsibility and autonomy, competences)
- the appreciation of students' evolution and development along the semester;
- the better use of evaluation with its learning regulatory function.

Certain online assessment methods are compatible with this type evaluation: project-based assessment use of the e-Portfolio, service-learning tasks, gamification-based learning and assessment, reflective tasks etc.

The answers and reflections provided by the respondents lead us to the conclusion that in case of the online evaluation, some of the solutions and measures must be agreed and promoted at the institutional level by measures such as:

- reducing the pressure of evaluation in relation with the awarding of scholarships and student accommodation;
- ensuring an improved continuity and coherence along the entire programme of study and between academic disciplines through an improved teacher team work;
- academic curriculum development by creating a bank of good evaluation practices;
- implementation of a whole programme of study assessment strategy through articulated actions such as a student development portfolio that includes proves of student's evolution in relation with the intended competences.

#### 5. Conclusions

The online teaching and learning platforms increasingly developed during the pandemic period remain an important support for the hybrid approach to the academic education even in the post-pandemic period. These informatic solutions have some important means for the design of an objective and correct academic assessment, both held in a traditional form and in alternative forms such as those related to e-Portfolios, Canva products, EonXR learning products etc.). Moreover, the use of the learning platforms has the potential to support ensuring the constructive alignment of the intended learning with the evaluation and approaches, a principle that, once implemented, gives evaluation a better and more functional status.

#### **Authors note:**

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The parents' Opinions regarding the Usefulness of Establishing the Configuration of the Profile of Intelligence of the Pupils, Using a Digital Application based on the Content of the Theory of Multiple Intelligences

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Research article

# The parents' Opinions regarding the Usefulness of Establishing the Configuration of the Profile of Intelligence of the Pupils, Using a Digital Application based on the Content of the Theory of Multiple Intelligences

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#### Abstract

Keywords: Multiple Intelligences, Assessment, Digital Application, School-Family Partnership, Profile of Intelligence, Vocational Counselling Recent studies have shown that the educational approaches based on the Theory of Multiple Intelligences are efficient and should be applied frequently in the classroom. Through this study, we set out to determine which are the parents' opinions regarding the optimum age to discover the configuration of the profile of intelligence of children and adolescents. Thus, we carried out an online survey. The online questionnaire was filled in by 507 parents. The study revealed that parents are interested to discover the dominant intelligences of their children, in order to choose appropriate extracurricular activities and to identify a suitable career for them. The results obtained indicate a strong desire of parents to understand children's strengths using a digital application based on the content of the Theory of Multiple Intelligences, developed by Howard Gardner. The results of the study are useful for school principals, teachers, and researchers in the educational sciences.

#### Zusammenfasung

Schlüsselworte: Multiple Intelligenzen, Assessment, Digitale Anwendung, Partnerschaft Schule-Familie, Intelligenzprofil, Berufsberatung Neuere Studien haben gezeigt, dass die auf der Theorie der multiplen Intelligenzen basierenden pädagogischen Ansätze effizient sind und häufig im Unterricht angewendet werden sollten. Durch diese Studie wollten wir herausfinden, welche Meinung die Eltern bezüglich des optimalen Alters haben, um die Konfiguration des Intelligenzprofils von Kindern und Jugendlichen zu entdecken. Daher haben wir eine Online-Umfrage durchgeführt. Der Online-Fragebogen wurde von 507 Eltern ausgefüllt. Die Studie ergab, dass Eltern daran interessiert sind, die dominanten Intelligenzen ihrer Kinder zu entdecken, um geeignete außerschulische Aktivitäten auszuwählen und einen geeigneten Beruf für sie zu identifizieren. Die erzielten Ergebnisse weisen auf den starken Wunsch der Eltern hin, die Stärken der Kinder mithilfe einer digitalen Anwendung zu verstehen, die auf den Inhalten der von Howard Gardner entwickelten Theory of Multiple Intelligences basiert. Die Ergebnisse der Studie sind für Schulleiter, Lehrer und Forscher in den Erziehungswissenschaften nützlich.

#### 1. Introduction

This research paper aims to outline the main benefits of establishing the configuration of the multiple intelligences of the children and their positive effects on strengthening the school-family partnership. In order to facilitate the process of assessment of their intelligence profile, we consider that children should interact with a friendly interface, using a digital application that will facilitate and make more attractive the process of discovering their intelligence profile. Recent studies revealed that is important to establish the configuration of the profile of intelligence of children as earlier as possible. In this context, the research aims to establish how relevant is

for the parents the creation of a digital application, entitled Supersona, that could establish precisely the characteristics of the profile of intelligence of each child and adolescent. In contrast to most of the instruments that are available online, that are filled either by children or adolescents, either by their parents, the instrument that we are developing in order to be administrated through a digital application, is very complex and simulates daily life contexts.

#### 2. Theoretical foundation

The assessment of the multiple intelligences is beneficial and can improve cooperation between the school and the family (Kaur & Chhikara, 2008). "Each kind of intelligence influences the unique traits of the learner and the future of the mature person. People usually choose a profession that expresses their strength and personal talent" (Yavich & Rotnitsky, 2020, p. 109).

The level of development of the multiple intelligences of pupils is influenced by a lot of factors, including the socio-economic status of the family, and the level of involvement of the parents in children's education (Marin & Bocos, 2019).

"A person can be most successful in a profession when the profession is according to his or her abilities and interests" (Kaur & Chhikara, 2008, p. 8). Thus, the profile of intelligence of the children could be a useful instrument for offering proper career counseling (Shearer & Luzzo, 2009; Bordei, 2015). "Need is to educate parents and teachers about the multiple intelligence of adolescents. As adolescence is the age when people start utilizing their talent and interest in particular field and start aspiring it as a career/profession" (Kaur & Chhikara, 2008, p. 9).

The level of development of each type of intelligence could be determined with various instruments, and some researchers became more preoccupied to find out how we can use technology to discover the configuration of the profile of intelligence of children and adolescents (Bordei, 2017; Garmen et al., 2019; Shearer, 2007; Tirri et al., 2013). Howard Gardner, the author of the Theory of Multiple Intelligences, and other experts in this field, such as C. Shearer have outlined the implications of using the Theory of Multiple Intelligences in the classroom (Gardner & Hatch, 1989; Shearer, 2018; Shearer & Reith, 2011). The applications of the theory have also positive effects in enhancing peoples' self-esteem and motivation for learning (Green at al., 2015; Lei et al., 2021; Yavich & Rotnitsky, 2020). "A person learns best when taught in the way he or she can best perceive the things to be learned. The educational institutions must give towards recognizing dominant attention the intelligence of students before planning educational activities" (Kaur & Chhikara, 2008, pp 7-8). Pupils should understand their weaknesses and strengths in order to improve their learning processes (Sener & Cokcaliskan, 2018; Yavich & Rotnitsky, 2020). The configuration of the profile of intelligence of each child or adolescent reveals important information about the pupils, that could be used to enhance teaching and learning processes according to their needs and learning styles (Kaur & Chhikara, 2008; Snyder, 2000; Yavich & Rotnitsky, 2020).

Recent studies have revealed that didactic activities based on the Theory of Multiple Intelligences can contribute to the improvement of the school results of all pupils, including those with special educational needs (Al-Zoubi & Al-Adawi, 2019; Taspinar & Kaya, 2016; Shearer, 2004; Stanford, 2003; Yurt & Polat, 2015). The educational applications of the theory are used with success not only at the pre-university level but also in higher education (Barrington, 2004; Christodoulou, 2009; Lei et al., 2021).

#### 3. Research hypothesis

We have started our research study to test the validity of the following hypothesis:

From parents' perspective, it is useful to know as early as possible the configuration of the profile of intelligence of the children through Supersona digital application.

#### 4. Research questions and design

We have used a nonexperimental design in order the establish the answer to the following questions:

- How useful is from the parents' perspective the process of establishing the configuration of the profile of intelligence of the children, using a digital app?
- How difficult is for parents to understand the content of the Theory of Multiple Intelligences?
- How many of the respondents are familiarized with the Theory of Multiple Intelligences?
- Which should be the main characteristics of the Supersona digital application, in parents' opinion?
- Which is the appropriate age to establish the configuration of the profile of the intelligences of the children?
- Which is the most appropriate moment to offer guidance to pupils concerning the selection of the most suitable profession or the most appropriate university specialization?

#### 5. Description of the instruments and method used

The research method used for data collection is the online survey. The online questionnaire was filled in by 507 parents, parents of children aged between 1 to 18 years (see Appendix A). The questionnaire was created using Typeform.

Most of the respondents have children enrolled in the primary educational system (see Table 1). Also, most of their children are enrolled in a public/state institution (84.2 % of them), from Romania. The majority of the respondents (77.5% of them), mentioned that the decisions regarding their children's education are taken by both parents.

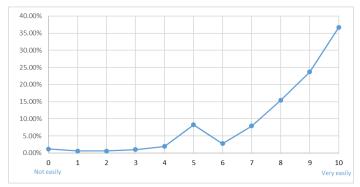
Table 1. The age level of the children of the respondents

The level of education at which children or adolescents are enrolled	Percentage
Does not attend kindergarten yet	0.39%
Preschool level	29.59%
Primary school level	55.03%
Secondary school level	10.85%
High school level	4.14%

#### 6. Results

Most of the respondents (51.1%) were not familiarised with the content of the Theory of Multiple Intelligences at the moment when they filled in the questionnaire. The theory was presented through a suggestive image. Using the image, most of the respondents considered easy or very easy for them to understand the essence of the Theory of Multiple Intelligences (see Figure 1).

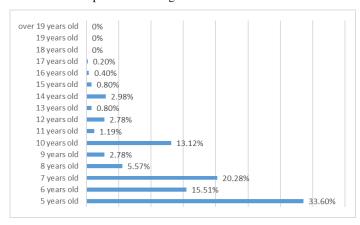
Figure 1. The level of difficulty of the content of the theory, in the vision of parents



99% of the respondents considered that is important or very important for them to discover the dominant intelligences of their child in order to use that information, in cooperation with the teacher, to motivate children to learn better and more pleasurably.

In parents' opinion, it is very important to discover the dominant intelligences of the children during kindergarten age and at primary school age. The assessment of the profile of intelligence of the children should begin at kindergarten and at the beginning of primary school. Thus, in their vision, the assessment process of the multiple intelligences of the children should begin at an early age. The ages mentioned by most of the participants (69,4%) are 5 to 7 years old (see Figure 2).

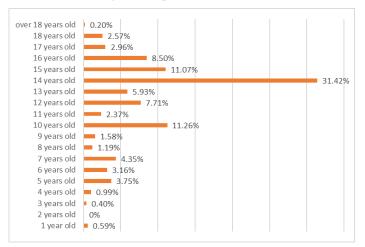
Figure 2. The appropriate age for establishing the configuration of the profile of intelligences of the children



More than 98% of the respondents considered that the discovery of the dominant intelligences is useful in guiding extra-curricular activity choices. The majority of the respondents considered that is useful and very useful for them to receive help to find educators which are organizing extra-curricular activities, through which their children can develop their multiple intelligences.

At the same time, knowing the fact that the profile of dominant intelligences is an efficient instrument that could be used in order to make recommendations for higher education studies that would naturally fit to each child, most of the parents consider that is very useful for their children to receive counseling services based on the information revealed of their profile of intelligence. Most of the respondents considered that the most appropriate moment to find out which higher education studies fit their children is the period of adolescence (see Figure 2).

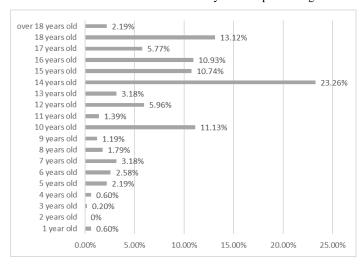
Figure 2. Parents' opinions regarding the appropriate age for establishing which superior studies fit to each child



The results of the study have also revealed that 98% of the respondents consider useful or very useful to find out recommendations regarding the professions that naturally suit for each child, and which are

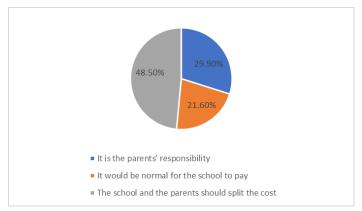
automatically generated by Supersona app. The ideal period to discover the professions that most naturally fit to each child is adolescence, and the optimum moment could be the final of gymnasial studies (see Figure 3).

Figure 3. Parents' opinions regarding the appropriate age for offering vocational services based on the Theory of Multiple Intelligences



Most of the participants (93.1 % of them) were interested in using the Supersona App, which was presented as an instrument with which children can interact easily. Regarding the frequency with which they would like to assess the level of development of the multiple intelligences of their children, most of the parents (57%) mentioned that they prefer an annual or biannual assessment. Also, 66.7% would like to pay a monthly subscription and 33.3% would like to pay a one-off assessment. Almost 50% of the respondents considered that it is both the school and family's responsibility to pay for the assessment (see Figure 4).

Figure 4. The institution responsible to pay the assessment of the multiple intelligences of the children



A small percentage of the participants mentioned that they have heard before about a multiple intelligences test (18,7%), but none of them could mention exactly the name of the psychological instrument.

The feedback received from parents was very positive and they were very excited to invite their children to use the Supersona App. At the same time, the respondents considered useful the process of developing the Supersona App. Some of the respondents mentioned that the advantages of using the Theory of Multiple Intelligences should be highlighted in public space and considered that substantial financial aid for developing this application should be allocated by the Ministry of Education, in order to make this assessment possible for every child. Also, during the process of development of the application should be taken into account all the educational realities, so experts in the educational field should be part of the team.

#### 7. Results

The study has revealed that most of the parents consider very useful the process of assessment of the level of development of the multiple intelligences of their children using a digital application. The results obtained are valuable and indicate a strong desire of parents to understand their children's strengths. The information regarding the configuration of the profile of intelligence of the children and adolescents is also useful for teachers to personalize the learning process, to offer vocational counseling and to cooperate with parents in order to develop pupils' competencies. The quality of the school-family partnership is influenced by the quality of communication between parents and teachers (Marin & Bocos, 2019).

The results obtained are in concordance with the recent research studies, which have outlined that parents consider useful the process of discovering the dominant intelligences of their children. The results of the study are relevant for educators, by highlighting the positive attitudes toward the Theory of Multiple Intelligences and the importance of establishing the configuration of the profile of intelligence of the children. Some of the limits of this research are related to the number of participants and the fact that national representativeness could not be ensured. Future research studies should involve parents and teachers, from all Romanian regions.

#### 8. Conclusions

The study has revealed that from parents' perspective it is very useful to investigate the profile of intelligence of the children. The purpose of discovering the dominant intelligences of the children is related not only to improving the learning processes

of the children. The results obtained by taking the assessment with the Supersona App will be used in offering career guidance and personalized counseling services for pupils to make the best choices in selecting the adequate university specialization and professions. Parents have positive attitudes toward the Theory of Multiple Intelligences and considered it easy or very easy to understand. The repondents consider useful to receive help in finding educators that can help them to develop the multiple intelligences of their children. Parents consider that the application should be used at an early age, in order to use the information regarding the pupils' profile of intelligence in the process of selecting adequate extracurricular activities children. During adolescence, the purpose discovering the profile of intelligence is related to vocational counseling, by helping adolescents to find of the professions or university specializations that fit with their interests, native predispositions, and actual abilities.

#### **Authors note:**

**Dragoş Grigoriu** is a Romanian entrepreneur and also the CEO and Founder of Supersona project. He is determined to use his expertise and skills to manage the activity of a team of experts which will develop a digital application that could precisely measure the level of the development of the multiple intelligences of children and adolescents. He attended the Creative Leadership MBA at Berlin School of Creative Leadership and other program studies offered by the University of Oxford, the University of Cambridge,

and The London School of Economics and Political Science.

Luana David is one of the members of the Supersona team, who has decided to use his competencies to conduct market studies and scientific research. She holds an MSc in Entrepreneurship from HEC Paris and a masters degree in Intellectual Property Law from University College London.

Muşata Bocoş is a University Professor and Ph.D. Coordinator at the Faculty of Psychology and Sciences of Education (Babeş-Bolyai University, Cluj-Napoca, Romania). She has obtained a Ph.D. in Educational Sciences in 1997 at Babeş-Bolyai University. Her research inter

**Diana-Crina Marin** is currently a teacher at "Pavel Dan" Theoretical High School of Câmpia Turzii. Her research areas are aimed at discovering innovative modalities to consolidate the school-family partnership, considering that the school and family should be real partners

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**Ciprian Baciu** is Lecturer in the Department of Educational Sciences, Faculty of Psychology and Education Sciences, Babeş-Bolyai University, Ph.D. in Education Sciences. His research is in the field of ICT, more precisely focused on e-teaching and e-learning.

#### Appendix A.

#### Research on the dominant intelligences of our children, according to the Theory of Multiple Intelligences

It only takes 7 minutes to complete this questionnaire. We aim to identify optimal solutions to help young people succeed in life more efficiently and pursue, with the help of family and school, a career that suits them and could satisfy them.

The research probes the opinions of parents in regards to evaluating young people by using the Theory of Multiple Intelligences, authored by Harvard professor Howard Gardner, PhD.

The knowledge of the dominant intelligences guides adolescents and children towards the professional fields in which they have native inclinations and can excel, maintaining an optimal mental state necessary for harmonious development. At the same time, it helps decide on higher or vocational studies and a professional career.

With the hope that this will bring beneficial news for our children, we thank you for your time and support!
Research Team: prof. Muşata Bocoş, PhD, Diana-Crina Marin, PhD, Ciprian Baciu, PhD, Dan Opariuc, PhD, Luana David, Dragos Grigoriu

Babeș-Bolyai University (Faculty of Psychology and Educational Studies) and Supersona Ltd, UK This questionnaire is fully ANONYMOUS. Please complete the questionnaire in total confidence; there is no identity data.

<ol> <li>If you have more than one child, j</li> </ol>	please complete one	questionnaire for each child.	What is your child's age?
--	---------------------	-------------------------------	---------------------------

- □ 1 year old
- ☐ 2 years old

	3 years old
	4 years old
	5 years old
	6 years old
	7 years old
	8 years old
	9 years old
	10 years old
	11 years old
	12 years old
	13 years old
	14 years old
	15 years old
	16 years old
	17 years old
	18 years old
2. What	grade will your child go into in the autumn of 2022?
	Not yet in school
	Year 1 Kindergarten
	Year 2 Kindergarten
	Year 3 Kindergarten
	Preparatory Grade (Year 1)
	1st Grade (Year 2)
	2nd Grade (Year 3)
	3rd Grade (Year 4)
	4th Grade (Year 5)
	5th Grade (Year 6)
	6th Grade (Year 7)
	7th Grade (Year 8)
	8th Grade (Year 9)
	9th Grade (Year 10)
	10th Grade (Year 11)
	11th Grade (Year 12)
	12th Grade (Year 13)
	Howard Gardner, PhD, professor at Harvard University, authored 1983 The Theory of Multiple Intelligences. He proposed
	fferent types of intelligence to cover a much larger palette of human intellect:
	inguistic Intelligence – efficient use of language and vocabulary;
	Logical-mathematical intelligence – logic solution of a numerical or scientific problem;
	Musical intelligence– possessing a superior sense of rhythm, music and hearing;
	nterpersonal intelligence – perception of feelings, moods, motivations and intentions of those surrounding one;
	ntrapersonal intelligence – ability to understand one's own needs, wants, and limits;
	Naturalistic intelligence – affinity towards nature, its components and its evolution;  Bodily-kinesthetic – abilities related to one's physical activity;
	Visual-spatial intelligence— the mental capacity to visualize and manipulate objects, coupled with excellent visual memory.
0. \	Were you already familiar with the Theory of Multiple Intelligences?
	Yes
	No No
	easily can you understand the multiple intelligences, as explained in the previous slide and summarised in the picture?
	, and the presence in



(Source of the image: https://en.wikipedia.org/wiki/Theory\_of\_multiple\_intelligences)



Not easily Very Easily

5. Absolutely all children are born with one or more dominant intelligences. Discovering them can be used by the school and parents to motivate children to study better and more pleasurably. Is it important for you to discover the dominant intelligences of your child?



Not at all important Very important

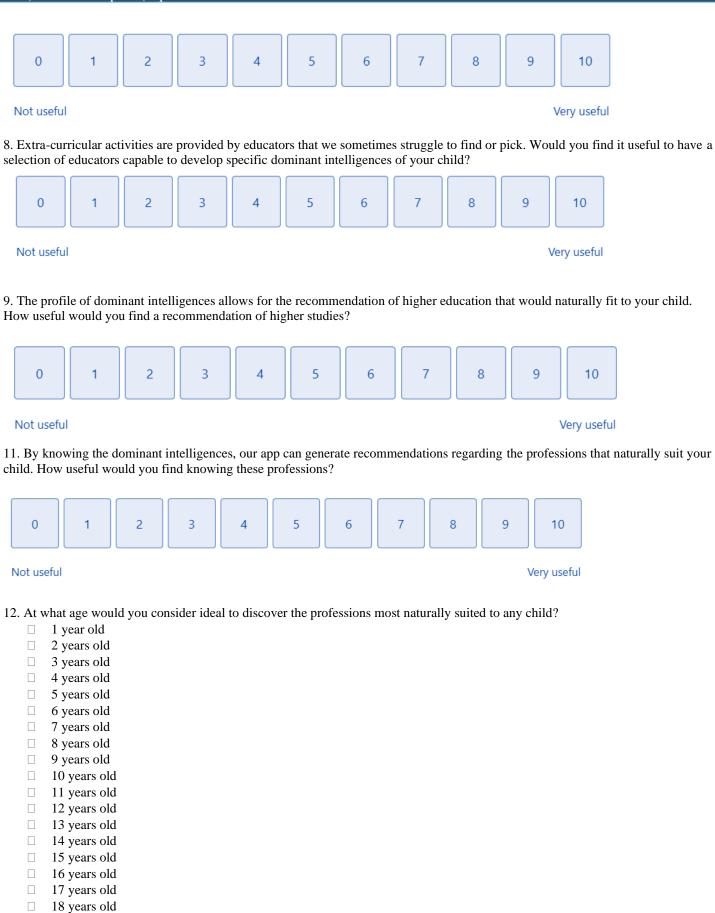
6. At what age would you consider ideal to discover a child's intelligence profile?

5 years old
6 years old
7 years old
8 years old
9 years old
10 years old
11 years old
12 years old
13 years old
14 years old
15 years old
16 years old
17 years old

□ 18 years old□ 19 years old□ over 19 years old

7. Aware of their child's dominant intelligences, parents can choose extra-curricular activities that develop the child's discovered intelligences. How useful would you find the discovery of dominant intelligences in guiding your extra-curricular activity choices?

over 18



13. The discovery of the dominant intelligences is a complex scientific process. We aim to simplify it while improving the experience and even making the results more precise. We are developing an app in the form of a game that your child can interact with

pleasantly. Would you be interested in using such an app?     I am interested
☐ I am not interested
14. How frequently would you test the evolution of your child's intelligences?
□ Once a month
☐ Once every 3 months
☐ Once every 6 months
□ Once a year
The following three questions will cover pricing regarding discovering the dominant intelligences profile via a digital app in the form
of a game.
15. What should be the price of a complete assessment to be considered a qualitative opportunity not to be missed? (EURO)
16. Which should be the lowest price without sending the wrong message regarding quality? (EURO)
17. Which should be the highest acceptable price for the usefulness and quality of the assessment? (EURO)
18. Suppose you agree to a monthly subscription (min. six months) instead of a one-off payment. In that case, the assessment app car
provide you, as an extra feature, with continuous valuable information about developing the dominant intelligences of your child. Would you be interested in paying a monthly subscription to access valuable information about education, higher studies and career
instead of paying a one-off fee?
☐ I would be interested in a monthly subscription for extra information, besides the assessment
☐ I would be interested in paying for the assessment, with no additional subscription to information
19. In your opinion, how much should cost a monthly subscription to your financial satisfaction while at the same time representing a
correct and adequate value for the service? (EURO)
20. In your opinion, who should pay for the assessment of dominant intelligences?
☐ It is the parents' responsibility
☐ It would be normal for the school to pay
☐ The school and the parents should split the cost
21. Where does your child currently study?
☐ In a private institution
☐ In a public/state institution
22. What is the educational curriculum that your child will attend from autumn 2022 (British, French, National, etc.)?
$\square$ Yes
□ No
23. Have you previously heard of or used any other multiple intelligences assessment?
□ Yes
No No No
24. Have you used this assessment method?
□ Yes □ No
25. It would be helpful for us if you agree to provide any information about the test that you have heard of or used previously. Please
fill in the name of the test, testing method, place of acquisition, price, level of satisfaction with results, etc. Thank you!
The following questions will be about your family income and situation. Thank you for the answers!
26. What is the approximate NET monthly income of your household? (EURO)
27. How many household members contribute to this income?
□ 1 member
□ 2 members
□ 3 members
□ 4 members
□ 5 members
$\square$ more than 5 members
28. Who is in charge of your child's educational decisions?
□ Mother
□ Father
□ Both parents
□ Other
29. What best describes your marital situation?
☐ Married
□ Not married
☐ Divorced or separated
☐ Other  30. Your child lives with
DU. TUHI CHIIO HVES WIII

		Both parents
		One parent
		A parent and their partner
		Other
31.	Wl	no filled in this questionnaire?
		Mother
		Father
		Other
32.	Wl	hat is the birth year of the person who completed this questionnaire?

If you want to send us a message or leave your thoughts, please fill in below. Thank you for your answers and your time!

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