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Teachers' beliefs about teaching and encouraging reflexivity in teaching practices

Aleksandra K. Anđelković*, Jovana J. Milutinović**, Biljana S. Lungulov***

Abstract

The paper is based on the hypothesis and the assumption that teachers' beliefs and perspectives on teaching have a significant impact on their behaviour in the classroom, as well as that they guide and direct reflexivity in teaching practice. In that manner, the teachers' beliefs and their reflective practice have become the necessary and integral part for the improvement of the teaching quality. The aim of this paper is to explore the connection between the beliefs and behaviour of teachers in the classroom through the analysis of the literature, as well as to consider the possibilities and effects of reflexivity in teaching practices. The results of this research indicate that, despite the different points of view among scholars and numerous studies, there is an agreement on the importance and role of teachers' beliefs and their impact on teaching practice. Furthermore, it was concluded that teachers' reflective practice is a significant step towards improving the quality of teaching and development of teacher competencies.

Keywords: teachers' beliefs, reflexivity, teaching practices, teaching perspectives.

1. Introduction

The subject of this paper are teachers' beliefs about teaching, which are among the inevitable topics when considering the issue of the quality of the educational process and the possibility of its improvement. As deep-seated beliefs that teachers hold about the nature of teaching (Postareff & Lindblom-Ylance, 2008), these beliefs guide their perceptions of the teaching situation and shape their actions in relation to that situation (Pratt & Associates, 1998). Some authors (Richard & Lockhart, 1996) define teaching as a very personal activity and it is not unexpected to claim that the teachers bring various beliefs and assumptions about what makes effective teaching (Richard & Lockhart, 1996). In that sense, teaching is much more than a set of abilities and approaches (Larrivee, 2000), and assessments of teaching effectiveness are often made through concrete and visible indicators such as classroom teacher activities or student achievement. The

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papers on effective teaching emphasize the fact that teaching techniques are just the tip of the iceberg and that a deeper perceiving and understanding is necessary, which includes studying the intentions and beliefs of teachers (Pratt & Associates, 1998). Also, authors points to all the complexity of the teaching process which, as a type of professional activity, needs to be built on values, beliefs and knowledge (Solomon & Tresman, 1999).

One of the starting points in the analysis of teaching practice is the teachers' beliefs, which are not always clearly visible, but have a significant impact on teaching. Beliefs and values support most teachers' decisions and actions, and therefore form what is called a "teaching culture" (Richard & Lockhart, 1996, p. 30) and direct teachers' behavior and thinking (Fives & Buehl, 2016). Some of the considerations of teachers' beliefs indicate that they are a result of growing up, a perception of life experiences, or an outcome of the socialization process in schools (Raths, 2001) and have an extraordinary impact on how teachers actually teach (Nespor, 1987).

Today the importance of teachers' beliefs and their influence on shaping teaching practice is increasingly recognized in research (Collins & Pratt, 2011; Milutinović & Anđelković, 2018; Pratt & Associates, 1998; Pratt & Collins, 2000; Trigwell & Prosser, 1996). On the other hand, nowadays there are many discussions regarding the importance of analysing and monitoring one's own teaching practice, where reflexivity refers to the tendency of teachers to question their own actions in the light of their knowledge and beliefs (Schön, 1987). Reviewing the teachers' own practice is essential since it can help teachers to make their actions more effective and improve their work.

In that context, purpose of the paper is a narrative literature review that offers one way of thinking the relationship between teacher's beliefs about teaching and reflective practice, with an emphasis on promoting reflective practice. The research question asked in this paper refers to the consideration and understanding of possible relationships between teachers' beliefs about teaching, teaching practice and reflexivity. The results of theoretical and empirical studies were analyzed in order to provide a wider view of the conceptual definition of teachers' beliefs, but also to present empirical findings about their impact on reflective teaching practice. The paper will first analyze the relevant studies that deal with the relationship between teachers' beliefs about teaching, their teaching practice and the concept of reflective practice, and then perceive the question of reflective practice/reflexivity in teaching and ways to enhance this process. In this sense, the wider theoretical framework in which this paper is placed refers to the current conceptions of professional teacher education, which are based on the concept of the teacher as a reflective practitioner.

2. Teachers' beliefs and perspectives on teaching

In this part of the paper, attention is focused on the analysis of the relevant theoretical and empirical studies which conceptualize the concept of teachers' beliefs/perspectives

about teaching and examine the relationship of those beliefs with teaching practice, especially with the concept of reflective practice.

Teachers' beliefs are most often defined as deep-rooted perceptions that teachers have about the essence or nature of teaching (Postareff & Lindblom-Ylänne, 2008) and as such are largely resistant to change (Raths, 2001). Some researchers (Nespor, 1987; Pajares, 1992) singled out two types of beliefs in teachers: *basic beliefs* which are more resistant to changes and can exist for a longer period of time, and *peripheral beliefs* that occur at the beginning of teacher's career, usually are not re-examined, and may disappear in contact with new experience.

Some of the first research was prompted by the idea of the connection of teachers' early educational experiences with their later actions in teaching practice (Lortie, 1977). Lortie introduces the term *apprenticeship of observation* to indicate the impact of experience during the schooling process from the earliest days on the later behaviour of teachers in their practice. In addition, three types of experiences stand out as the main sources of teachers' beliefs and attitudes: own experiences, schooling and teaching experiences, and experiences with official knowledge - school subjects and pedagogical knowledge (Thomas, 2017).

Therefore, teachers have strong beliefs about: what is right and wrong in a classroom, the role that education has, explanations for individual variation in academic outcomes, and many different areas (Raths, 2001). Accordingly, teachers' beliefs shape and guide their perceptions and precede individual reflections and actions. Numerous studies (Lam & Kember, 2006; Milutinović & Anđelković, 2018; Nespor, 1987; Pajares, 1992; Pratt & Associates, 1998; Trigwell & Prosser, 1996) confirm the influence of teachers' beliefs on almost all aspects of teaching.

Although some authors claim that teachers' beliefs are difficult to change (Pajares, 1992; Raths, 2001), other results indicate that 63% of teachers believe that they change their own concepts of teaching (Alger, 2009). It can be concluded that teachers believe more in changing the beliefs and their own ways of teaching, than that these processes actually take place in teaching practice. Recent research (Maksić & Pavlović, 2019) have found that university teachers rely on experiences from their own schooling, whether they want to repeat them or avoid them. With such an approach, teachers develop their own style of teaching and assessment that is built and re-examined throughout their careers.

Beliefs are assumed to be implicit or tacit because teachers are often unaware of how their personal beliefs affect certain behaviours. Some research findings (Oppell & Von Aldridge, 2015) suggest that teachers are convinced to implement constructivist practices using mostly superficial activities which reflect teachers' limited understanding. In addition, recent research among primary and secondary school teachers (Anđelković, 2017) shows that 49.9% of respondents assess their teaching as closest to a contextualist approach in relation to a realistic and relativistic approach that represent categories of teachers' epistemological beliefs (Shrow & Olafson, 2003). Also,

authors who study teachers' epistemological beliefs indicate that *naive* epistemological beliefs are clearly reflected in practice, while *sophisticated* beliefs are not always obviously related to practice (Kang & Wallace, 2004). In that sense, it is necessary to connect epistemological beliefs, teaching context and teaching goals.

A significant contribution to the consideration and research of teacher beliefs has been made by Pratt and Associates (1998) by introducing the term teaching perspective. Through numerous works (Collins & Pratt, 2011; Pratt & Associates, 1998; Pratt & Collins, 2000), the authors have tried to describe, compose and explain the components of teachers' actions in practice. The concept and term of a teaching *perspective* emerged as a result of several years of studying and researching teacher practice in Canada, China, Hong Kong, Singapore, and the United States. The main idea of the author is imbued with the need and emphasis on the importance of re-examining one's own beliefs and values in teaching and learning. Based on extensive research, interviews and instrument development, the authors defined five teaching perspective (Developmental, Apprenticeship, Transmission, Nurturing and Social Reform). Accordingly, each of perspectives represents a "legitimate view of teaching, subject only to variations in the quality of implementation, not the nature of their underlying values" (Pratt & Associates, 1998, p. xiii). Also, perspectives determine the roles and idealized image of oneself as a teacher and represent the basis for thinking in practice, while each of the perspectives in teaching represents a complex mix of actions, intentions and beliefs.

When explaining the perspectives in teaching, Pratt and Associates (1998) point out the interconnectedness of beliefs and intentions, which give meaning and direct actions in teaching practice. In that sense, these three aspects – beliefs, intentions and actions are at the core of every teaching perspective. Teaching *beliefs* are ideologies, worldviews, and assumptions that are used to interpret teacher experiences. Teaching *intentions* are intended for teacher behaviours in teaching taking into account real-world constraints. *Actions* represent behaviours in teaching that describe teachers' engagements. All three mentioned aspects are interrelated (Collins & Pratt, 2011). Also, studies by Pratt and Associates (1998) have shown that perspectives on teaching are not mutually exclusive; similar actions, intentions, and even beliefs can be found in multiple perspectives. Accordingly, there is not only one answer to the question of what "good teaching" is, that is, that answer largely depends on broader cultural specifics and the context in which teaching is discussed (Lungulov, Milutinović, & Anđelković, 2020).

Researches on teacher beliefs mention a number of different terms such as: orientations, concepts, beliefs, approaches and intentions (Kember, 1997), all of which refer to certain notions and preconceptions of teachers about what teaching is and how it should be to look. However, it is still possible to distinguish between concepts and approaches in teaching. Lam and Kember (2006) define teaching concepts as teaching beliefs that lead the teacher's perception of the situation and as such form actions and teaching approaches, while approaches represent the ways in which beliefs are placed

within practice. In that sense, it can be concluded that teachers' beliefs represent the starting points that are manifested as teachers' behaviours in the classroom.

However, there are different arguments and research findings regarding the question of the correlation of teachers' beliefs and their effects in the classroom. Certain empirical studies (Ho, Watkins, & Kelly, 2001; Kember & Kwan, 2000; Martin & Lueckenhausen, 2005; Trigwell & Prosser, 1996, 2004) show that there is a connection between teachers' beliefs about teaching and their approaches to teaching, that is their action in teaching practice. However, in other empirical studies (Levin & Wadmany, 2005; Milutinović & Anđelković, 2018) a partial inconsistency between teachers' beliefs and actions in teaching practice was determined. Also, there are arguments that little is known about the relationship between epistemological views of the world of teachers, as view related to teachers' beliefs about the nature of knowledge and the process of learning, and teaching practice (Shrow & Olafson, 2003). Strong contextual influences such as external examination syllabi (Lam & Kember, 2006), or a teaching environment that changes teachers' beliefs (Demir, Erdal, Bagceci, Vural, & Müjdat, 2015) are highlighted as causes that can lead to a complete separation between teachers' concepts and approaches.

The analysis of the studied literature allows the conclusion that understanding, researching and monitoring the fundamental beliefs/perspective of teachers about teaching are crucial issues, since teachers' beliefs/perspectives about teaching influence the activities and decisions made by the teacher, which consequently affects the styles of teaching work and the behavior of teachers in classrooms. Accordingly, the studied literature contributes to the view that beliefs about teaching shape teachers' perceptions and evaluations that precede individual reflections and actions. In this sense, reflective practice assumes the willingness of the teacher to become aware of and question his own beliefs on which he builds his actions, which were previously incorporated into his practice without questioning.

3. Reflective practice in teaching and ways of its enhancing

In this part of the paper the focus is on analysis of theoretical and empirical studies which conceptualize the term reflective practice/reflexivity in teaching, where special emphasis was placed on the question of ways to enhance this process, using various activities and tools for reflection.

Introducing the term of reflection into the field of education and pedagogical literature, Dewey (1933) identified reflection as a binding segment of learning and teaching. He believed that, if reflection does not occur, the teaching process becomes static and unchanging, which violates its essential property, and leads to the traditional approach to teaching. The basis of any reflection in Dewey's concept is experience, and he emphasized that "... to reflect is to look back over what has been done so as to extract the net meanings which are the capital stock for intelligent dealing with further experiences" (Dewey, 1938, p. 87), as well as not to learn from experiences but from reflections on experiences (Dewey, 1933).

Numerous researchers after Dewey, continued to develop the ideas of reflection, reflective practice and the reflective practitioner. Among them, the works of Schön (1987, 1991) stand out, which, among other things, indicate that the awareness of one's own intuitive thinking grows out of practice through articulation with others, emphasizing the importance of cooperation with other colleagues and their role in developing individual reflections. Graves (2002) considers that the most powerful tool of a teacher is reflection, for exploring and understanding their previous teaching experience and redirect their practice.

Reflexivity is defined as a higher level of the process of learning and teaching that arises through the awareness of personal beliefs and ways of acting in the classroom, whereby it presupposes the ability and readiness of teachers to change in order to improve student and personal development. As a response to the question why reflection is defined as the essence of the teaching process, the explanation can be singled out that "unless teachers engage in critical reflection and ongoing discovery they stay trapped in unexamined judgments, interpretations, assumptions, and expectations" (Larrivee, 2000, p. 294). Reflection is a consequence of considering the inner beliefs and thinking of the teacher, which is expressed through actions in the classroom. At the basis of the reflection process is the essential question of how an individual can improve teaching practice and thus their own professional development and learning outcomes of students.

Teaching can be conceptualized in a number of different ways because it is a complex process (Richard & Lockhart, 1996), while reflection is a strong and deep deliberation on teacher actions from initial planning to realization of ideas in practice with reliance on experiential learning. Reflection is thus considered a feature of quality teaching and proactive action in teaching practice, suggesting that a trigger for deeper understanding of teaching is critical reflection (Richard & Lockhart, 1996). It is also significant that Dewey (1938) pointed out that an open mind, responsibility, honesty and immediacy are important for reflective practice, which in part indicated the connection between the personal characteristics of teachers and reflexivity. In this context, Larrivee (2000) emphasize that reflection is a distinctive feature of the reflective practitioner, and that the term *critical reflection* combines critical inquiry, conscious consideration of ethical implications and consequences of teaching practice with self-reflection, deep examination of personal beliefs and assumptions about potentials of human being and learning.

Over time, reflection has become an important aspect of the study of teaching practice and the subject of numerous studies, which further emphasizes the importance of encouraging a constructivist approach to teaching and the active role of students and teachers. The key tendencies of teaching improvement are characterized by the transition from the model of knowledge transfer to the constructivist model that emphasizes the personal experience of students (Milutinović, 2016). The results of the research confirm that constructivist teachers have a richer repertoire of strategies compared to non-constructivist teachers and that they strive to use teaching strategies that are potentially

more effective in encouraging conceptual change (Hashweh, 1996). On the other hand, some research suggest that teachers believe that they implement constructivist practices even though they are using mostly superficial activities which reflect teachers' limited understanding (Oppell & Von Aldridge, 2015).

The professional development of teachers thus begins with awareness and re-examination of beliefs and existing ways of working. There are five stages in the development of reflective practice (Bartlett, 1990), with each stage focusing on specific issues that help the teacher determine his or her beliefs and actions: 1. Mapping (What I do as a teacher?), 2. Informing (What is the meaning of my learning?), 3. Competition (On what base my teaching was created?); 4. Assessment (What can I do and how can I teach differently?); 5. Action (What and how I will teach now?).

Furthermore, when it comes to the possibilities of developing reflective practice, it is significant to discuss the implementation of various activities and tools for reflection. Activities and tools for reflection make it easier for teachers to answer the question - how can I review my work? The purpose and aim of reflective tools is to provide teachers with the opportunity to independently explore certain phenomena, processes and circumstances in their classrooms. Since the activities and tools for reflection facilitate the reconstruction of the experience and actions of teachers, as well as the evaluation of their own teaching, they enable teachers to plan their further work. Numerous recommendations and suggestions to teachers for the application of certain reflective tools, understanding the meaning and possibilities of improving reflective practice can be found. For example, nine dimensions of reflective practice are defined which enable reflexion through action research, use of literature, review of their beliefs, use of new strategies, etc. (Zwozdiak-Myers, 2012). These recommendations relate to conducting a systematic evaluation of teaching practice and can be summarised as suggestion for teachers to: 1. study their own teaching; 2. systematically evaluate their teaching through classroom research; 3. link the theory with their practice; 4. question their own personal theories and beliefs; 5. consider alternative perspectives and possibilities; 6. try out new strategies and ideas; 7. maximise the learning potential of students; 8. enhance the quality of their teaching; 9. continue to improve their own teaching (Zwozdiak-Myers, 2012).

Also, certain procedures for developing reflexivity have been proposed, which include the use of professional literature, class recordings, surveys and questionnaires, class observation, and action research (Richard & Lockhart, 1996). Those procedures include different strategies that teachers can use in order to reflect and improve their teaching: 1. Teaching journals 2. Lesson reports 3. Surveys and questionnaires 4. Audio and video recordings 5. Observation 6. Action research (Richard & Lockhart, 1996, p. 6).

Additionally, reflective journals are suggested as important tools for developing reflective practice (Göker, 2016; Ho & Richards, 1993) because they are primarily aimed at recording specific classroom events and a variety of reflections, allowing teachers to discover their own assumptions and beliefs guided by teaching work. Given the current intensive digitalization of the teaching process, digital tools are being developed more

and more, which enable the development of reflectivity in teaching practice. In that sense, it is recommended to create professional blogs, use social networks, and participate in discussion groups, interactive microblogging, use electronic textbooks and other resources that are useful digital tools in the development of reflexivity (Williamson, Mears, & Bustos, 2015).

Since the attempt to consciously introduce questioning into everyday work can be very demanding for teachers, it is important to point out the challenges that teachers may face in the process of reflection. In that framework, when it comes to the subject of teacher reflexivity, it is significant to address the potential risks that teachers should become aware of when reflexively observing their own teaching (Graves, 2002). The first risk refers to monitoring the reflection process without taking any action based on the obtained data, while the second concerns simply considering reflection as a process through which the observed problem has already been solved, although the main goal is to find the basic reasons that led to the problem. Therefore, reflective practice is a practice that is developed through deep re-examination through one's own analysis, but also discussions with colleagues about the ways of working in teaching, with an emphasis on improving one's own development, student achievement and teaching quality. Noticing one's own weaknesses but also virtues is one of the characteristics of a reflexive approach by which a teacher directs and plans their own professional development. In this way, reflective learning occurs by approaching one's own weaknesses as opportunities that can be further developed and improved. The reflexive approach is based on existing beliefs that change through processes of critical reflection, while shared experiences are valuable resources in encouraging teachers to work and act more successfully.

The analysis of the studied literature allows us to conclude that reflective practice is a process through which the teacher first analyzes and then enhances his own teaching practice. However, researching the literature allows us to state that this process is not simple, especially when it comes to teachers at the beginning of their career. In this sense, the activities and tools for reflection that can help them in reviewing their own practice are of particular importance. It is also significant that, regardless of whether it is about the using of tools, such as, journal writing, self-reporting or making recordings of lessons, the goal is for the teacher to become aware of the beliefs on which he bases his teaching practice so that he forms a coherent system of beliefs that can manage and guide the way in which the teacher implements the teaching activity.

4. Conclusions

Teachers' beliefs and their assumptions about teaching and learning have a certain impact on the process of learning and the teaching efficiency, and therefore it is crucial that teachers discover and understand the beliefs and values on which they base their own teaching practice. However, in order to bring certain changes in education, it is not enough to merely present existing research and theories to teachers, but it is necessary

for teachers to build their own teaching theories based on personal knowledge, skills, training and experience during lectures (Richard & Lockhart, 1996, p. 203). Also, the recommendation for creating education policy is to enable teachers to do self-reflection and to re-examine their beliefs in the context of education reforms (Fives & Buehl, 2016).

Reflection is a process which includes a number of reflective tools and that improves the quality of teaching and teachers' competencies. Reflection is also an integral part of improving the education quality and the professional type of obligation that contributes to the growth of professional activities, teaching practices and thus the development and progress of students. Therefore, it is crucial that teachers are encouraged to reflect, to become aware and to re-examine their own beliefs and actions in order to influence changes in everyday practice. It is about the fact that the reflective approach includes changes in the way teachers think, act and experience the teaching process using their own and the experiences of other colleagues. Reflective analysis, reports, recording lessons are just a part of the repertoire of reflective tools that provide opportunities for improving the quality of teaching. Taking into account all the above, the recommendations refer to the need to develop and apply reflective practices in the education programs of teachers and education professionals, as well as to encourage and train practitioners to use various reflective tools to support awareness of teaching beliefs on what their actions are based.

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The role of practicum in teacher education policy documents in Ethiopia, Myanmar, Kazakhstan, and Iran

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Abstract

This study aims to compare the role of practicum in teacher education policy documents in Ethiopia, Myanmar, Kazakhstan, and Iran to propose a better way to improve the practicum system. The term practicum in pre-service teacher education allows student teachers to integrate their knowledge from the university courses and experiences from the practicing school (Kopp & Kálmán, 2015). The increasing importance of practice in teacher education is a global educational policy trend, but the national context necessarily influences implementation. However, few studies researched comparing teacher education in developing countries, although the national context is essential to understand the organization and operation of teacher education systems (Tatto, 2021) where the main obstacle is the linguistic diversity of different countries. This study referred to Weidman et al. (2014) conceptual framework for comparative and international teacher education. The qualitative document analysis method with MAXQDA software is used to analyze teacher education policy documents, mainly focusing on the aim, structure, and student activities. Researchers developed a common codebook, imported it into the software, and analyzed 39 documents. The results revealed that the aim and definition of the practicum are similar, but the learning outcomes of student teachers' practice related to practicum are a little different between the four countries. Student teachers are required to complete the practicum as part of their pre-service teacher education program in four countries. Teacher education policy documents in four countries have addressed all the elements and requirements related to teacher education contexts, however, the implementation level of the practicum in each country may differ significantly. Nevertheless, this study compares the practicum in teacher education document, highlights similarities and differences, and shares the best practices from four countries.

Keywords: practicum; teacher education; policy document; document analysis.

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1. Introduction

The growing importance of practicum is common and central to teacher education programs worldwide (Cohen et al., 2013). Investigating practicum is crucial for teacher education programs; theoretical and practical understanding of practicum significantly enhances teacher educators and the student teachers' pedagogical, expedient, professional, and teaching skills (Tatto, 2021). International comparative studies on practice are becoming increasingly important, but researchers' linguistic and cultural background means that much of this research is focused on the English language area (Kopp & Pesti, 2022). Consequently, many countries whose teacher training documents are not or only partially available in English are less included in international comparisons. Countries where fewer comparative studies are available tend to have fewer resources and less developed teacher education systems. However, important lessons can be drawn from the solutions and that countries with less favourable conditions have adopted to improve their teacher education programs. Our research team's linguistic and cultural diversity allows us to break down the cultural and linguistic barriers to research. The research started with analyzing the national documents on teacher education, focusing on those parts of the documents that relate to practice. The article summarises the main results of this analysis.

2. Theoretical background

There are many calls for more international research in teacher education (Darling-Hammond, 2017). Coccia and Benati (2018) presented that the comparative studies in social sciences examine the elements, structures, systems, processes, and policies in national, international and local contexts and demonstrate similar nature and contrast. The characteristics of teacher education are influenced by multiplex organizational factors of the respective national context and emphasize on isolated educational requirement (Kopp & Pesti, 2022). To understand the factors influencing the context of education, the conceptual part of the teacher education program must incorporate practicum in the preparation of student teachers (Tuli & File, 2010).

Weidman et al. (2014) drew a conceptual framework based on probable inter-relationships among the critical components of the national context that combine in different ways to establish the country's teacher education system. Even though teacher education in each country is traditionally and locally shaped to a large extent, it is also essential to internationalize it (Leutwyler et al., 2017). Much global research on teacher education includes some ideas of education reform and transformation (Avalos, 2011; Adamson, 2012; Kopp, 2020). Practicum and internship experiences are required in various teacher preparation programs (Boylan & Scott, 2009).

Much research focuses on the strategies and consequences of implementing the practicum based on teacher training programs (Chaw & Kopp, 2019). Naderi (2022) investigated the internship program in teacher training through a comparative study of

England and Iran and found the importance of internship programs for student teachers in both countries. Moreover, Clarke & Mena (2020) conducted a comparative study on practicum mentoring in New Zealand, Thailand, China, Canada, Spain, and Australia. They highlighted that practicum mentors give student teachers a unique way of thinking about teacher education.

Despite all these studies mentioned above on the importance of practicum in developing the teaching profession, the comparative studies of the role of practicum in teacher training in developing countries can be considered one of the neglected areas of educational research. Besides, getting the documents in developing countries is a big challenge because of accessibility and national language issues. Although we are former teacher educators from teacher education universities in four countries, permission is required from the respective person to access the related teacher education policy documents in each teacher education program.

In order to fill the literature gap, the present comparative study highlights the role of practicum in teacher education policy documents in Ethiopia, Myanmar, Kazakhstan, and Iran to better understand how the practicum is implemented in different contexts. The purpose of this study is to compare the role of practicum in teacher education documents from four developing countries by comparing the aim, structure, and student activities during the practicum. The programs were selected based on the availability of documents in languages we are familiar with and countries with developing teacher education programmes. Thus, this study aimed to answer the following questions: (1) What is the role of practicum in teacher education documents in Ethiopia, Myanmar, Kazakhstan, and Iran? (2) What are the similarities and differences between practicum programs in those countries?

National context of four countries

The country context of Ethiopia, Myanmar, Kazakhstan, and Iran are briefly described in the following section to understand the national context before comparing the role and structure of the practicum in teacher education policy documents in these countries.

Ethiopia

Ethiopia, located in the Horn of Africa, is a multilingual and multinational country with a population of 117 million and 2.5 % of population growth rate per year (World Bank, 2021). The main religions are Ethiopian Orthodox Christianity and the official language is Amharic. It has over 90 distinct ethnic groups, and 80 languages are spoken (Minority Rights Group, 2015). In Ethiopia, there needs to be a clear and comprehensive teacher education policy; the system suffers from unnecessary interference from the Ministry of Education and Regional Education Bureaus. The teaching profession is perceived as having lower value and poor working conditions. Low income and a heavy workload impede teaching attractiveness (Assefa, 2008). Moreover, teacher education faces several challenges, including the linkage between the curriculum in training institutions and schools, teachers' insufficient subject mastery, unattractive profession for trainees, and

ineffective program management. In 2021, a new teacher education curriculum was also created. Even with the new curriculum, the teaching profession will accept candidates with a 2.00 GPA for a diploma certificate and 2.25 for a bachelor's degree (Ministry of Education, 2021).

Myanmar

Myanmar (formerly Burma) is a Southeast Asian nation in the Asia continent. The bordering countries of Myanmar includes India, Bangladesh, China, Laos, and Thailand. The population of Myanmar is 54 million, and the annual population growth is 0.7%. The country has more than 100 ethnic groups (World Bank, 2021). The presence of the British colonists (1824 to 1948) inevitably transformed the nation, its government, society, education system, and institutions. In Myanmar, teaching is considered a service profession in which teachers serve society and serve as role models for the communities they serve. Centralized system is operationalized in higher education and and famous universities had limited autonomy as one part of educational reform (Kandiko Howson & Lall, 2020). The teacher demand will also increase across the system as the new curriculum is introduced and school years are expanded (Lall, 2020). In Myanmar, the Ministry of Education sets the curriculum and the assessment of Teacher Education. Education Degree Colleges offer a 4-year degree program, and two significant universities of education provide a 5-year degree program as the pre-service teacher education program (Chaw & Kopp, 2019). Teacher education program in education degree colleges faces challenges of teaching new curriculum, the practicum, technology, and continuous professional development of teachers, and the dilemma of the new degree structure (Lall, 2020).

Kazakhstan

Kazakhstan is a country in Central Asia with a population of 19 million (World Bank, 2021). Kazakhstan is a secular, multiethnic country; the domestic policy of the state is aimed at the development of one society, one land, and one state for different ethnic groups that live in the country (Sheryazdanova, 2018). Most of the population are Kazakhs (69.03%), followed by Russians (18.47%) (Bureau of National Statistics, 2021). The Kazakhstani education system was inherited from the Soviet system based on teacher-centred approach (Abylkassymova, 2020). Current trends in the Kazakhstani education system are focused on preparing competitive specialists with not only traditional "hard skills" but also "soft skills". In connection with this, the professional practicum of students is considered a compulsory component of all training programs, and the implementation of which is not only difficult but often impossible in the conditions of academic training (Gabdrakhmanova et al., 2020). Today, teachers in Kazakhstan are prepared in the two-level education system that includes pre-service education consisting of secondary vocational education and training (SVET) and training in higher education institutions and in-service training in centres of professional development (Tastanbekova, 2018). After graduating from the pre-service teacher

education organizations (college or university), teachers obtain a diploma proving their pedagogical qualification (Tastanbekova, 2018). In-service training centres provide training courses and educational services in advanced training and professional development for teaching the staff (Kozhabergenova & Kopp, 2021).

Iran

Iran is the second-largest country in the middle east with 85.028.760 people (World Bank, 2021). The main religion in Iran is Islam (99 %). Persians are the largest ethnic group in Iran with 61 % of the total population (Minority Rights Group, 2015). Several reforms have been made and implemented in the secondary and primary education sectors in Iran's education system since the 1979 Islamic Revolution to certify quality education. Moghaddas and Zakeri (2012) asserted that despite various teacher training institutions and new educational policies, high-quality teacher education has not been achieved. According to Moghaddas and Zakeri (2012), the authorities make educational decisions, and a one-size-fits-all policy is dominant without recognizing individual differences. Similarly, Momen (2020) states that teachers in Iran should model morality, spirituality, and science. In addition, teachers should ensure that learners are invariably guided toward learning sources and that their overall development is supported. Teachers are responsible for organizing and monitoring learning activities, arranging and managing the classroom, and motivating students to learn. In the field of teacher education in Iran, student teachers in the undergraduate program are required to complete practicum courses during their undergraduate years. Students are assigned to teams in schools, with their partners acting as critical friends. Cooperating teachers allow students to observe and provide feedback on their peers' teaching.

3. Methodology

Research design

This paper uses the qualitative research design and document analysis method to analyze the aspects of the practicum's role in the teacher education policy documents in four countries. Then, based on the aim of our study, we collected and analyzed 39 practicum-related papers in teacher education policy documents using a deductive approach.

Type of data

This study identifies secondary data documents (teacher education policy documents related to practicum issues) in four countries (Iran, Myanmar, Ethiopia, and Kazakhstan) as the data to be analyzed. There are 27 documents from the teacher education policy documents in Myanmar, five from Kazakhstan, two from Iran and five from Ethiopia. In Myanmar, some policy documents could only access the hard copy version, and the researcher asked the responsible person to take a photo of the hard copy file. Thus, 23

photos are included in the Myanmar case. Table 1 showed the type of documents for this study.

Table 1: Type of documents in four countries

Name of the country	Name of the documents in MAXQDA	Type of documents		Total
		Scanned Photos	Document file	
Ethiopia	E1, E2, E3, E4, E5	-	5	5
Myanmar	M1, M2, M3, M27	23	4	27
Kazakhstan	K1, K2, K3, K4, K5	-	5	5
Iran	I1, I2	-	2	2
Total		23	16	39

Data analysis method

The document analysis method is conducted using MAXQDA software. The qualitative deductive coding method is used in this current study. The qualitative deductive coding approach has been labelled "template coding" (King, 1998), and Blair (2015), "deductive coding" (Miles et al., 2014), "protocol coding", or "a priori coding" (Saldaña, 2021). In deductive/template coding, the researcher must define the codes drawn from the theory, research questions, and literature (King, 1998). Blair (2015) described three phases of template coding; creating the priori codes starts with (1) the research problems, (2) the research questions and aim (3) the literature.

Data analysis process

1) Creating a common codebook/ template

This study refers to the deductive coding approach of Blair (2015) and Miles et al. (2014) and is based on three phases of data in the deductive approach. First, we focused on research problems and developed "priori codes." Second, we looked back through the research questions and aim, adjusted the priori codes, and drew out the possible codes. In the next stage, we read the literature related to practicum in teacher education documents of our countries and revised the codes with the previous ones to create the final codes. Miles et al. (2014) suggested that codes should relate to one another in coherence, and sub-coding can be employed after an initial coding scheme has been applied. Then, we discussed the definition of the codes and subcodes and created a common code book or template for the analysis. We agreed to add additional codes if we found a unique case in each policy document. Our common codebook is presented in table 2.

Table 2: Common code for analysis of practicum in teacher education policy documents

<i>Code</i>	<i>Subcodes</i>	<i>Definition/Meaning</i>
Aim	Practicum definition	Definition of practicum
	Practicum aim	Aims of the practicum as a whole
	Learning outcomes	Skills, knowledge, and competencies that student-teachers are aimed to achieve them
Structure of the practicum	Type of practicum program	(E.g., Practicum in Undergraduate program, master program, internship program, university program or college program or internship)
	Credits number	Credit numbers for practicum period or practicum course or program
	Duration (Year/Semester)	The time period for the practicum/teaching practice in schools
	Practicum bases	Where students have their practice (e.g., at university, school, educational organization)
	University arrangement	E.g., the formal arrangement including the number of student teachers in each school, allocation of subjects, an official letter from the university to the school.
Student teachers' activities during the practicum	Type of practice	E.g., educational, professional, pre-diploma practice, bloc teaching, practice teaching
	practice activities	Student teacher's activities during practicum (e.g., teaching, observation, participation in school activities, writing the report, assessing student learning outcomes, etc.)
	Lesson study	Lesson preparation by self or together with other student teachers, teaching aids

As described in table 2, we developed our common codebook, including 3 main codes, 11 subcodes, and respective definitions of each code related to practicum in teacher education policy documents in four countries.

2) Importing and creating code system into MAXQDA software

Team coding assists with definitional clarity and makes a good reliability check (Miles et al., 2014). Before conducting the analysis, the researchers input the codebook (common codes) into the MAXQDA software. After that, that MAXQDA software file (with imported codes) is exported to other research group members for analysis. Then, the other researchers downloaded the file and imported the codesystem into the software.

3) Analyzing the documents/ Coding in MAXQDA

After importing teacher education policy documents and codebooks, the researchers started analyzing the document/ coding process. Analyzing the template coding approach requires us to search for the things that might be in the codebook and decide whether to skip the data or implant it into a code that does not fit when the concept in the documents does not match the definitions of the codes (Blair, 2015). The researchers read the concepts from the documents, interpreted them, and matched them with the codes from the codebook. Afterwards, each researcher sent their MAXQDA coded file to one researcher from the group. Finally, the researchers merged the coded files of teacher policy documents of four countries in MAXQDA.

4. Results

There are 39 teacher education policy documents, including photos and files, and the group of researchers analyzed these documents and did 224 codes. After merging our team-coded files, the researchers found that some documents have many codes and some documents that do not have many codes. The following crosstab table compares document and code variables in four countries' teacher education policy documents.

Table 3: Summary of comparing codes in teacher education policy documents in four countries (total doc-39, codes-224)

Code system	Myanmar (M1, ..., M27)	Kazakhstan (K1, ..., K5)	Iran (I1, I2)	Ethiopia (E1, ..., E5)	Total codes
Aim					
Practicum definition	3	4	2	2	11
Practicum aim	6	8	6	4	24
learning outcomes	9	6	2	3	20
Structure of the practicum					
Credits number	0	6	6	4	16
Duration (Year/Semester)	9	8	11	2	30
Practicum bases	7	10	2	0	19
University arrangement	13	4	0	0	17
*Practicum model	1	0	0	0	1
Type of practicum program	5	5	2	2	14
Student teachers' activities during the practicum					
Type of practice	12	11	2	9	34
practice activities	12	7	8	5	32
lesson study	3	0	3	0	6
Total					224

*(0 = no description about the codes)

The summary of codes in teacher education policy documents in four countries is shown in table 3. According to the researchers' pre-defined codebook, there are three main codes related to practicum: aim, the structure of the practicum, and student-teachers' activities during practicum. Under these main codes, there are 13 sub-codes: three codes under aim, six codes under the structure of the practicum and three codes under student-teachers' activities during the practicum. However, there is one new subcode named "practicum model" under the structure of the practicum in Myanmar.

In comparing practicum in teacher education policy documents in four countries with the pre-defined codebook using the qualitative deductive approach, the researchers found distinctive features in each country.

Table 4. Comparing the similarities and differences of variables (distinctive codes) in four countries

Country name	Similarities and differences in distinctive codes				
	Aim/definition	Credit number	University arrangement	Lesson study	Practicum model
Myanmar	√	χ	√	√	√
Iran	√	√	χ	√	χ
Ethiopia	√	√	χ	χ	χ
Kazakhstan	√	√	√	χ	χ

(√ means similar cases, and χ denotes different cases)

The comparison of distinctive codes between the four countries' policy documents is tabulated in table 4. In four countries, similar cases and different situations related to distinctive features of the practicum (such as credit number, university arrangement, lesson study, and practice activities). For example, the credit numbers for the practicum period or practicum course or program are not explicitly described in Myanmar's teacher education policy document. However, it is mentioned in Iran, Ethiopia, and Kazakhstan. Moreover, the word "model" in that document means the type of practicum provided to student teachers in Myanmar. In other countries' documents, different terms such as "type", "structure", and "program" of the practicum are found instead of the word "model".

Besides, the university arrangement (formal arrangement including the number of student teachers in each school, allocation of subjects, and approval from the university to the school) is not clearly outlined in Iran's teacher education policy document. In Ethiopia's teacher education policy document, some distinctive codes of "university arrangement" and "lesson study" are not indicated. In Kazakhstan, teacher education policy documents did not state "lesson study" and "portfolio" even though the other three countries had included them in their documents.

5. Discussions

In comparing the role of practicum in teacher education policy documents in Ethiopia, Myanmar, Kazakhstan, and Iran, the authors focused on three main practicum domains – aims, practicum structure, and students' activities.

In answering research question 1, we explained the three common codes (aim/definition, the structure of the practicum, and student teachers' activities during the practicum) mentioned in tables 2 and 3 in developing four countries.

(1) Aim/Definition

We found that the practicum aim is similar in the four countries in which this term is defined as an opportunity for student teachers to put in the theoretical knowledge and skills they obtained during their study in the actual situation of teaching lessons. In general, practicum in all four countries requires their student teachers to combine theoretical knowledge and practice, develop professional knowledge and practices, understand the school environment and the contexts related to teacher education,

identify practicum-related issues and reflect on their practice. Since the practicum aim is somehow reflected in the practicum definition, aims in the teacher education policy documents of the four countries are analogous. However, there are some differences in the learning outcomes of the students' practice during the practicum.

When we go deeper into the policy documents,

- a) In Myanmar, student teachers are expected to become aware of the school environment and teachers' professional responsibilities, combine theory and practice and acquire teacher competencies standards in the practicum guidebook of Myanmar teacher education.
- b) In Ethiopia, student teachers are expected to investigate and reflect on the organization and management of local schools, understand environmental factors underpinning education, and have actual experience related to the school environment and students, and identify issues and solutions relating to the practicum.
- c) In Iran, students are prospected to get the ability to reflect on practice through participation in the teaching process and perform learning activities at the classroom level.
- d) In Kazakhstan, practicum intends for student teachers to consolidate the knowledge from training, acquire practical skills, and master best practices to develop professional activities and future skills.

(2) Structure of the practicum (Duration of practicum and Credit number)

In general, the four countries described the credit system of practicum in their teacher education program. However, different types of practicum programs (campus courses and school placement) and credit systems based on the hour/courses and terms (practicum, internship, professional practice) are found in four countries.

- a) In Myanmar, student teachers in the undergraduate program participate in practicum I in 3rd year (in the 6th semester) and Practicum II in the 4th year (in the 8th semester) at the University of Education. The practicum module in Education College is scheduled from 1st to 4th year (11 weeks of lesson study and 17 weeks in practice school). Nevertheless, the credit hours for the practicum are not mentioned explicitly.
- b) In Ethiopia, the practicum is included in a diploma program for pre-primary education: Practicum I (school observation) for three credits hour and Practicum II (assisted teaching) for three credits hour; Bachelor of Education for primary and middle education: Practicum I for three credit hour and Practicum II for three credit hours; and post-graduate diploma program for secondary school teachers: Practicum took one month for 4 credit hours.

- c) Kazakhstan: Pedagogical practice is carried out in the 3rd year (in 6th semester), at least four credits (at least four weeks, 120 hours), and industrial pedagogical practice is carried out in the 4th year (8th semester), at least ten credits (at least ten weeks, 240 hours).
- d) Iran: the internship course is planned to offer 128 hours for two credit numbers, and school placement takes six weeks.

(3) Student teachers' activities

During the practicum period, four countries have assigned different activities for student teachers to be fulfilled. However, all four countries include written reports about their professional experience and practice.

- a) In Myanmar, student activities during practicum include assessing their learning, writing practicum journals, lesson study, observation, assistant teaching experience, and student case study.
- b) The student teachers in Kazakhstan need to submit a written report on the implementation of the professional practice program and a diary report on the completion of professional practice.
- c) In Ethiopia, student teachers' activities include sharing experiences, teaching practice in the school, micro-teaching, reflection on school placements, school observations-lesson observations, lesson planning, and portfolios.
- d) Iranian student teachers must learn campus courses, including reflective observation, narrative writing, and analysis of experiences as constructive/shaping elements of intellectual practice, participating in workshops, and as a practice activity; they teach at the classroom level as a micro-scale.

Research question 2 explored the comparative similarities and differences between the countries. Although each country conceptualizes the aim and definition of practicum, the meaning and purpose of practicum placement are nearly the same in the four countries. However, there are differences in calculating credit system, arrangement of practicum and student teachers' activities in four countries. The credit number in the Myanmar document is not clearly explained. Practicum in Myanmar is attached to the teacher education curriculum contents, and it is not separated as another module or course within the university program. In other countries, especially Iran and Ethiopia, the practicum is a module or a compulsory course that student teachers must fulfil in their teacher education program.

The university proposed the practicum arrangement and continued with the hierarchical process in the document of Myanmar and Kazakhstan. The detailed arrangement and process are not mentioned in Iran and Ethiopia documents. Our codes defined lesson study as one of the student teachers' activities during the practicum. However, lesson study is mentioned in the Myanmar document as the activities aligned

with the practicum process. The conversation about student teachers' practice and lesson observation with the supervisor of the practicum program are described in the document of Iran. However, the lesson study is not mentioned in the documents of Ethiopia and Kazakhstan.

6. Conclusions

This study explores how practitioners in different countries respond to the practicum and how developing countries implement their practicums. According to each country's documents, students are required to complete the practicum as part of their pre-service teacher education program. Furthermore, the practicum structure resembles a centralized protocol system; for instance, in Kazakhstan, the rector places students in educational settings based on the terms of practice and the teacher who leads them. The Ministry of Education approves student teacher's practicum arrangements in Myanmar. From the perspective of internationalization, we can learn the best practices of practicum from each other's teacher education documents, such as the component of practicum structure in a university program (e.g., credit system, module arrangement, time period) and different student teachers' performance including lesson observations and professional feedback and conversation with the practicum supervisor and portfolio.

Even though teacher education policy documents in four countries have addressed all the elements and requirements related to teacher education contexts, the implementation level of the practicum in each country may differ significantly. Besides, creating a more comprehensive network of practice bases in different types of schools (e.g., gymnasiums, lyceums, specialized schools for talented children, and inclusive schools) is necessary. Nevertheless, this study provides insight into the role of practicum from teacher education policy documents of four different countries. In addition to identifying similarities and differences, the document shares best practices and suggests ways to improve each country's practicum.

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Principles of economic theory: an anachronistic school textbook in Greek educational system?

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Abstract

In the Greek educational system, students of the third grade of general and vocational high schools, who wish to enter higher education institutions with an economic orientation, must choose the scientific field "economics and computer sciences". In this field, one of the most important subjects examined is 'Principles of Economic Theory'. It was introduced in the panhellenic examinations in 2000 and is still in existence today. The textbook of the course has not undergone any changes and according to many economists it contains anachronistic information and knowledge. In this context, the Greek Ministry of Education decided to introduce a new course entitled "Principles of Economic Science" from the school year 2025-2026 and consequently to write an updated textbook. In this paper we evaluate the adequacy of the old textbook to determine, on the one hand, whether the change in the curriculum was necessary and, on the other hand, whether its replacement in secondary education was correct. Through descriptive statistics and inferential testing and using the prefecture of Rethymno, Crete, as a case study, we cross-check the attitudes of students and economics teachers towards the textbook, to draw our conclusions.

Keywords: panhellenic examinations, school textbook "principles of economic theory", evaluation method.

1. Introduction

The course "Principles of Economic Theory" is taught in the third grade of General (GEL) and Vocational high schools (EPAL) in Greece. It is related to the basic concepts of economic science and is a prerequisite for students who wish to enter higher education institutions of economic direction. It was first admitted to the Panhellenic exams in the year 2000 under Law 2525/1997 and was maintained with Laws 4186/2013 and 4327/2015. Nowadays, it belongs to the orientation group "economics and computer sciences", according to Law 4692/2020 ("school upgrade and other provisions") (www.minedu.gov.gr). The content of the course describes various economic problems that concern a society (what will be produced, how it will be produced, how it will be distributed, how the quantity produced will increase). It consists of two main pillars:

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chapters 2-6 include microeconomic theory (how the prices of goods are determined by the forces of supply and demand) and chapters 1 & 7-11 macroeconomic theory (understanding the economy as a whole) respectively.

The main objective of this article is the evaluation of the school textbook "Principles of Economic Theory", which is used in the examination process of the panhellenic exams from the year 2000 until today. This is an anachronistic book, which in the opinion of many economists needs to be replaced (www.alfavita.gr). In this context, the ministry of education decided a radical change in the course curriculum, within the next three years (2025-2026). The course will be renamed to "Principles of economics" and a new updated textbook will be written (Government Gazette 3317/28.06.2022 issue B'; www.esos.gr; www.protothema.gr). Using the prefecture of Rethymno as a case study, we cross-check the attitudes of high school students and public sector economics teachers, in order to exact our conclusions and evaluate whether this ministry's effort is correct.

The proposed research is both original and unique in Greece, while leaving great room for further deepening in the future. In the Greek pedagogical literature, there are significant gaps in the evaluation of this textbook. Especially now that the decision of the ministry of education is to replace-update it, this evaluation is considered necessary to determine its correctness. We hope that the proposed evaluation method will deepen more into existing knowledge and expand the analysis of either the old or the new textbook both in other Prefectures of Crete and in the rest of Greece.

In particular, the main research questions we attempt to answer are:

- What are the attitudes of students and economics teachers towards the textbook "Principles of Economic Theory", based on its content, structure and organization, language, didactic and pedagogical suitability, and typographical appearance?

- Are the above five factors of evaluation of the textbook 'Principles of Economic Theory' related to each other and in which direction?

- Does the gender and the school type, of economics teachers in the Prefecture of Rethymno, influence the evaluation grade of the textbook "Principles of Economic Theory"?

- Is there a difference between economics teachers of the Prefecture of Rethymno of different ages, degrees, area of work, employment relationship and years of service in terms of the evaluation grade of the textbook "Principles of Economic Theory"?

2. Literature review

Banaszak (1987) states that economics is not only a body of knowledge but also a way of thinking about phenomena. Economics courses in secondary education and the quality of the corresponding services have been rated low by both students and universities (Colander, 2017) (Hansen, 2013). The main reason according to Finegan & Siegfried (1998) is the connection between economics, mathematics and statistics, elements that make it difficult for high school students (Cohn, Cohn, Balch, & Bradley, 2001). In relation to universities, the "poor" performance of students is due to the fact that they have

integrated some economics courses (e.g. microeconomic and macroeconomic theory) into scientific fields that do not fit perfectly (nursing, management, law, polytechnic schools, etc.) (Hansen, 2001) (Salemi & Siegfried, 1999). Brasfield et al (1993) and Durden & Ellis (1995) concluded that students of microeconomic and macroeconomic theory who had taken economics courses in high school read less, assimilated the material better and had higher grades.

Buckles (1991) pointed out that since economics education aims to use economic concepts in a logical way to adequately analyze individual and social economic issues, what matters is the "method" of teaching economics. Loabuchi (2017) considers that the most common technique for teaching economics is the traditional lecture method, even if other methods that require students' active participation in the lesson have been proposed. However, according to Walstad (2001), the results with regard to the effectiveness of these alternative forms of teaching vary.

In the Greek pedagogical literature, a doctoral thesis conducted in 1991 to determine the economic knowledge of senior public high school students in Macedonia (Makridou-Bousiou, 1991). It emerged that there is on the one hand a low level of economic knowledge and on the other hand an understanding of broader economic concepts due to economics courses. Samaras (2003) stressed the need for innovative change in the teaching of economics courses by proposing literary texts as one of the teaching methods. New technologies and their use in the teaching of economics courses in secondary education, with emphasis on the effectiveness of online education were adequately emphasized by Tyrovouzi (2006). Magoula (2009) thoroughly analyzed the educational reforms and timetables of economics courses in Greek secondary education, from 1929-2009. After explaining the methods-techniques of microteaching in the classroom, she focused (2019) on the microteaching design of an economics course. An innovative proposal was submitted by Brinia et al (2015) (Brinia, Kalogri, & Stavrakouli, 2016) suggesting that the course "principles of economic theory" should be taught through background music. A historical review of Greek economic education was also made by Whitehead (2006). Kekhaidou (2011) compared the teaching of economics courses between GEL and EPAL, while Brinia & Vikas (2011) found that the appropriate teaching method contributes to a more effective understanding of economic phenomena, allowing students to better interpret economic concepts.

In a survey conducted for the secondary school economics course "Principles of business organization and administration", in GEL of Piraeus (2004), the effectiveness of the "Project" teaching method was recorded based on the results of the panhellenic examinations of 2004 (Brinia, 2007). This analysis was further extended in 2010 (Brinia & Chrysafidis) when the authors argued that the application of the method is indeed feasible at the high school level, despite the difficulties under the prevailing conditions. In another survey conducted by the Pedagogical Institute (2005) among 367 high schools, 7,500 students and 400 teachers, it was concluded that economics courses contribute

cognitively to the socio-economic behavior of individuals, with one third of the respondents considering economics as their most favorite subject (Magoula, 2009).

Therefore, although in recent years there has been increased attention paid to secondary school economics courses, there are significant gaps in didactic research (regarding the attitudes and behaviors of stakeholders) for the course "Principles of Economic Theory". This gap in the Greek pedagogical literature will be covered by the present study. Central to this analysis is the course book and its subsequent evaluation.

The teacher in his/her effort to organize the teaching and learning process uses the course book more than any other teaching tool (Katsarou & Dedouli, 2008). It has been estimated that in the context of a teaching hour most of the time (80-95%) is taken up by the use of the textbook (OEPEK, 2008; Johnsen, 1993). It determines about 70% of educational activities (Weiss, 1998). The evaluation of textbooks is of paramount importance and is seen as an ongoing educational process. It takes place during their writing, approval, introduction and use in the teaching process. According to Bonidis (2005), the purpose of evaluation is to improve and revise textbooks, while according to Konstantinou (2002), the purpose of evaluation is to draw up new Curriculum to produce both new textbooks and additional theoretical approaches.

Richaudeau (1979), analyzed and evaluated textbooks in terms of a) content, b) transferability of content to the reader, c) adaptability to learning needs and d) materiality. Chiappetta, Fillman & Sethna (1991) focused on a) understanding and encouraging knowledge acquisition, b) cultivating critical thinking, and c) the two-way relationship between science and society. Trilianos (1999) based his evaluation on four axes of evaluation related to content, presentation, didactic and methodological dimension and the interaction of the textbook with the curriculum. The same was done by Tsolakis (2005), targeting the content, structure and presentation of the material and the connection with contemporary society and its values. Scientific validity, reliability and transparency, didactic and pedagogical appropriateness were addressed by Xochellis (2005), while similar criteria were used by Kapsali, A. & Charalambous (2008).

Special mention should be made to a study carried out by the Pedagogical Institute of Greece (Konstantinou, 2002), where 141 textbooks for primary and secondary schools were evaluated (161 schools were visited and 3,367 questionnaires were collected). The five main evaluation axes that emerged were: a) content, b) structure and organization, c) language used, d) didactic and pedagogical suitability and e) typographical appearance. This paper is largely based on this research analysis. We consider that its main axes comprehensively describe the results and findings of the scientific search around the issue, fully cover our research objective and meet all the criteria necessary for the evaluation of a textbook.

3. Research methodology

As is well known, the population in a survey is the total number of subjects (Dimitriadis, 2016). In our study, we focused on GEL and EPAL of Rethymno Prefecture (there were 11

GELs and 1 EPAL of economic direction in total). We had census research data of economics teachers teaching the course (16 in total) and communication with students was easy (school year 2021-22). The survey for teachers was conducted between September and November 2021 and for students between November 2021 and January 2022.

The main research method used was a "case study" of a single geographical area (Rethymno Prefecture). This targeting allowed us to make detailed observations, something that cannot be done with large samples (e.g., at a national level) without high costs (Schindler, 2019). Also, the method is useful, as it can expand the study to other prefectures in Greece. The chosen research strategies involved both the "qualitative method" (interviews) and the "quantitative method" (questionnaires) (Saunders, Lewis, & Thornhill, 2019). In our case, the research design included both qualitative (gender, marital status, region of residence, etc.) and quantitative (age, years of service, etc.) characteristics. Therefore, we conducted a mixed-methods study, where we combined quantitative and qualitative data collection techniques and corresponding analytical procedures (Schindler, 2019).

Students were given semi-structured face-to-face interviews. Initially they were asked specific questions and then we followed their train of thought. This method offered flexibility and immediacy. We achieved the collection of valid and reliable data relevant to our research questions and objectives. It is worth mentioning the high response rate they show (Babbie, 2018). The students' individual choices (opinions, perceptions, interpretations) conveyed their realistic experience of the course (Magoula, 2019; Whitehead & Makridou-Bousiou, 2006; Sitzimis, 2011). Possibly the interviews also helped to improve our ideas, as there was an exchange of constructive views with respondents (Callas, 2015).

Specifically, we randomly selected 12 high school students from the prefecture of Rethymno (one per school and in relation to gender we followed an equal percentage ratio) (school year 2021-22). That means we followed the quota sampling method (even though in qualitative research the representativeness of the sample is not considered necessary). Our sampling units were selected based on predefined characteristics, so that the total sample has similar characteristics to the general population (Callas, 2015). We knew that the proportion of boys and girls in relation to the general population is approximately 50:50. According to data from Hellenic statistical authority (school year 2018-19), in the total number of Greek students who took the Panhellenic examinations choosing the economic direction, 62% were girls and 38% were boys. In the prefecture of Rethymno these percentages were 58% and 42% respectively (297 students in total) (www.statistics.gr). The sample was therefore selected approximately based on this ratio, i.e. 6 boys and 6 girls (12 students in total) (Babbie, 2018).

The semi-structured interviews were on-site and relevant to the structured questionnaire. The difference was that we collected different and more information (56 questions in total). Respondents answered a series of questions (closed and open-ended)

whose number, order and content were predetermined by the interview protocol form. All participants were asked the same questions, in the same words, in the same order and in the same neutral manner (Babbie, 2018). The interviews were not recorded, but were recorded verbatim, as were any pauses in speech or any jokes.

In particular, the interview structure included three parts:

- The first part contained 3 open-ended questions about the demographic characteristics of the interviewees.

- The second part contained 48 closed-ended likert-type questions, exactly as asked to the economics teachers of the prefecture of Rethymno (some questions were removed in order to adapt the questionnaire to the students).

- The third part contained 5 open-ended questions, where participants were asked for their views on the five main categories of textbook evaluation used in this research.

Structured questionnaires with likert-type questions were distributed to the teachers via the internet (google forms), in order to measure the variables of our conceptual framework and the relationships between them (Magoula, 2009; Whitehead & Makridou-Bousiou, 2006; Saunders, Lewis, & Thornhill, 2019; Argyropoulou, 2018). With the structured questionnaire we achieved to collect useful data and information in a very short time. Compared to other research tools, it is minimally costly (time, money effort) and the researcher, without interference, often gets honest answers to subtle questions (Babbie, 2018). We chose online questionnaires as the target population had computer literacy, there was certainty that the right person was answering, there was little chance of distortion of the respondent's answers, the questionnaire was presentable and readable, and automatic data entry resulted (Zafeiropoulos, 2015).

For the economics teachers, a "full census" was conducted due to the small size of the target population (<30) (Dimitriadis, 2016). 16 questionnaires were sent online to the 16 economics teachers of the prefecture of Rethymno. The main advantage of the census is the absolute validity of the results, since there are no sampling errors (Dimitriadis, 2016).

The design of the questions included:

- 67 closed-ended quantitative likert-type questions, to measure the variables of our conceptual framework and the relationships between them.

- The division of the questionnaire questions into six categories: a) the category related to the respondents' individual characteristics (8 questions), b) the category "book content" (13 questions), (c) the category "book structure and organization" (13 questions), d) the category "language of the book" (5 questions), e) the category "didactic and pedagogical suitability of the book" (19 questions), f) the category "typographical appearance of the book" (9 questions)

Our overall aim was to tap into the experience and knowledge of the teachers through more detailed and specific questions and then to cross-check their answers with the students' general views on the book, through a freer discussion and taking advantage of their spontaneity and youthfulness.

4. Descriptive statistical analysis of data and results

α. Analysis of the teachers' structured questionnaire

The SPSS statistical program (Gardellis, 2013; 2019) was used to analyze the teachers' structured questionnaire. The descriptive statistics were divided into five categories: a) the category "book content", b) the category "book structure and organization", c) the category "language of the book", d) the category "didactic and pedagogical suitability of the book", e) the category "typographical appearance of the book". For each question of each category, the minimum and maximum value of the answer, the mean, the median, the mode and the standard deviation were recorded (Dimitriadis, 2016). At the same time, the percentage distribution of the answers was used based on the 5-point likert scale. At the end, the means of the measures of central tendency and variance were extracted.

It should be noted that the application of the "mean" for drawing conclusions is not an appropriate methodology (Dimitriadis, 2016). As a measure of central tendency, it is not meaningful in ordinal variables. After all, how could we derive a mean between the responses "strongly disagree" and "strongly agree" or how would we consider the emotional distances between "strongly disagree-agree" and "agree-strongly agree" to be equal. Moreover, respondents are several times reluctant to take a clear position and give more weight to the "neutral" response. However, we found that the median and the mode (indicated in ordinal variables), were consistent with the "mean" results in all analyses. We therefore used it as a key analytical tool as it makes the drawing and interpretation of conclusions, clearer to the reader and facilitates our analysis.

The survey population consisted of 5 men (31.3%) and 11 women (68.8%). Most of them belonged to the age category 41-50 years old (43.8%). They were mainly holders of postgraduate degrees (68.8%) and worked in urban areas (62.5%) in the city of Rethymno (75%). 68.8% of the respondents worked in a GEL (68.8) and most of them had both a permanent employment relationship (75%) and 11-20 years of experience in the field (68.8%).

Considering that responses 1 to 2 express respondents' dissatisfaction, response 3 expresses neither satisfaction nor dissatisfaction and responses 4 to 5 express satisfaction, we arrived at table 1 and the following related conclusions:

1. Based on the average of the "mean" values of the responses (mean), the highest dissatisfaction of the respondents is expressed for "didactic and pedagogical suitability" (2.48) and the highest satisfaction for "language" (3.66). In no category did the result exceed the value of 3.66, i.e. no strong satisfaction was expressed by the participants.

2. The mean value of the variable (response) with the highest frequency (mode) appears in "language" (3.8) and the lowest in "didactic and pedagogical suitability" (2.26).

3. The average of standard deviations in all evaluation categories ranges from 0.71 to 0.88. This shows that most results are between 0.71 and 0.88 points from the

corresponding mean. Some researchers believe that 70% of all scores fall within one standard deviation of the mean (Dancey & Reidy, 2020). For example, in "language", a value of 0.71 indicates that almost 70% of the participants responded between 2.95 and 4.37.

4. The percentages of "strongly disagree" to "neutral" responses are particularly high for all categories, reaching 82.31% for "didactic and pedagogical suitability" and 75.07% for "typographical appearance". Only in the "language" category do the answers "agree to strongly agree" (59.96%) predominate. The teachers' concern about the quality and adequacy of the textbook is evident.

Table 1. The evaluation of the school textbook "Principles of Economic Theory" by the teachers of the prefecture of Rethymno

<i>Evaluation criteria</i>	<i>Measures of central tendency and variance</i>				<i>Response rates</i>	
	<i>Mean</i>	<i>Mode</i>	<i>Median</i>	<i>Std.Deviation</i>	<i>Strongly disagree-neutral</i>	<i>Agree-strongly agree</i>
Content	3,22	3,23	3,31	0,82	58,22%	41,78%
Structure and organization	3,06	3,00	3,00	0,80	58,74%	41,26%
Language	3,66	3,80	3,80	0,71	40,04%	59,96%
Didactic and pedagogical suitability	2,48	2,26	2,32	0,88	82,31%	17,69%
Typographical appearance	2,73	2,67	2,72	0,86	75,07%	24,93%

Based on the percentages of responses ranging from "strongly disagree" to "neutral", i.e. the expression of dissatisfaction with the adequacy of the textbook, we concluded that we could rank the dynamics of their objections in descending order as follows: (1) Teaching and pedagogical suitability, (2) Typographical appearance, (3) Structure and organization, (4) Content, (5) Language.

To establish the reliability of the structured questionnaire given to the teachers, we used the Alfa (Cronbach's α), Split-Half and Guttman models (Anastasiadou, 2012). The assessment was done separately for each of the five categories of the questionnaire. All three models confirmed the internal consistency of the questions in all scales of the questionnaire (values greater than 70%). At the same time, we considered testing the validity of the conceptual construction of the questionnaire through confirmatory factor analysis. The aim was to verify the correctness of the selection of all questions per assessment axis (scale) and to see which of the axes (scales) are best adapted to the census data we have on the attitudes of economics teachers in the prefecture of Rethymno. Then and after the analysis was completed, we would calculate the factorial scores, which appear as new variables and can replace the original variables in other multivariate analysis methods such as t-test, regression, analysis of variance, etc. (Dimitriadis, 2016). However, this analysis was not conducted due to the small number

of participants in the study. A prerequisite for the application of the above method is that the participants-variable ratio should be at least 5:1 (Anastasiadou, 2012; Markos, 2012). Besides, the original questionnaire (Konstantinou, 2002) was obtained after factor analysis, and we will not question the latent variables that were obtained.

β. The analysis of semi-structured student interviews

After collecting the qualitative data from the semi-structured student interviews, we proceeded to analyze them. We recorded their demographic and social characteristics and moved along two main axes. In the first strand, we studied in the same way, as the teachers, their responses to the closed-ended questions (the questions were the same, with small adaptive deviations). That is, we recorded measures of central tendency and variance. Our aim was to find differences or similarities in teacher and student attitudes over the five categories of evaluation. In the second degree, we studied students' responses to the open-ended questions of the semi-structured interview. After we had recorded all the data on paper, we read and reread them to recall and understand the most useful ones. The aim was to gain a comprehensive understanding of the participants' views. We then proceeded to coding, giving representative codes to larger sections of the text. Feelings of anxiety, joy, satisfaction, dissatisfaction, indifference, and difficulty in understanding were attempted to be elicited by textbook evaluation category. They were then contrasted and compared with each other to identify codes with similar characteristics or meanings. The identification of similar codes helped us to conclude how students interpret, perceive, and experience the reading of this particular textbook.

The sample of students in the study consisted of 6 boys (50.0%) and 6 girls (50.0%). The majority of them resided in urban areas (66.7%) in the city of Rethymno. 58.3% of students expressed a preference for schools of management and economic sciences, 8.3% for schools of computer sciences, 8.3% for schools of production and management engineering, 8.3% for military schools and 16.7% for police schools.

The analysis of the closed-ended questions revealed that (Table 2):

1. Based on the average of the "mean" values of the answers (mean), the highest dissatisfaction of the respondents is expressed for "teaching and pedagogical suitability" (2.87) and the highest satisfaction for "language" (3.50). In no category did the result exceed the value of 3.50, i.e. no strong satisfaction was expressed by the participants.

2. The mean value of the variable (response) with the highest frequency (mode) occurs in "language" (4.00) and the lowest in "typographical appearance" (2.67).

3. The average of standard deviations in all evaluation categories ranges from 0.87 to 1.31. This indicates that most results are between 0.87 and 1.31 points from the corresponding mean.

4. The percentages of "strongly disagree" to "neutral" responses are relatively high for two of the five categories, reaching 67.71% for "didactic and pedagogical suitability" and 60.16% for "typographical appearance". The categories "language", "structure and organization" and "content" are dominated by "agree-strongly agree" with percentages

of 62.53%, 54.18% and 51.21% respectively. The students' concern about the quality and adequacy of the textbook is evident.

We concluded that we could rank the dynamics of their objections in descending order as follows: (1) Teaching and pedagogical appropriateness, (2) Typographical appearance, (3) Content, (4) Structure and organization, (5) Language.

From a total of twelve semi-structured student interviews that took place, only six of the open-ended questions provided clearly usable results for our research. We therefore relied on them. These were four girls and two boys. Regarding the "content" of the textbook, the predominant opinions of the respondents are relatively positive, but they are related to the immediate and required updating of the textbook. Some respondents' observations show the psychological and educational pressure on students due to their participation in the panhellenic examinations. The "structure and organisation" of the textbook is considered satisfactory by the participants, with one important observation being of concern to most of them. Chapter one of the textbook, which deals with the productive potential of the economy, is located together with the chapters on microeconomic rather than macroeconomic theory. The "language" of the textbook is generally described as simple and understandable, adapted to educational needs. As regards "didactic and pedagogical suitability", students express their objections (mainly the absence of student-teacher interaction and of exercise-solving methodologies) but in general they consider the textbook to be relatively suitable for the educational process. The "typographical appearance" of the textbook, considered to be inconsistent both in terms of color and graphics with their young age.

Table 2. The evaluation of the school textbook "Principles of Economic Theory" by the students of the prefecture of Rethymno

Evaluation criteria	Measures of central tendency and variance				Response rates	
	Mean	Mode	Median	Std.Deviation	Strongly disagree-neutral	Agree-strongly agree
Content	3,33	3,29	3,43	0,87	48,79%	51,21%
Structure and organization	3,42	3,75	3,58	1,07	45,83%	54,18%
Language	3,50	4,00	4,00	1,31	37,48%	62,53%
Didactic and pedagogical suitability	2,87	2,88	2,91	1,00	67,71%	32,29%
Typographical appearance	3,21	2,67	3,11	1,04	60,16%	39,84%

5. Inferential statistical analysis of data and results

As is well known, inferential statistics is applied when we want to generalize the findings of our sample to the general population. In the case of census data, this need does not exist because we have all the required data. The point here is to explain by subjective criteria both the cause of the deviation and whether it is a large deviation with a

particularly practical significance for our analysis. On the other hand, the statistical analysis applied to census data involves descriptive statistics and perhaps some correlation analysis. The question is whether the p-value should be used to draw conclusions. This value indicates the probability that the emergent relationship between the different variables is random and has no statistical significance. In the census the inference is absolute and cannot be due to randomness.

We ended up considering, the census of sixteen economics teachers of the prefecture of Rethymno as sample data of a larger hypothetical population. This could refer to the corresponding teachers of future periods. After all, the classical quantitative analysis, where the conclusions drawn from the sample are extrapolated to the population, is nothing more than a representation of the moment. Of course, the sampling in this case would not be random and would not be based on probability (convenience sample). However, in order to best answer our research questions, we performed several parametric tests such as the Pearson correlation coefficient, the t-test for independent samples, and the anova test.

Accepting the validity of the questionnaire, we started with the factorial score of each latent variable by summing the responses of the respective questions. In this way we created five new continuous variables, which could be used to calculate correlation coefficients between them. At the same time, we checked whether there is a normal distribution of the data. The test for normal distribution was performed with the Shapiro-Wilk criterion which is commonly used in studies with small samples ($n < 20$ or 30). In our case it matched the number of our census data (16). We found that our data followed the normal distribution, as the Shapiro-Wilk test showed p-values for all five variables > 0.05 . The same results were obtained by the skewness and kurtosis tests. The z absolute values of skewness and kurtosis (for $n < 30$) were everywhere less than 1.96 (Papaioannou, Zourbanos, & Minos, 2016).

Therefore, the correlation test to be performed was parametric and as all the conditions for the Pearson coefficient were met, it was the one finally chosen. Our main objective was to determine whether there is a statistically significant relationship and in which direction between the five evaluation factors. The results showed that all variables show at least low correlation ($r > |0.2|$) between them (Evans, 1996). For the combinations "content-didactic and pedagogical suitability" ($r = 0.581$) and "content-typographical appearance" ($r = 0.570$), there is a moderate positive correlation ($|0.4| < r < |0.59|$), while for the combinations "structure and organization-didactic and pedagogical suitability" ($r = 0.768$), "structure and organization-typographical appearance" ($r = 0.762$) and "language-typographical appearance" ($r = 0.770$) the correlation is high and positive ($|0.6| < r < |0.79|$). Indicatively, this means that the more positive the respondents' perception of the "language" used in the book, the more positive their perception of the "typographical appearance". A very high positive correlation ($r > |0.8|$) is evident between the variables "content-structure and organization" ($r = 0.805$). Interestingly, no negative correlations are found at all. We

would say that respondents have either positive or negative attitudes towards all five underlying variables of the questionnaire. As shown in the descriptive analysis, the general tendency towards the textbook is negative.

In fact, if we assume a wider future population of economics teachers for the prefecture of Rethymno, then we would note that with a two-sided test and a significance level of $\alpha=0.05$, most of the above correlations are statistically significant ($p\text{-value}<0.05$). Only the combinations "teaching and pedagogical suitability-language" and "content-language" show the existence of a non-statistically significant relationship between them.

We then proceeded to test normal distribution by categorical variable for all five evaluation factors. We found that the sample followed the normal distribution, as the Shapiro-Wilk test showed for all categories of independent variables that $p\text{-value} > 0.05$. This meant that we had to re-use Pearson's correlation coefficient r to analyze the degree of correlation of the five evaluation factors by independent variable group.

In relation to "gender", males show statistically significant ($p\text{-value}<0.05$) very high positive correlation between the factors "structure and organization" and "content" ($r=0.923$), while females between the factors "typographical appearance" and "structure and organization" ($r=0.873$). Ages 31-40 correlate positively and very highly between the factors "structure and organization" and "content", ages 41-50 between the factors "typographic appearance-structure and organization" ($r=0.842$) and "typographic appearance-language" ($r=0.811$), and ages >50 between the combinations "structure and organization-content", "typographic appearance-content", "typographic appearance-structure and organization", but the relationships do not appear statistically significant ($p\text{-value}<0.05$). Teachers with a second-degree correlate "structure and organization" with "content" very highly ($r=0.970$, $p\text{-value}<0.05$), while those with a master's degree correlate both the "typographic appearance-language" ($r=0.823$, $p\text{-value}<0.05$) and "didactic and pedagogical suitability-structure and organization" ($r=0.855$, $p\text{-value}<0.05$). Regarding the "working area", statistically significant correlations do not appear for those living in urban and semi-urban areas. In urban areas, teachers have a very high and positive correlation between "structure and organization" and "typographical appearance" ($r=0.858$, $p\text{-value}<0.05$) and "language" and "typographical appearance" ($r=0.868$, $p\text{-value}<0.05$).

GEL teachers show very high coefficients of positive correlation between "content-structure and organization" ($r=0.839$, $p\text{-value}<0.05$), "structure and organization-teaching and pedagogical appropriateness" ($r=0.825$, $p\text{-value}<0.05$), "language-typographical appearance" ($r=0.831$, $p\text{-value}<0.05$). The teachers of EPAL correlate more strongly the dyads "didactic and pedagogical suitability-language" ($r=0.895$, $p\text{-value}<0.05$) and "structure and organization- typographical appearance" ($r=0.910$, $p\text{-value}<0.05$). Substitute teachers considered a very significant positive relationship between "structure and organization" and "teaching and pedagogical suitability" ($r=0.998$, $p\text{-value}<0.05$), while permanent ones considered a very significant positive relationship between "content-structure and organization" ($r=0.804$, $p\text{-value}<0.05$),

"structure and organization-didactic and pedagogical suitability" ($r=0.803$, $p\text{-value}<0.05$) and "language-typographical appearance" ($r=0.830$, $p\text{-value}<0.05$). Finally, those with 0-10 years of experience record a very high positive correlation of "structure and organization-didactic and pedagogical suitability" ($r=0.998$, $p\text{-value}<0.05$) and those with 11-20 years record a correlation of "structure and organization-content" ($r=0.802$, $p\text{-value}<0.05$).

In order to answer the research question "does the gender and the school type, of economics teachers in the Prefecture of Rethymno, influence the evaluation grade of the textbook "Principles of Economic Theory"?", we used the parametric test "t-test for independent samples". It can be used in this analysis because our sample follows the normal distribution and on the one hand we have dependent-quantitative variables and on the other one independent-qualitative variable per case that divides the sample into two groups (Roussos & Tsaousis, 2011). In relation to normality, we found that the sample follows the normal distribution as the Shapiro-Wilk test showed for all categories of independent variables that $p\text{-value}>0.05$.

After defining as null hypothesis that there is no statistically significant difference in the degree of textbook evaluation between males and females and between GEL and EPAL, we proceeded to the descriptive data analysis (mean, standard deviation, standard error of estimate) for the dichotomous variables of interest. We then performed a variance test using "Levene's test for equality of variances" (Chalcos, 2020). For the two dichotomous variables we observed that $p\text{-value} > 0.05$ for all 5 evaluation factors. So, we could not reject the null hypothesis of equality of variances. It seems that there are no statistically significant differences in the evaluation level of the textbook "Principles of Economic Theory" between males and females and between GEL and EPAL, as the t-test for equality of means (two-sided test) showed that everywhere $p\text{-value}>0.05$. However, this is true at the level of extrapolating our findings to a larger future population, as already stated. If we limit ourselves to our census data, through descriptive statistics, men rated "content", "structure and organization", "didactic and pedagogical suitability" and "typographical appearance" more positively, while women rated "language" (based on the "mean"). The type of teaching school gives more balanced results as there is only a large variation in "teaching and pedagogical suitability", where it is evaluated more positively by teachers in GEL.

In relation to the research question "is there a difference between economics teachers of the Prefecture of Rethymno of different ages, degrees, area of work, employment relationship and years of service in terms of the evaluation grade of the textbook "Principles of Economic Theory"?", we used the parametric one way anova test (one way analysis of variance) (Chalkos, 2020). This analysis is initiated when the sample follows the normal distribution, the variances of the quantitative variable in each category of the qualitative variable are equal and we have dependent-quantitative variables and one independent-qualitative variable per case that divides the sample into more than two groups independent of each other (Roussos & Tsaousis, 2011). In relation

to normality, we found that the sample follows the normal distribution as the Shapiro-Wilk test showed for all categories of independent variables that $p\text{-value} > 0.05$.

After defining as null hypothesis that there is no statistically significant difference in the degree of textbook evaluation among the groups of categorical variables, we proceeded to test for variances through Levene's test for equality of variances (Chalcos, 2020). For all categorical variables we observed that $p\text{-value} > 0.05$ for all five evaluation factors. So, we could not reject the null hypothesis of equality of variances. We then tested the independence between the groups of categorical variables and found that only for the evaluation factor of "content" of "structure and organization" and "pedagogical and teaching suitability" there was a statistically significant difference between the groups of the categorical variable "work area" ($p\text{-value} < 0.05$). To examine between which levels of this independent variable there were statistically significant differences the LSD multiple comparison test was applied (Chalcos, 2020). The results showed that for "content" and "structure and organization" statistically significant differences ($p\text{-value} < 0.05$) were observed between "rural-urban" and "semi-urban-urban" areas, while for "didactic and pedagogical suitability" only between "rural-urban" areas.

Specifically, in relation to "content", teachers from rural areas of Rethymno have a higher evaluation score (mean = 46.6 ± 3.05) compared to teachers from urban areas (mean = 39.1 ± 4.17) and those from semi-urban areas (mean = 46.3 ± 4.04) had a higher evaluation score compared to those from urban areas. In relation to "structure and organization", the teachers of rural areas of Rethymno prefecture had a higher evaluation score (mean = 48 ± 5.29) compared to the teachers of urban areas (mean = 36 ± 5.33) and those of semi-urban areas (mean = 44.3 ± 5.68) had a higher evaluation score compared to those of urban areas. Finally, for "didactic and pedagogical suitability", the teachers of rural areas of Rethymno prefecture had a higher evaluation score (mean = 58.66 ± 13.79) compared to the teachers of urban areas (mean = 44.3 ± 6.48). In all other cases, we could not reject the null hypothesis of independence.

6. Conclusions and discussion

The main purpose of this paper was to evaluate the quality of the textbook "Principles of Economic Theory". We tried to make clear the necessity and correctness of its replacement by the Greek Ministry of Education and to introduce an evaluation method for both this and the new proposed textbook.

Using the prefecture of Rethymno as a case study, we cross-referenced the views of third grade students and the economics teachers of the public sector. The evaluation criteria used were "didactic and pedagogical suitability", "typographical appearance", "structure and organization", "content" and "language". Structured questionnaires were distributed to the economics teachers of Rethymno prefecture and semi-structured interviews were conducted with the students of the same area. The descriptive analysis showed in general that teachers and students agree in terms of evaluation on the quality of the textbook. Both consider "pedagogical and didactic suitability" and "typographical

appearance" as major problems, while a slight difference is observed in the ranking order of "structure and organization" and "content". The 'language' of the text is considered satisfactory by both categories of respondents.

Because the statistical analysis applied to census data involves descriptive statistics and perhaps some correlation analysis, we were faced with the dilemma of whether to use the p-value to draw conclusions. We ended up considering the census of sixteen economics teachers as a sample data of a larger hypothetical population, which could refer to the corresponding teachers of future periods. This allowed us to apply inferential statistical tests to our data.

Pearson's correlation coefficient r revealed that all five evaluation variables show at least a low correlation between them. Most of them were statistically significant. No negative correlations were detected at all. The results vary considering separately the variables "gender", "age", "level of education", "area of work", "work relationship", "teaching school" and "years of experience" of the economics teachers.

The parametric test "t-test for independent samples" showed that there are no statistically significant differences in the degree of evaluation of the textbook "Principles of Economic Theory" between males and females and between GEL and EPAL. However, this is true at the level of extrapolation of our findings to a larger prospective population. The census data, through descriptive statistics, showed that men rated "content", "structure and organization", "didactic and pedagogical appropriateness" and "typographical appearance" more positively, while women rated "language". School type gives more balanced results as there is only a large variation in "didactic and pedagogical suitability", where it is evaluated more positively by teachers in GEL.

The parametric one way anova test clarified that for "content", "structure and organisation" and "pedagogical and didactic suitability" there is a statistically significant difference between the groups of the categorical variable "working area". The results of the LSD multiple comparison test showed that for "content" and "structure and organization" statistically significant differences are observed between the "rural-urban" and "semi-urban-urban" areas, while for "didactic and pedagogical suitability" only between the "rural-urban" areas.

The previous analysis clearly gives some indications of students' and teachers' attitudes towards this textbook. Unfortunately, it is limited to the prefecture of Rethymno and its research results cannot be generalized to the rest prefectures of Greece. However, it can form the basis for conducting similar research, following the same methodological tools. In addition, the quality of the research could be improved in the context of testing the validity of the conceptual construction of the structured likert-scale questions of students and teachers, which would require a larger number of respondents. It should also be mentioned that the sample of students was too small for the analysis of the structured questions (4% of the total population) and the sampling was non-probability. In the context of inferential statistics, the sample should have been random and larger to properly test the statistical significance of the responses.

In summary, it is evident that students and teachers in the prefecture of Rethymno are concerned about the quality and adequacy of the textbook "Principles of Economic Theory" in secondary education. A textbook that was introduced in the examination process of the panhellenic examinations in the school year 1999-2000, certainly needs updating and replacement. We therefore conclude that the Ministry of Education's announcement of a change in the curriculum and the writing of a new updated textbook for the newly created course "Principles of Economic Science" is correct.

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Online teaching and students' perceived level of math anxiety during covid-19 pandemic

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Abstract

This study explores how teachers' perceptions of students' math anxiety changed during online learning imposed by the Covid-19 pandemic. Using the focus group method of qualitative research for a group of selected math teachers, we have looked into the following questions: How was the students' perceived level of math anxiety in online classes? What differences and what similarities have the teachers noticed in comparison with the face-to-face learning? The results of the study show that the phenomenon of math anxiety is decreasing and is becoming less significant than in face-to-face education. Moreover, our research showed that the frame description of how teachers perceived the students' math anxiety implies two different different processes: the students' engagement in online learning (SEO) and the students' digital competences (DC). It seems that students' digital competences has a positive effect on learning mathematics, a fact that leads to students'experiencing less anxiety. Also, the phenomenon of math anxiety may be caused by the lack of students' engagement in online learning. Students who don't have digital skills, tend to avoid participating in online mathematics classes.

Keywords: emergency remote teaching and learning; perceived level of math anxiety; digital competences; comparison; student engagement.

1. Introduction

Online education has become very important nowadays due to COVID-19 pandemic that started in 2020. So, schools and teachers had to adapt to new educational circumstances (Kofoed et al, 2021). In order to give more insight in the way teachers perceived the online mathematics teaching in the secondary school, the present research investigates students' math anxiety and the factors influencing their anxiety in certain Romanian schools.

Math anxiety is commonly defined as an unpleasant feeling associated with doing math (Hembree, 1990). Ashcraft and Krause (2007) explain math anxiety as a "feeling of tension, apprehension, or fear that interferes with math performance". In other words, when students suffer from math anxiety, they seem to be unable to focus on solving math problems because they get worried about the tasks given by their teachers (Beilock & Carr, 2005).

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Mathematics anxiety is not only a psychological phenomenon that limits the ability to solve mathematics problems, but also a phenomenon by which those who suffer from mathematics anxiety can experience physical reactions similar to pain (Paiva et al., 2021). As a result, those affected by these problems, avoid mathematics classes and do not develop careers in which good mathematical skills are essential (Ashcraft & Ridley, 2005). Spielberg (1972) showed the distinction between math trait anxiety and math state anxiety. Trait anxiety is defined as an individual's tendency to feel anxious, whereas state anxiety is perceived as an individual's feelings of anxiety in different stressful situation. The studies undertaken by Wigfield and Meece (1988) among secondary school students showed that the phenomenon of mathematics anxiety has two different dimensions: cognitive and affective. The cognitive dimension, perceived as "worry", emphasizes the concern regarding the performance achieved and the possible consequences in case of failure, whereas the affective dimension, perceived as "emotionality", reveals the traces of nervousness and apprehension in test situations. Current scientific studies assess the phenomenon of math anxiety using items such as "How anxious are you when you have to solve a worksheet by yourself" or "How worried are you that you won't follow the math lesson" (Carey et al, 2016).

It has been demonstrated that the phenomenon of math anxiety has educational consequences on mathematics education (Aiken, 1970; Aschraft & Moore, 2009). Unfortunately, approximately 20% of students suffer from high math anxiety (Aschraft & Ridley, 2005). Researchers have shown that individuals with math anxiety perform more poorly than their low math anxious colleagues in math-related educational tasks (Mendoza et al, 2021; Ludwig, 2021).

The 2012 PISA tests investigated the phenomenon of mathematics anxiety among students, asking students to report whether they worry that math lessons will be difficult for them, whether they become stressed when doing math homework, whether they feel helpless when they have to solve math problems or if they worry about getting low grades in math (OECD, 2012). The results of the 2012 PISA tests showed that an important proportion of 15-year-olds expressed feelings of emotional stress when facing mathematics. Thus, 59% of students stated that they often tend to get worried when it comes of their participating in math classes; 33% of students admitted that they become tense and fidgety when they start to do their math homework; 31% of students reported that they get nervous when they try working on math; 30% declared they feel helpless when it comes of solving math problems and 61% said that they concern about getting low marks in math. In Romania, the phenomenon of mathematics anxiety is even more impactful: 75% of students declared that they feel anxious when dealing with mathematics (OECD, 2012).

The COVID-19 impacted negatively students' mathematics achievement. Another dramatic consequence of the pandemic is students' deteriorating mental health, a fact that also leads to their math anxiety. (Hammerstein et al., 2021; Paiva et al, 2021).

A review by Panagouli (2021) reveals a selection of 42 papers published before July 2021 in which he analyses school performance reported by teachers and parents. Most of these studies show a major decrease in mathematics results compared to the years before the pandemic; six of them mention the phenomenon of students' math anxiety.

Recently, Svaleryd et al. (2022) has published a new survey that confirmed learning difficulties and mental health challenges among students.

In online classes during the pandemic, only 11% of students experienced low levels of math anxiety, most students admitted moderate levels of anxiety (Delima & Cahyawati, 2021). Also, the results of the 2012 PISA tests showed that students who use the Internet a lot have a lower sense of satisfaction with life than students who spend less time online (OECD, 2012). The same happens with the use of mobile phones (Hawi & Rupert, 2016) and with the use of video games (Manzoni et al., 2011). In this context, it is very important to investigate the phenomenon math anxiety in online learning.

On the other hand, Takács et al. (2021), has shown that successful outcomes regarding students' online learning depend on: students and teachers' digital competences, well-adjusted study materials, behavioral engagement of student, accessibility and responsiveness of teachers. Taking into account all these results, the interrogative approach of the focus group explores the link between this four factors and math anxiety. The teachers and students' digital competences (DC) were defined as "skills, knowledge, creativity, and attitudes that everybody needs in order to use digital media for learning" (Rokenes & Krumsvik, 2014). Computer games have been regarded as important means for mathematics education because they have the potential to provide an attractive and funny learning environment (Oblinger, 2006).

The student engagement concept (SE), defined by Alexander W. Astin's work (1999) "Student involvement: A developmental theory for higher education", refers to "physical and psychological energy that the student devotes to the academic experience". Student engagement is characterized by behavior engagement, cognitive engagement as well as emotional engagement, following Bloom's educational goal classification (Fredricks et al., 2004). Student engagement in mathematics classes influences the learning results (Qiping Kong, 2003).

Student engagement in online learning (SEO) is "engagement when using online learning platform to learning, including behavioral engagement, cognitive engagement and emotional engagement" (Min Hu et al., 2016). The students' engagement had a positive effect on learning effectiveness whether in face-to-face activities or technology-mediated activities (Hu & Hui, 2012). Thurston et al. (2021) showed that there are three factors that influence SEO, namely: "access to household material and technological resources, school programming and instructional strategies, and family social capital".

2. Research objectives and questions

This research is based on the focus group method. The purpose of this study is to emphasize the teachers' point of view about math anxiety, to reveal different opinions on the main theme and to point out in which way the teachers became participants in the debate for the focus group. We explore the question: how was the phenomenon of math anxiety perceived by teachers in online education? The central objective is to identify the teachers' perception of math anxiety in the emergency remote online classes. Another objective is to investigate the relationship between student engagement in online learning (SEO), the teachers and students' digital competences (DC) and mathematics anxiety.

3. Materials and Methods

The focus group method was the main method used for this research. The instruments with which data were collected, were given by the focus group guide.

3.1. Participants.

The focus group was conducted with the participation of 11 secondary teachers of mathematics: 5 teachers from rural areas and 6 from urban areas. The research took place in June 2020, in the last weeks of school, via Zoom, with a duration of 90 minutes. The approval for conducting this research was given by the Scientific Research Ethics Committee of the University of Bucharest. The teachers were selected from the group of mathematics teachers participating in a training course in mathematics education, organized by the Faculty of Mathematics and Informatics, in Buşteni. All the selected teachers have outstanding results in their careers. Also, the teachers involved in this research were concerned with the phenomenon of anxiety caused by mathematics and also had some information about this phenomenon from the specialized literature.

3.2. Focus group guide.

The interrogative approach for the focus-group contains 10 carefully formulated questions to obtain relevant data for the study. The questions used for this research were: opening questions, transition questions, key questions and ending questions.

The question session debate for the teachers' focus group had the following ten questions:

1. Would you like to tell me your initials, your grade, your level of teaching and if you teach in a rural or urban area? (Opening Question)
2. How would you characterise your students' behavioral engagement in online courses? (Transition Question)
3. Have you noticed any students with math anxiety during online teaching? (Key Question)
4. Could you mention a case of a student dealing with math anxiety? (Key question)
5. What is the most important cause for students' math anxiety from your point of view? (Key Question)
6. How could you help a student struggling with math anxiety? (Key question)

7. What differences and what similarities have you noticed in comparison with the physical teaching? (Key Question)
8. Our intention is to find out more information about students' perceived level of math anxiety. Do you think we have skipped some other important questions? Is there something you would add? (Ending question)
9. What would you like to know about this phenomenon when we have finished this study? (Ending question)

The questions were developed taking into account the existing information about this math anxiety phenomenon in the specialized literature (Dowker et al., 2016). They are as follows:

Question 1 highlights relevant data (degree, level of teaching, urban or rural area) about teachers.

Question no 2 concerns the involvement of the students in online classes.

Question no 3 and 4 focus on the students' math anxiety.

Question 5 wants to highlight the cause of students' math anxiety

Question 6 aims to describe the way the teacher helps the child dealing with math anxiety.

Question 7 wants to highlight the differences and the similarities in comparison with the face-to-face teaching.

Question 8 and question 9 aims to draw opinions and expectations from teachers about math anxiety.

3.3. Coding and data analysis.

Focus group analysis is an intentional process with a clear purpose. The long table method was used. The data analysis was based on the audio and video recordings of the focus groups and their transcription, taking into account the words used by the participants, the context in which they were said, the precision of the answers, the importance of the topics, their frequency, the emotional intensity shown and the specificity of responses (Krueger & Cassey, 2005).

The chosen data was coded (Saldana, 2013) inductively in a first round of categories. In a second round, themes and subthemes were expressed. This information is presented in tabular form.

The students referred to by the teachers in this focus group are typical secondary school students, students who have confessed that they struggle with the phenomenon of mathematics anxiety.

During the discussions, it was found that in the teachers' perspective, there are no gender differences in terms of mathematics anxiety: both girls and boys may be afraid of mathematics. This conclusion is also validated by the Pisa 2012 tests: although, globally, there are countries where the phenomenon of math anxiety is more impactful among girls, in Romania, no significant effects of this gender differentiation were found (OECD, 2012).

From the teachers' perspective, it can be concluded that the students' behavioral engagement had both productive and counterproductive elements, which can lead to math anxiety. Math anxiety is decreasing when students are involved in classwork, when they ask questions and when they do their homework.

In an attempt to stimulate student engagement in class, teachers strived to create relevant, interesting, and enjoyable instructional opportunities. A teacher stated: "I used engaging educational platforms such as My Koolio (<https://www.mykoolio.com/>) and Brio (<https://brio.ro/>), and thus my students said that mathematics could be fun to deal with". Another teacher also remarked on the students' math anxiety "there were students who no longer answered class because of the fear of giving incorrect answers with their microphone turned on". Several teachers stated that every class, there were students who had their camera and microphone turned off, avoiding answering the teachers' questions. This fact could also be a proof of their math anxiety.

Table 1 Investigating question 2 from the focus group

Question 2	Topic	Subtopic	Category
"How would you characterise your students' behavioral engagement in online courses?"	Negative aspects of the students' engagement	Non-video Non-audio Online games	The students' engagement in online courses (SEO)
	Positive aspects of the students' engagement	Involvement Answer Questions during classes Doing homework The joy of using online platforms	

Regarding the phenomenon of math anxiety, teachers say they have noticed this phenomenon in students, describing more a form of cognitive anxiety, manifested by students by anticipating failure or avoiding participation in online classes. Thus, a teacher stated: "there were situations in which some of the students avoided answering my questions, then, when they heard the correct answer, they said that they thought the same but were afraid that their answer was wrong".

They also identify the student's lack of digital skills (DC) as a potentiating factor in math anxiety. The teachers noticed that "some of the students did not upload the math assignments on time, accumulating gaps in math, because they did not know how to use Classroom".

Table 2 Investigating question 3 and question 4 from the focus group

Question 3 and questions 4	Topic	Subtopic	Category
"Have you noticed any students with math anxiety during online teaching?"	Math Anxiety	Characteristics of anxiety about mathematics Differences from general anxiety	Perceived Level of Math Anxiety (PLMA)
"Could you mention a case of a student dealing with math anxiety?"	Cognitive math anxiety	Fear of working Avoiding online connection Turning the web cameras off	Perceived Level of Math Anxiety (PLMA)
	Negative emotions towards mathematics	Worry	

The main causes of math anxiety, teachers listed, in particular, the lack of math knowledge caused by poor students' engagement (SEO) and digital skills of the students (DC). Thus, compared to classical education, the lack of digital skills stands out as the cause of the anxiety caused by mathematics: "there are students who do not know how to upload homework correctly, take pictures of them and then avoid handing them in to their teachers; they avoid connecting to certain educational platforms because they do not have the necessary digital skills".

The answers of the teachers highlight the link between general anxiety and anxiety caused by mathematics, but also the specificity of mathematics anxiety: "they are talkative and involved students but anxious about mathematics", remarked a leading professor; link also confirmed by specialized literature (Ní Fhloinn, 2021; Lanius et al, 2022). Another cause mentioned by teachers is that of the pressure exerted by parents: "there are parents who only want grades of 10 (the best mark in Romanian system) for the student to be admitted to prestigious high schools".

Table 3 Investigating question 5 from the focus group

Question 5	Topic	Subtopic	Category
What is the most important cause for students' math anxiety from your point of view?	Causes of math anxiety	Lack of math knowledge Lack of general skills The general anxiety of the student Failure to do homework The pressure exerted by parents	Perceived Level of Math Anxiety (PLMA)

Among the strategies to reduce math anxiety, teachers listed teaching strategies, school counselors and school psychologists' advice and educational platforms that have attractive, animated content. Ramírez et al. (2018) showed that cognitive-behavioral

therapy has a positive impact on the phenomenon of anxiety caused by mathematics. The use of literature in teaching mathematics might be another strategy to reduce mathematics anxiety (Furner, 2018). The teachers' answers are thus supported by the specialized literature: "I tell the students about how certain theorems were discovered in order to stop being stressed".

Table 4 Investigating question 6 from the focus group

Question 6	Topic	Subtopic	Category
How could you help a student struggling with math anxiety?	Mathematical anxiety reduction strategies	Teaching strategies Attractive educational games Differentiated training School psychologist	Perceived Level of Math Anxiety (PLMA)

Teachers have noted that in the online environment, students benefit from several strategies to reduce anxiety caused by mathematics and a possible explanation would be the attractive digital content and another explanation would be the distance given by the screen of the device they use. The teachers emphasize the benefits of online education: "I use various educational platforms or use phone applications and the children are happy to show me how to use these digital tools; I also give the tests using a standardized testing platform and the students agree to this way of assessment". And yet, the perception of teachers is that students who do not have digital skills face the math anxiety phenomenon because they cannot access these educational platforms properly, they cannot upload assignments on time and they cannot use these platforms when they have to take tests.

Table 5 Investigating question 7 from the focus group

Question 7	Topic	Subtopic	Category
What differences and what similarities have you noticed in comparison with the physical teaching?	The competence of using online resources (DC)	Less online math anxiety Intensity Frequency Digital educational platforms Educational games Standardized tests	Perceived Level of Math Anxiety (PLMA)

The answers received to questions 8 and 9 showed that teachers want to know more information about the phenomenon of mathematics anxiety. A professor stated that: "I propose the elaboration of an explanatory guide of this phenomenon, a guide that should include the ways we identify and treat this phenomenon, and also he strategies for the prevention of this impactful phenomenon for students".

Table 6 Investigating question 8 and 9 from the focus group

Question 8 and question 9	Topic	Subtopic	Category
Our intention is to find out more information about students' perceived level of math anxiety. Do you think we have skipped some other important questions? Is there something you would add?	Adjacent conclusions	School homework Profile of the Generation Z student Anxiety about other disciplines	Conclusions
What would you like to know about this phenomenon when we have finished this study?	Expectations on the phenomenon of anxiety caused by mathematics	Math Anxiety Reduction Strategies Explanatory guide Scales for measuring mathematics anxiety	Conclusions

4. Conclusions

Our study aimed to cover a gap in terms of studies on the observation of the phenomenon of math anxiety in the context of online education during the Covid-19 pandemic. Remote education caused by the Covid-19 pandemic led to the emergence of methods for teachers to encourage student independence in learning (Al Ghazali, 2020). However, not all students were prepared to learn math online, which led to the phenomenon of math anxiety.

Our findings showed that the way of how teachers perceived the students math anxiety is mediated by two different processes:

- (1) the students' engagement in online learning (SEO)
- (2) digital competences (DC)

Regarding the student online engagement (SEO), our study shows that the students who are less involved in online learning activities are more likely to develop math anxiety. A possible explanation would be that these students gather math gaps and then they lose their self-efficacy (Bandura & Schrenk, 1981); so, the need to conduct new studies related to this phenomenon becomes quite prominent.

Regarding the digital competences (DC), as other studies have suggested (Attard, 2020; Camacho-Zuñiga, 20 21), it has been confirmed that the use of educational platforms has important advantages due to the animated content, the presence of engaging videos and the creation of a digital environment with which students are familiar.

However, after analyzing the data collected, an interesting phenomenon has been noticed, namely that students feel safe and show less math anxiety when they have essential digital competences.

The conclusions of our study show that the phenomenon of math anxiety is also present in the online environment and can be diminished by the student engagement in properly using different educational platforms. A limitation of our research is the fact that we have based our research only on the opinion of teachers and on specialized studies, and thus we consider it necessary to undertake new studies in which the opinion of parents and students should be more taken into consideration.

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Clinical supervision of experienced school counsellors in Israel

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Abstract

The purpose of the study was to examine the prevalence, type and frequency of supervision provided to school counsellors, as well as to map experienced counsellors' expectations of the supervisor. The research question guiding this study was: What is the platform, type and frequency of supervision provided to school counsellors, and what are experienced counsellors' expectations of the supervisor? An online survey was employed to collect data for the present study from the respondents (N=78). The survey was distributed to Israeli counsellors via an announcement posted on a dedicated WhatsApp group. The survey results indicated that %71 of the counsellors receive supervision, where 44% receive individual supervision and 78% group supervision. Sixty-seven percent of the supervision sessions are provided at the school and the rest at the district and in workshops. Regarding experienced counsellors' expectations of the supervisor, a higher proportion than novice counsellors noted the following topics: additional points of view, space for deliberation, new intervention tools, good understanding of their feelings, emotional ventilation, new knowledge in counselling, as well as the wish to receive emotional support and clear guidance. This data suggests that experienced counsellors need regular supervision to enhance their awareness and professionalism and that their needs change throughout their years of work. At the same time, some counsellors still need the dominant and directing presence of a supervisor even after many years of work, a fact that indicates personal aspects that affect the role of the counsellor. This paper contributes additional knowledge concerning experienced school counsellors and suggests expanding the range of possibilities according to counsellors' needs.

Key words: Lifelong supervision, Experienced school counsellors, Clinical supervision.

1. Introduction

Most caring professions provide supervision as a matter of routine. Supervision plays a significant role in the professional development of professionals, including school counsellors. Supervision is defined as "An intervention provided by a more senior member of a profession to a more junior member or members of that same profession. This relationship is evaluative, extends over time, and has the simultaneous purposes of enhancing the professional functioning of the more junior person(s), monitoring the quality of professional services offered to the client(s) she, he, or they see(s), and serving

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as a gatekeeper of those who are in the particular profession“ (Bernard & Goodyear, 1998, p. 6).

Two dominant types of supervision are found in the literature: clinical and administrative. Administrative supervision focuses on the tasks and duties facing the counsellor, periodic evaluations and adherence to procedures, as well as meeting deadlines, documentation of counselling processes, and identifying and developing personal and professional goals (Henderson & Gybers, 2006; Dollarhide & Miller, 2006; Tromski-Klingshirn & Davis, 2007). Clinical supervision focuses on the counsellor's development as a professional while developing personal awareness through a process of reflective evaluation (Bernard & Goodyear, 2009). Development of reflective thinking is achieved by observing the counsellor's actions, interactions, thoughts and feelings in the supervision session as well as in the counselling processes (Neufeldt, Karno & Nelson, 1996; Ward & House, 1998). The two types of supervision support the counsellor's role but provide a different kind of feedback aimed at streamlining the counsellor's work and strengthening his/her sense of competence and commitment to the job (Kreider, 2014; Somody et al., 2008).

In university training programs for school counsellors, clinical supervision is an essential and fixed component that supports the process of professional consolidation and encourages processes of reflection and self-awareness (Baggerly & Osborn, 2006; Borders & Usher, 1992; Oberman, 2005). Most experienced counsellors receive no clinical supervision after receiving their counselling license (Erhard, 2014). Researchers who examined the frequency of supervision among counsellors pointed out that clinical supervision takes place partially and infrequently, while administrative supervision is delivered regularly (Somody et al., 2008; Perera-Diltz & Mason, 2012).

According to the ethical code of school counsellors provided by the Israeli psychological counselling service (SHEFI, 2012), counsellors are obliged to continue studying and developing and to expand their awareness, as well as to enrich their counselling tools, in order to meet the many needs that arise. This is compatible with the ethical code of other countries (Henriksen, Henderson, Liang, Watts, & Markes, 2019)

Despite the agreement regarding the code of ethics and the need of counsellors to be conscious of themselves and to continue developing professionally, studies have shown no uniformity regarding the supervision that counsellors receive during their training and professional work in different countries – in Israel, the US, and Europe (Henriksen, Henderson, Liang, Watts, & Markes, 2019). In Europe, there is greater openness to the subject of supervision, although there is less distinction between the different needs of the caring professions (Bond & Holland, 2010). In contrast, the British Association for Counselling and Psychotherapy and the Counselling Federation of Australia require regular, on-going supervision for fully licensed professional counsellors (Grant & Schofield, 2007).

The researchers are disagreed as to the significance of clinical supervision throughout the counsellor's years of work. Some educators believe that lifelong learning leads to an

increase in competence and mastery among counsellors over their professional lifespan (Granello, 2010; Rønnestad & Skovholt, 2013). In contrast, others have noted a concern that lifelong supervision might impair the counsellor's professionalism, professional independence and self-monitoring, and that after the training stage the counsellor is expected to be capable of performing self-reflection and self-direction independently (Littrell, Lee-Bordin & Lorenz, 1979).

Most studies on supervision focused on the training stage of counsellors, and there is a gap in knowledge regarding the needs of experienced counsellors and existing supervision processes (Borders & Cashwell, 1992; Page & Wosket, 2015). The purpose of the current study is to enhance the knowledge concerning the supervision needs of experienced counsellors.

Studies conducted in the US by Kolodinsky, Draves, Schroder and Lindsey (2009), Roberts and Borders (1994), Sutton and Page (1994) and Baggerly and Osborn (2006) mentioned the benefits of receiving supervision. These include responding in a way that is more adapted to the needs of pupils (Page et al., 2001), enrichment of professional experience (Agnew et al., 2000; Dollarhide & Miller, 2006), development and expansion of counselling skills (Dollarhide & Miller, 2006) and higher quality counselling skills (Bradley & Ladany, 2001). Additional benefits are a more precise definition and clarification of counselling skills (Benshoff & Paisley, 1996) and the development of ethical sensitivity (Henderson, 2009).

Studies indicate that counsellors who did not receive supervision reported a heavy workload, burnout and involvement in multiple non-counselling tasks (Kirchner & Setchfield, 2005; Leuwerke et al., 2009). At the same time, surveys indicate that the number of counsellors who receive supervision is much smaller than those who request it (Page et al., 2001; Studer & Oberman, 2006; Perera-Diltz & Mason, 2012). A small number of studies indicate the prevalence and frequency of supervision provided. A survey by Page et al. (2001) found that 13% of school counsellors receive individual clinical supervision and only 10% receive group clinical supervision. Twenty-nine percent reported weekly peer group supervision (without a facilitator). Fifty-seven percent of the counsellors wanted regular clinical supervision and 33% said that they do not require clinical supervision. A similar survey conducted in Maine (Sutton & Page, 1994) found that 63% of the counsellors want clinical supervision but only 20% receive it. These surveys point to a gap between supply and demand and to the fact that there are counsellors who do not want supervision, which raises the question of whether these counsellors understand the contribution and importance of supervision for their professionalisation.

Studer and Oberman (2006) further explored ways in which counsellors are exposed to supervision and understand its contribution. Their research focused on how counselling students were trained to work with regard to the ASCA (American School Counselor Association) National Model (2005), indicating its importance for learning and professionalisation. The majority said that they had not received training in the field of

supervision, though 49% said that they relied on the ASCA National Model 2005 in their school, where supervision is part of the standards expected of a counsellor.

Perera-Diltz and Mason (2012) conducted a follow-up study to that of Page et al. (2001), which found that counsellors' years of experience have an impact on receiving and providing supervision. The most substantial relationship was found between providing supervision and years of experience (Cramer's $V = 0.4$). Perera-Diltz and Mason (2012) pointed out that there is an increasing trend of counsellors who provide supervision (41.1%), which indicates a desire to enhance their professionalism and professional autonomy. Nonetheless, the researchers noted that only 10.3% of the counsellors received weekly supervision and most of the sessions took place once a fortnight or once a month.

According to the survey by Perera-Diltz and Mason (2012), 28.3% of the counsellors receive supervision from other counsellors but only 10.3% receive supervision once a week. Although there is a trend of improvement in the number of counsellors who receive clinical supervision, they still do not reach the rate of supervision in other mental health professions (Perera-Diltz & Mason, 2012). Also, their role perception, which views supervision as an integral part of their work efficiency and professional responsibility, is not unequivocal. It can be concluded that there is a parallel between how counsellors perceive supervision and how the official authorities perceive its importance and allocate resources for this process.

Another finding of Perera-Diltz and Mason's (2012) study is that 71% received administrative supervision from the school headmaster or inspector. This finding relates to the survey by Page et al. (2001), which found that administrative supervision is the most common type of supervision among counsellors. This finding reinforces the need to assess the efficacy of the counsellor's work and examine his/her compliance with the school objectives by non-counselling parties. Also, 31.7% participated in peer supervision provided by non-counselling parties. This can be understood as a search by counsellors for sources of professional support and suitable settings for discussing professional dilemmas, where in the absence of readily available clinical supervisors in counselling the peer group offers such an opportunity.

In Israel, in contrast, the policy with regard to supervision is that novice counsellors are obligated to receive clinical supervision in a group once a fortnight (40 annual hours) for two years from school counsellor supervisors until they undergo an evaluation process by the inspector and receive their license. At the same time, they are obligated to participate in workshops (40 annual hours) to build school prevention and development programs, for three years. Then, all counsellors are obligated to take part in professional enrichment through workshops and lectures (30 annual hours). Side by side with this official policy, there is one district in the Ministry of Education, the rural district, where the local administrative decision is to provide supervision that combines clinical and administrative contents to experienced counsellors (those with 5-30 years of experience). In addition, some counsellors receive supervision based on a local

administrative decision of the educational setting, provided by school elements (experienced counsellor, psychologist, social worker) at the headmaster's discretion and as a result of the counsellors' needs in the field.

A search for materials on the prevalence of supervision in Israel shows that no surveys were conducted in recent years. In addition, the existing surveys do not distinguish between clinical and administrative supervision, which makes it hard to compare the results to other surveys from around the world. In a national survey of counsellors in Israel, which included experienced and novice counsellors (Erhard, 2008), about 38% responded that they receive regular professional supervision. Compared to the previous decade (Erhard, 1998) there was a 5% increase, from 33%. According to the survey, as the counsellors' tenure increases, the rate of those who receive supervision drops. Among counsellors with 3-6 years of tenure, only 36% receive supervision. The most common setting is that of group supervision (72%). At the same time, about half the counsellors receive personal supervision or both types of supervision. The average frequency of supervision is about two sessions a month. Seventy-seven percent reported that they perceive personal supervision as having a higher value, while only half of the counsellors estimated that group supervision had a significant contribution to their profession.

Although surveys have indicated a positive increase in the number of counsellors who receive supervision throughout their career, there is still a discrepancy between the number of counsellors seeking supervision and those who receive it (Page et al., 2001; Studer & Oberman, 2006; Perera-Diltz & Mason, 2012). School counsellors, as mental health professionals, have been operating within the educational system in Israel from the 1960s, as part of the school's support system, but their role definition has evolved considerably. In Israel, as in the United States, the role of the counsellor has changed from vocational guidance to a more inclusive role aimed at assisting all pupils with their academic achievements, personal-social development and career development, in order to help them become adaptive adults (ASCA, 2005; Dashevsky, 2009).

Side by side with assisting pupils as individuals, counsellors are required to perform wider observation at the school as a social organisational system and to promote the mental well-being of all those involved in the organisation: pupils, teachers, the management and parents. The expansion of the role requires the counsellor to display, in addition to a command of counselling skills on the individual level, also skills on the systemic level: work in cooperation with the pedagogic staff, consulting with multi-professional teams, instructing teaching staff, supervision of teachers, work with large groups of pupils, and activation of development and prevention programs among pupils (Wingfield, Reese & Wels-Olatunji, 2010; Erhard, 2014).

Theories of career development can help understand the unique needs of experienced counsellors and, accordingly, assist in planning their professional development (Cinamon & Hellman, 2004; Rønnestad & Skovholt, 2013). However, career development theories do not present a fixed linear model of stages but rather schematic

stages that are affected by various ever-changing challenges, a process that requires flexibility and repeated transition between the stages for reorganisation (Patton & McMahon, 2006; Savickas et al., 2009; Super, 1980). The theory emphasises the need for the supervisor to adapt the style and structure of supervision to the changing needs of the supervisee.

Stoltenberg (1981) suggested a model for observing the development of counsellors within the supervision: 1. The counsellor is dependent on the supervisor, insecure, with a limited consciousness and high motivation to succeed. At this stage the supervision is structured, guiding, with lots of support; 2. The counsellor moves between dependency on the supervisor and autonomy, begins to develop a consciousness, needs less structured and guiding supervision; 3. The counsellor has more confidence and consciousness. At this stage he shares more and is willing to defend his views; 4. The counsellor is independent, with a solid professional identity, and the supervision is more consulting-oriented and collegial.

Shechtman and Wirzberger (1999) conducted a study in Israel (N=382) that examined the type of supervision that counsellors seek and to what degree it is needed, by years of experience. The findings supported Stoltenberg's model. However, the results indicated that less experienced counsellors (three to seven years) still requested structured and study-oriented supervision (Shechtman & Wirzberger, 1999). The data indicate that there are personal variables that affect the ability to transition from stage to stage, with regard to professional development.

Rønnestad and Skovholt (2013) shed further light on the career circle of counsellors, noting the process counsellors undergo as they move along the dialectic axis between development and stagnation. The researchers describe five processes: 1. Transition from reliance on techniques and external orientation to flexibility and authenticity in the counselling process; 2. Transition from receiving information by experts to an independent understanding of knowledge; 3. Transition from relying on external authority to relying on internal sources; 4. Transition from reliance on theoretical and professional knowledge to reliance on generalisations accumulated from experience; and 5. Transition from separation of the "self" from the professional role to integration of the role and work style. They note that for counsellors to develop and benefit from supervision and learning they need to develop introspection and reflection, i.e., work on intrapersonal processes.

Researchers note the need of experienced counsellors to enhance their understanding, work and consciousness (Harries & Spong, 2017). Experienced counsellors are rooted in the school system, which generates organisational pressures and conflicts (Seashre Luis & Lee, 2016; Maitels & Tubin, 2022). At the same time, counsellors are more aware of transference and countertransference processes that occur within their relationships and also want to retain their professional position, which will allow them to preserve the relationships as well as contributing to their professional

and personal development (Walsh Rock, 2018; Harries & Spong, 2017). This, side by side with the desire to be professional and accountable in their work (Buckingham, 2012).

Hence, the current study contributes additional knowledge on the topic of supervision in Israel and the place of experienced counsellors within this supervision. The goal of the current study, presented in this paper, was to examine the prevalence, type and frequency of supervision provided to school counsellors in Israel, as well as to map experienced counsellors' expectations of the supervisor. The survey categories were designed based on thematic analysis of twenty interviews conducted in a wider qualitative study.

2. Methodology

This survey is part of a wider qualitative study on the contribution of supervision to experienced counsellors. The purpose of the study was to examine the prevalence, type and frequency of supervision provided to school counsellors, as well as to map experienced counsellors' expectations of the supervisor. The research question was: What is the platform, type and frequency of supervision provided to school counsellors, and what are the experienced counsellors' expectations of the supervisor? The research hypothesis was that 40% of the counsellors receive group supervision at the district once a month and that experienced counsellors' expectations of the supervisor will focus on expanding their self-awareness and they will be less inclined to seek clear guidance, encouragement and confirmation of their work than novice counsellors.

2.1 The research approach

An online survey was conducted in March 2022 among 78 respondents, encompassing 13 questions. The form was created via Google Forms and was utilised to collect data for the present study. The survey was distributed to Israeli counsellors via an announcement posted on a dedicated WhatsApp group and the average time it took to complete the form was 6 minutes.

The survey was divided into three parts. At the beginning of the survey, demographic questions were asked regarding age, years of seniority, in which district they work and what additional training had they received. Additional questions focused on the type of setting in which they receive supervision (group, individual, workshop around a topic), the supervisor's training (school counsellor, psychologist, social worker), the platform, i.e., the geographical location of the supervision (at the school, district, or workshops in the district) and the frequency of the sessions (once a month, once a week, three or four times a year).

The one multiple-choice question was: What are your expectations of the supervisor? The question was constructed of categories that reflected on intrapersonal and interpersonal processes which occur in the supervision that arose from the interviews via the broad qualitative study, i.e., different points of view, understanding the school counsellors' feelings, new knowledge, space for deliberation, validation of their work,

partnership, explicit instruction on what to do, support, encouragement, thought organisation, new counselling tools, and ventilation.

A convenience sample consisting of Israeli respondents was employed. A total of 78 usable questionnaires were collected over one week. Twenty questionnaires were omitted due to missing data. The sample size is consistent with Boomsma's (1982) minimum sample size recommendations.

2.2 Participants

The research sample in the current survey consisted of N=78 respondents. Of all counsellors in the sample, 72% were from the rural district. The rest, 28%, were from other districts (northern, central, Jerusalem). The research population does not reflect the entire population of school counsellors in Israel but it allowed observation of a group of counsellors of whom most receive supervision to different extents and in various manners as part of the local supervision policy in the district.

Regarding the seniority of counsellors in the survey, 23% had 0-5 years of seniority, while 77% of the counsellors had 5-30 years of seniority. The age of the counsellors in the study ranged from 25-65. All the counsellors had a Master's degree and 96% of the respondents were women. The research data show that the counsellors continued to study various disciplines over the years, as noted by 77%. This reflects their need to continue developing and to enhance their professionalism.

2.3 Data analysis

The qualitative nominal data was coded with deductive reasoning to test an existing theory by labelling the Excel answers with numbers, starting at one. Then, descriptive statistical analyses were performed to offer a general view of the sample's characteristics and data distribution. The descriptive analyses included an assessment of skewness and kurtosis. An assessment based on the < -1 and $> + 1$ threshold affirmed that the dataset is asymmetrically distributed, the data were coded as to the thematic analysis and added to the Excel sheet to be used via graphs and pivot tables.

3. Findings

It was evident that 78% of the respondents were receiving group supervision in different types of settings. Forty-four percent noted that they were receiving individual supervision and would like to continue doing so. Twenty-seven percent noted that they were not receiving individual supervision but would like to, and 16% noted that they were not receiving and did not want to receive, individual supervision.

On the question of the platform, i.e., the geographical location of the supervision, 67% noted that the supervision takes place at the school, 15% at the district, 7% at PCS units (meaning supervisors from different disciplines) and 7% as part of the supervision group provided in the first two years of work.

On the question of the frequency of the supervision, 31% noted that they receive supervision once a week, 40% once a month, and 22% noted that they receive supervision 3-4 times a year. These data indicate that 71% of the counsellors receive regular continuous supervision throughout the year.

On the question of the respondents' expectations of the supervisor, there were many options. Among experienced counsellors with 5-30 years of experience, 96% noted additional points of view, 65% sought a space for deliberation and 51% noted cognitive organisation (see Table 1), These data indicate the significance of the supervision for counsellors as a space for self-examination.

Table 1: Distribution of counsellors' expectations of the supervision by years of experience

Years of experience	0-5	5-10	10-15	15-20	20-30	5-30
Additional points of view	78%	86%	100%	100%	100%	96%
Understanding my feelings	44%	14%	73%	33%	38%	39%
New knowledge	50%	71%	54%	67%	42%	55%
Space for deliberations	67%	43%	82%	55%	73%	65%
Emotional ventilation	67%	43%	64%	44%	54%	51%
Partnership	28%	29%	36%	22%	31%	30%
Clear guidance on what to do	11%	43%	18%	33%	19%	26%
Validation of their actions	28%	36%	45%	33%	19%	30%
Support	39%	43%	64%	78%	58%	58%
Encouragement	28%	36%	27%	33%	11%	23%
Cognitive organisation	44%	50%	54%	55%	54%	51%
New intervention tools	55%	86%	82%	100%	73%	81%
Additional tools	22%	36%	36%	0	8%	18%

The diversity among counsellors with different lengths of experience might indicate changing needs and availability over the years. It can be assumed that over the years counsellors become gradually more aware of their subjectivity and of the complexity of incidents and understand the value of supervision and consultation, which they utilise.

Among experienced counsellors with 15-20 years of experience, 100% sought new tools for intervention, compared to 55% of counsellors with 0-5 years of experience. It can be assumed that in the course of their work counsellors encounter more topics in which they would like to specialise and expand their toolbox. Fifty-four percent of counsellors with 10-15 years of experience noted that they expect the supervisor to provide them with new knowledge, and on this topic too there is a variance between those with different lengths of experience (see Table 1). The supervisor's professionalism and training are important for providing the counsellors with the new knowledge they seek.

Seventy-three percent of counsellors with 10-15 years of experience seek to better understand their feelings, versus 39% of all counsellors with 5-30 years of experience. A variance can be seen by years of experience (see Table 1). The topic of understanding feelings was relatively low compared to the room counsellors give to cognitive organisation, which might indicate that the supervisors provide less of a focus on counsellors' feelings and the latter seek a way of reorganising how they perceive reality.

Another example is that 64% of counsellors with 10-15 years of experience noted needing emotional ventilation, a percentage that diminished over the years but was close to that found among novice counsellors, 67%. Also, counsellors' wish for support rose with their years of experience (see Table 1). This might indicate that experienced counsellors know, based on their experience, what they can receive from the supervisor and that this is a safe and growth-generating space for them (see Figure 2).

Experienced counsellors with 10-15 years of experience noted that they need the supervisor as a partner, 36%, more than novice counsellors. There is also a difference between those with different lengths of experience, which might indicate the changing significance of the supervisor (see Figure 2).

Twenty-six percent of experienced counsellors with 5-30 years of experience noted that they need clear guidance on what to do. This is evident among counsellors with various lengths of experience, possibly indicating that experienced counsellors have different dependency needs, which is more characteristic of earlier stages of professional development.

Among counsellors with 5-30 years of experience, 30% noted that they seek the supervisor's approval of their actions, noted by 45% of counsellors with 10-15 years of experience. This might indicate the importance of the supervisor as a professional authority, which is more characteristic of early stages of professional development (see Table 1).

Charting the most dominant issue on which counsellors would like to receive the assistance of supervisors by years of experience, shows that 86% of counsellors with **5-10 years of experience** noted additional points of view, 71% seek new knowledge in counselling and 43% seek clear guidance from the supervisor. There was a rise in requests for support relative to those with 0-5 years of experience. Moreover, they noted a desire for encouragement, 36%. This might indicate that at this stage counsellors feel a considerable lack of knowledge and try to expand their toolbox, with an attempt to extend their professionalism. The fact that a high percentage need clear guidance might indicate overload on one hand and a difficulty to focus on a single issue due to the heavy task load, or alternately a sense of responsibility and concern that they might make a mistake.

When charting the dominance of counsellors' expectations of the supervisor among counsellors with **10-15 years of experience**, an emphasis is evident on expanding comprehension and on attempts to understand the complexity of events in their surroundings, as well as on seeking different points of view. One hundred percent of the counselors noted this. They also noted their desire to organise their thoughts, 54%. Of all counsellors, 73% noted a desire to understand their feelings and 64% noted use of the supervision for purposes of ventilation. This was the highest level when compared to counsellors with other lengths of experience, which might indicate a burst of new awareness. It may be assumed that the counsellors are more aware of their feelings and therefore of the impact of these feelings on their decisions and choices. There could be a

possible progression here regarding integration between thoughts and feelings, as well as higher levels of regulation and a deepening of their self-awareness.

There is a decline in the wish for clear instruction by the supervisor, to 18%, and counsellors seek more validation of their work by the supervisor, 45%, indicated that they are more inclined to share their professional work, which might attest to a sense of confidence and a desire to reach deeper levels. They also seek the supervisor's response. They see the supervision as a space for deliberation, 82%, and seek more partnership of the supervisor in their work, 36%, compared to those with other lengths of experience (see Table 1).

When charting the dominance of counsellors' expectations of the supervisor among those with **15-20 years of experience**, it is evident that they seek additional points of view, as stated by 100%, as well as organisation of their thoughts, 55%. They also seek new tools for intervention, as stated by 100%, as well as new knowledge in counselling, 67%. They seek more support from the supervisor, 78%, than do those with 10-15 years of experience. This might once again indicate a better understanding of the contribution of supervision.

Interestingly, an increase is evident in the need to receive clear guidance, from 18% to 33%, as well as a decline in the need to receive the supervisor's confirmation of their work among those with 10-15 years of experience, from 45% to 33%. They also need less sharing of their responsibility (a partner), which 22% sought versus 36% among those with 10-15 years of experience. This might indicate that the majority feel more confident in their work and that their relationship with the supervisor is more collegial and they are less in need of the supervisor as a figure of authority or, alternately, the rise in the need for clear guidance at this developmental stage raises several possible interpretations that require a more profound look at personal parameters. Moreover, the data indicate a drop in the expectation that the supervisor will help them understand their feelings, from 73% to 33%, at this stage in the career, as well as a drop in the expectation that the supervision will be a space for emotional ventilation, from 64% to 44%, indicating that counsellors enjoy more regulation and a greater consciousness of themselves .

Charting the dominance of counsellors' expectations of the supervisor among those with **20-30 years of experience** showed that they seek additional points of view, as stated by 100%, as well as organisation of their thoughts, 54%. There is a decline in the desire to receive intervention tools, from 100% to 73%, and in the desire to receive new knowledge about counselling, from 67% to 42%, which might indicate that they feel they have sufficient counselling tools for high standard work. Then again, there is a rise in the desire to understand their feelings, from 33% to 38%, and a rise in the wish that the supervisor will facilitate emotional regulation (ventilation), from 44% among those with 15-20 years of experience to 54%. The counsellors would like the supervision to offer a space for deliberation, 73%, which might indicate a desire to invest more in their own consciousness and professionalism. There is a significant drop in the desire for clear

guidance as well as in the need to receive confirmation of their work, with the same percentages, from 33% to 19%. The data also indicates a drop in the desire for the supervisor's support, from 78% to 58%, although the need for support still existed.

4. Discussion

The research question guiding this study was: What is the platform, type and frequency of supervision provided to school counsellors, and what are the experienced counsellors' expectations of the supervisor? The research hypothesis was that 40% of the counsellors receive group supervision at the district once a month and that experienced counsellors' expectations of the supervisor will focus on expanding their self-awareness and they will be less inclined to seek clear guidance, encouragement and confirmation of their work than novice counsellors.

First, it is evident from the survey that the rate of counsellors who receive supervision is higher than the data generated by the previous survey conducted in Israel (Erhard, 2008). This may be related to the fact that most of the counsellors in the current survey belong to a district where the inspectorate has a policy of supervision for all counsellors and allows time for this within the daily counselling work. It is evident from the survey that there is a rise in the participation of counsellors in group supervision versus Erhard's (2008) survey. Also, a certain decline in the rate of counsellors who receive individual supervision is evident in the current survey, compared to that of Erhard. Regarding the frequency of sessions, there is no difference between the mean frequency of sessions in the current study compared to Erhard's (2008) survey. The research hypothesis was refuted, as the frequency of the supervision sessions was found to be higher than that expected.

Other surveys in the US noted a lower prevalence of counsellors who receive clinical supervision than in Israel. Page et al. (2001) found that more counsellors receive individual than group supervision. Counsellors wanted regular clinical supervision and some counsellors noted that they do not need clinical supervision. This study indicated a discrepancy between the supervision provided to counsellors in practice and that desired by the counsellors. In the current survey as well, counsellors noted that they do not receive individual supervision but would like to.

The study by Perera-Diltz and Mason (2012) noted that more counsellors received administrative supervision than clinical supervision and only some received group supervision from a mental health professional, where the rest received it from the inspectorate rather than from counselling professionals. Perera-Diltz and Mason (2012) pointed out that there is an increase in supervision provided by school counsellors, which indicates a desire to enhance their professionalism and professional autonomy. Then again, many counsellors receive supervision from another mental health professional (psychologist or social worker).

Also, in the current survey it is possible to see that a high percentage of supervision is provided by school counsellors who received training as supervisors and are made

available to the counsellors through the SHEFI (the psychological counselling service). At the same time, counsellors who received supervision from other professionals (psychologists, social workers, more senior school counsellors at the school) did so as a result of their own independent initiatives as well as local decisions of headmasters with no funding, which might indicate their great need for such a space. As a rule, all the experienced counsellors receive their supervision in their free time and not as part of their work hours.

It is therefore evident from these surveys that there is an increase in counsellors who receive supervision in Israel. This may be related to the policy of the Ministry of Education. Needs arising from the field motivate counsellors to seek supervision and there may be an increasing awareness of the contribution of this domain. Moreover, a conspicuous fact is that school counsellors participate in group supervision more than in individual supervision. In Israel this reflects the policy of the Psychological Counseling Service. It is also evident from the study that more supervision is being provided by counsellors, as evident in the study conducted by Perera-Diltz and Mason (2012) as well. This is probably related to policy and to the fact that more counsellors are undergoing a supervision course, as well as to the desire of experienced counsellors to provide supervision as an expression of their need for professional development.

Studies have noted the importance of distinguishing between the needs of novice and experienced counsellors (Page & Wosket, 2015). Developmental theories noted the fact that there are stages in the development of counsellors, which do not depend on the counsellor's years of experience or work setting but rather on personal variables (Shechtman & Wirzberger, 1999; Hellman & Cinamon, 2004). Hence, it can be assumed that when analysing data presented by years of experience, there are counsellors who despite their years of experience are in earlier developmental stages. Nevertheless, the survey may indicate a certain trend of counsellors in the different stages with regard to expectations of the supervision, by identifying the dominance of the topics among each group.

Regarding the hypothesis whereby experienced counsellors' expectations of the supervisor will focus on expanding their self-awareness and they will be less inclined to seek clear guidance, encouragement and confirmation of their work than will novice counsellors, the following findings were revealed. When the experienced counsellors (5-30 years of experience) were asked about their expectations of the supervisor, higher percentages than among novice counsellors (0-5 years of experience) answered that they need different points of view, space for deliberation, space for cognitive organisation, new tools for intervention, and the support of the supervisor, which might indicate that they are more aware of their subjectivity and of the complexity of events, including the importance of sharing and the need to continue developing and growing professionally. This is confirmed by other studies (Mehr, Caskie & Ladany, 2015; McMahan & Patton, 2000), which noted the importance of supervision as a space for self-examination and exploration, as well as for better understanding of the consultants (Cook & Sackett, 2017).

It is evident that the data varies by length of experience, which might indicate development processes of the counsellors and changing needs. This was also noted by theories on career development (Hellman & Cinamon, 2004; Shechtman & Wirzberger, 1999).

Experienced counsellors want to deepen their understanding of their relationships and the parallel relationship between the supervision and counselling. They also seek to contain and understand complex processes, be capable of choosing between different interventions, dealing with the counsellor's and client's difficult emotions and examining the interplay between the counsellor's "self" and his/her "professional self" (Page & Wosket, 2015; McMahon & Patton, 2000).

It is also evident that school counsellors (5-30 years of experience) emphasise cognitive dimensions more than emotional dimensions within the process. Experienced counsellors noted in the survey that they use the supervision less as a space for ventilation to regulate themselves emotionally. As a rule, they are less occupied with understanding their feelings, although in the distribution by length of experience it is evident that those with 10-15 years of experience are more occupied with this.

This observation was reinforced in a study by Luke, Ellis and Bernard (2011), who distinguished between the supervisors' outlook in school counselling and that of supervisors in other mental health professions. The study noted differences between the two groups, mainly concerning the ability to accommodate a complicated cognitive situation that involves cognitive and emotional aspects, as evidenced by the ability to be in contact with personalisation skills. School counsellors focus more on aspects of intervention and conceptualisation and less on emotional aspects. This was also noted in Granello's (2002) study, who found that students in school counselling exhibited lower levels of cognitive complexity, meaning the ability to integrate personality and role facets. The cognitive and emotional skills required to do so are the ability to integrate between different perspectives while consolidating the counsellor's position and admitting a lack of knowledge or uncertainty.

This ability develops over the counsellors' years of work, from those with five to ten years of experience to those with more than ten years (Granello, 2010), while deepening self-awareness regarding the relationship between the role and the system. In the counselling field, high levels of cognitive complexity are associated with greater flexibility in the use of counselling methods, more empathic communication (Benack, 1988), less prejudice, greater multicultural sensitivity, expanding observation of the client, greater confidence, less anxiety and greater tolerance of vague situations (Jennings & Skovholt, 1999), as well as observing the counselling process and less burnout (Birk & Mahalik, 1996). As stated, the counsellors themselves evolve over the years and develop their personal capacity to cope with the complex reality, a process that is supported by the supervision.

When analysing by years of experience, it is evident that among those with 5-10 years of experience there is a desire to deepen and further establish one's work in counselling,

as well as to acquire additional counselling tools. There is a considerable focus on actual work and less emphasis on emotional aspects and self-consciousness, as well as less reliance on the supervisor's support, as noted by Hellman and Cinamon (2004).

Among those with 10-15 years of experience there is a considerable rise, according to this survey, in counsellors' desire to understand their feelings and to use the supervision as a space for ventilation, which might indicate their wish to reach deeper into themselves and expand their consciousness. At this stage they also seek more validation of their work and less guidance, as noted by Luke, Ellis and Bernard (2011). The supervisor's perception of the supervision also affects counsellors' development processes.

Those with 15-20 years of experience display a decline in the desire to receive the supervisor's validation and clear guidance, and a rise in the desire to receive additional tools for intervention. There is also a decline in the desire to understand their feelings and counsellors are less inclined to use the supervision as a space for ventilation. This may be a stage at which counsellors feel more emotionally regulated, free to choose, autonomous and aware in their work, when they are interested in studying new fields aside from counselling, as also noted by Rønnestad and Skovholt (1992), who mention in the fourth stage a transition from relying on external sources to relying on internal sources.

Counsellors with 20-30 years of experience show a decline in the desire to receive from the supervision additional tools for intervention. They only seek a space for deliberation. They may feel that they have enough tools. Once again, there is a rise in the desire to understand their feelings. This may be a stage at which they wish to focus more deeply on themselves and are occupied with integration between the personal and professional self. Rønnestad and Skovholt (1992) noted this as the fifth stage, characterised by integration between the self and the professional role and work style, a process that demands intrapersonal processes, inner observation and self-reflection.

A surprising finding that arose from the survey is that 26% of experienced counsellors (5-30 years of experience) noted a desire for clear guidance by the supervisor. This raises a question regarding the autonomy of some of the experienced counsellors. It was also noted by Shechtman and Wirzberger (1991). This indicates a different pace of development and personal variables related to the counsellor's personality.

5. Conclusions, limitations and suggestions

The study indicates an increase in the number of school counsellors who receive lifelong supervision in Israel. There are also more supervisors who come from the field of school counselling. The supervision they receive is provided partly based on resources of the Psychological Counseling Service (SHEFI) and partly by school resources that the counsellors expropriate (school psychologist, more experienced counsellors), which may indicate their awareness of the contribution of supervision to their professional and

personal development. Regarding the expectations of experienced counsellors, it is evident that they see the supervisor as a person who helps them understand the complexity of the school and of human reality, as seen through different points of view, and as a space for deliberation and for cognitive organisation, a part of the supervision to which counsellors attach considerable weight. The supervisor also supports a process of self-regulation and consciousness, as evident from the categories of better understanding of the counsellor's feelings and ventilation, which were considerably less present than aspects of organising and conceptualising reality (Luke, Ellis & Bernard, 2011).

Experienced counsellors' needs of the supervision vary over their years of work. There is a trend of transition from dependency on the supervisor to more independence, and of transition from relying on external sources to internal sources (Rønnestad & Skovholt, 1992). At the same time, some experienced counsellors still need structured and clear guidance from the supervisor. This raises a question regarding the type of supervision most suitable for them and perhaps also indicates the counsellor's personal traits (Shechtman & Wirzberger, 1999).

In a segmentation by years, it is possible to see a jump in the stage of development among counsellors with 10-15 years of experience. It seems that at this stage counsellors understand the contribution of the supervision as a space for self-exploration and as a space that enables support (Hellman & Cinamon, 2004; Shechtman & Wirzberger, 1999).

The current study focused on a limited research sample of only 78 counsellors. Most of the counsellors in the survey belonged to the rural district of the Ministry of Education, which has a policy of providing supervision to experienced counsellors in addition to the professional development provided to all school counsellors in Israel. This offers a merely partial picture of supervision in Israel. In addition, the study is based on descriptive statistics, which invites interpretation and can be judged by the readers. The survey is compatible with studies conducted on developmental theories (Hellman & Cinamon, 2004; Shechtman & Wirzberger, 1999) and can constitute a tool for observation and discourse among supervisors concerning their counsellors. It can also constitute a foundation for rethinking by policymakers regarding the policy concerning supervision provided to experienced counsellors and expanding the available options according to counsellors' needs. Moreover, the survey raises many questions that remain open, regarding the existing resources for supervision and the type of supervision received by counsellors, which invite further research on the subject.

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Video modeling and daily living skills training in students with ASD

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Abstract

This article includes multiple case studies that aim to explore the effectiveness of using video modeling on the development of daily living skills in middle and high school students with autism spectrum disorders (ASD).

In this study we used video modeling to train five daily life skills in students with ASD. The students watched the videos according to a specific procedure.

The participants in the study were four students with ASD enrolled in special education, two boys from the 8th grade, and two students (a boy and a girl) from the 9th grade.

Data were collected by applying the Waisman Scale for Daily Living Skills (W-ADL) at the beginning and end of the intervention and the Observation Grid that was completed for each individual student, during each session/session, throughout the duration of the intervention.

The results showed that video modeling is an effective technique for teaching a wide range of daily living skills to students with autism spectrum disorders that they were able to master, achieving 100% of them on their own, some in a shorter time frame, others in a larger number of sessions.

The findings and recommendations of the study suggest that video modeling is not only an evidence-based practice to train daily living skills in students with ASD, but also that the use of video modeling is beneficial because of the reusable and portable technology.

Future research should further explore the effectiveness of video modeling on the training of both daily living skills and other activities (eg: assembling a toy, playing games with peers, evacuating in case of fire, but also activities of teaching) to pre-schoolers and young school children.

Keywords: *video modeling, daily living skills, autism spectrum disorders.*

Introduction

The people with Autism Spectrum Disorder (ASD), especially children, often have difficulties in performing daily living skills independently. They need assistance in performing skills such as brushing teeth, toileting, washing clothes or dishes, doing household chores, handling money. These are very important skills that children need to know how to develop at home and at school, and which concern parents and teachers alike. Parents of children with ASD have an important role in the formation of daily life

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skills and should give increased importance to this aspect, especially since the need for self-care of these children is high, requiring additional care from families (Jasmin et al., 2009, apud Meister & Salls, 2015).

The relevance of this topic can be argued by the fact that through video modeling the acquisition of functional skills independence, the increase of participation in community and increase of the quality of life of people with ASD are achieved. Teaching different daily living skills to students with ASD (eg: personal hygiene, food preparation, shopping, etc.) can encourage their independent functioning without adult supportm shaping a safe, productive, and independent life (Carnahan et al., 2009; Shiplay-Benamou et al., 2002 apud Gardner, 2015), by promoting the acquisition of skills that will enable them to live, function, and participate in the community (Wolery et al., 1992).

Video modeling (VM) is an instructional method that can help children with developmental disabilities gain functional skill independence (Gardner & Wolfe, 2013). Teaching children with ASD to achieve independence in daily living skills is essential to their independence as adults and integration into social life. Daily living skills are also taught to students in two therapies that are being studied in special education, namely Occupational Therapy and Personal Autonomy Training, but a relatively new intervention/technique that has been and is successful in teaching life skills everyday is video modeling.

VM is increasingly being used to teach skills and abilities to children with disabilities, particularly neurodevelopmental disorders, for learning a variety of daily living skills, including self-help skills, household skills and related skills. food preparation. The advantages of video modeling include immediate feedback, the ability to repeat instructions and replay the video in parts or in full, and low cost (Athorp et al., 2022; Kellems et al., 2016; Mechling, 2005).

According to Bandura's research, attention to the model and motivation are needed for a student to imitate another. A student is more motivated to follow a role model who is "competent" and similar in physique, gender, and age. (Murray & Noland, 2015). Bandura also discovered that those who observe will imitate the behaviors presented both in the presence of the model and in its absence, but also in other similar situations.

There are three distinct types of video modeling: basic video modeling (MVB), auto-modeling video (AMV), and point-of-view video modeling (MVP). Basic video modeling (MVB) is a learning strategy in which the student watches a video recording of an actor other than the student illustrating a specific skill or routine. The method aims to change the student's behavior, which will increase his ability to acquire a skill or routine. Behavior means "any change of an entity in relation to circumstances" (Bigelow et al., 1943, p.18 apud Murray & Noland, 2015). Self-modeling video (AMV) differs from basic video modeling in one essential way: the main actor in an AMV clip is the learner himself. If in the case of basic video modeling the student was a mere spectator, in the case of self-modeling video he is the actor. Watching a clip of yourself performing the desired behavior not only teaches the student what to do, but also increases their self-efficacy.

Point-of-view video modeling (MVP) is similar to basic video modeling, recording someone other than the student—a sibling, parent, peer, teacher demonstrating the target skill or routine. What sets this strategy apart from other forms of video modeling is that the video captures exactly what the student will see when performing the skill or routine. Because the footage illustrates the target skill from the student's perspective, the clip only includes the model's hands and other social partners necessary to demonstrate the skill or routine.

This research study applies basic video modeling as an intervention technique to modify student behavior through the acquisition of a skill or routine.

Identifying methods of developing daily life skills for children with ASD in order to increase their level of independence are vital in improving their quality of life. Video modeling has been used as a tool to support the development of various skills in people with ASD since the late 1990.

There are several reasons why video modeling is particularly successful in teaching new skills to children with ASD. The visual stimulus is perceived much faster than the auditory stimulus by people with ASD (Grandin, 2005; Quill, 1997 apud Merdan, 2020). Visually perceived information may allow easier encoding in children with ASD, who show stronger preferences for watching videos, e.g., over other tasks. Videos can be perceived by the child with ASD as a recreational activity, which increases motivation and can provide a change from the daily routine (Charlop-Christy et al., 2000). Learning with the help of video modeling could increase the attention and interest of people with autism for the complete and error-free realization of the activities proposed to them.

The benefits of this technique are multiple: improving attention during activities, improving social interaction skills, improving language and the amount of functional language, understanding facial expressions and determining the student to act appropriately in social situations, decreasing inappropriate behaviors and ease of breaking routines, imitation skills, increasing the degree of independence of some activities, increasing the ability to protect oneself (a stage difficult for an autistic student to understand if presented 1:1 in a therapy), improving functional play skills, decreasing the level of anxiety towards certain activities (Yakubova et al., 2016; Piccin et al., 2018; Park et al., 2019).

The results of studies have shown that video modeling helps to increase daily living skills (Delano, 2007; Kinney et al., 2003; Hitchcock et al., 2003), decrease the level of disruptive behaviors (Apple et al., 2005; Bugghey, 2005) and causes increased social interactions and interacting with other children (Cihak et al., 2009; Nikopoulos & Keenan, 2003; Wert & Neisworth, 2003). The researchers argue that video modeling interventions are inherently motivating and naturally increase interest in various activities for children with ASD and the skills that can be taught through video modeling are diverse: increasing attention, dress-up or recreational play, handwriting legibility, math skills, daily life skills (MacDonald et al., 2009; Sherrow et al., 2016). Charlop-Christy et al. (2000) demonstrated that video modeling results in children with ASD acquiring different skills

more quickly and generalizing more than face-to-face teaching of the same skills and helps to maintain the skills formed over time.

7. Methodology

2.1. The research questions

To study the effectiveness of using video modeling on the training of daily living skills in middle and high school students with autism spectrum disorders (ASD), the following research question was formulated: *How will the daily living skills of students with ASD, performed at home and in society, learned through the video modeling technique improve?*

2.2. Research objectives

- O1 – to identify the daily life skills that the study participants have (degree of independence/dependence);
- O2 – to identify the daily life skills that must be formed by the subjects subjected to the intervention/research;
- O3 – to train the daily life skills necessary for students with ASD in secondary and high school.

2.3. Research design

The method used to study the effectiveness of using video modeling on the formation of daily life skills in middle and high school students with autism spectrum disorders was that of multiple case studies.

Initially, the study participants were selected, then the Waisman Scale for daily activities (W-ADL) (Elsevier Inc., 2013) was applied with 15 items (adapted), 13 items representing daily life skills performed at home and 2 items representing skills of daily life carried out in society.

The research variables are: ASD; video modeling; the five daily life skills that students need to develop with the help of video modeling (hand and dental hygiene, making a ham and cheese sandwich, setting the table, lacing and tying shoelaces, compliance with traffic rules when crossing the street through marked and traffic lighted places or not).

2.4. Participant

The sample of study consisted of four students (three boys and one girl) aged 16 and 18 years (mean 17 years) and with $IQ \leq 50$. All were diagnosed with autism by a clinical psychologist. The students are enrolled in special education, two boys are students in the 8th grade and two students (a boy and a girl) are students in the 9th grade

The four students participating in the study were selected based on the following criteria:

- 1) Diagnosed with ASD by a specialist and the existence of an Individualized Educational Plan (IEP).

- 2) Have deficits in daily life skills identified by the principal and parents.
- 3) Have the ability to pay attention for 15 minutes.
- 4) Have the ability to pay attention to a visual stimulus for at least 10 minutes.
- 5) Have the ability to express oneself using oral verbal language and to understand oral verbal language.
- 6) Have the ability to carry out at least 4 verbal instructions.
- 7) To recognize some objects necessary in the formation of daily life skills (objects for personal hygiene, clothing, crockery and cutlery).

In the selection of these students, the leading teachers from grades V-VIII and grades IX-X were involved. Thus, the 2 students from the secondary school were selected from a number of 12 students with ASD, and the 2 students from the high school were selected from a number of 8 students with ASD.

2.5. Instruments

In conducting this multiple case study we used the Waisman Scale for Activities of Daily Living (W-ADL) (Elsevier Inc., 20013) and the Observation Grid as instruments.

The Waisman scale consists of 15 adapted items, 13 items specific to daily life skills performed at home and 2 items for daily life skills performed in society.

The parents of the 4 children were given the Waisman Scale to complete. Also, the leading teachers from the classes of the 4 students completed the Scale. Following the score obtained by each individual student, I chose the five daily life skills that I tried to train them during the intervention, using video modeling. The skills chosen for the study were those in which levies score 0 points.

2.6. Procedure

Data were collected over a 7-weeks period. Each student participated 5 times a week in sessions that lasted 15 minutes. The activities took place in a specially designed classroom, where the students worked alone, under the supervision and guidance of the observing teacher. Also, household activities (preparing a sandwich and setting the table) took place in the canteen of the school unit. In order to learn traffic rules, the students took turns, accompanied by the observing teacher, on the street, in a traffic lighted intersection and on a street marked with pedestrian crossing only.

It started with the activity "making a ham and cheese sandwich", an easy activity presented in a 1-minute video. This activity took place in the kitchen of the school unit. On the workbench was a slice of bread, a box of margarine, and a plate on which were two slices of ham and two slices of cheese.

To begin with, the student had to recognize and name the objects on the table. Then he watched the entire video. After watching the entire video, the student was asked to perform the task. The student watched the sequence again, then performed it. The way of working was the same until the task was completed. The activity should not exceed 15

minutes, because the student with ASD cannot stay engaged in a task for a long time. He loses interest and attention.

The way of working was the same with each individual student. The activity was carried out several days in a row, until the students were able to complete the task by themselves. After several sessions, they performed the task individually after only one viewing of the entire video, the first 30 seconds. At the end of the intervention to develop the ability to prepare a sandwich with ham and cheese, the students were able to perform the task without a prior viewing of the video.

The second daily life skill that students with ASD developed was "arranging the table". The intervention also took place in the canteen of the school unit. On a table, the students found all the objects needed to carry out this task. To begin with, the students recognized and named the objects they will use in carrying out the task: mat (napron), flat plate, bowl (bowl), spoon, fork, knife, napkin and glass.

While doing the first step, each student names the object being used, then says what step they are going to do next. Every step that the student performs incorrectly or does not know how to perform at all, is replayed on the video. Students can also be helped by receiving some brief directions from the observing teacher or helpful questions. It should be noted that, in video modeling, the actor is filmed from the front, and the student sees the image "in the mirror". So his right side is actually the left side of the performer in the video. This can be a limitation of basic video modeling compared to point-of-view video modeling.

Another target skill was "personal hygiene", during the intervention, the students learned to wash their hands, eyes and teeth. The video lasted 3 minutes and 30 seconds and featured a 6-year-old student as the main actor. The students went to the bathroom, where they found a sink, container of liquid soap, toothpaste, toothbrushes, and a towel. As with the other activities, the students identified, named and specified the utility of each object.

The fourth daily life skill learned by the students in this study was "tying and tying shoelaces". It is known that students with ASD are dependent on adults when it comes to choosing and dressing in clothes, as well as putting on and tying shoes, basketballs, etc. Therefore, the formation of this daily life skill in children with autism in this study was also a challenge for the teacher researcher/observer. The video was shot in one session with no mistakes and no need for retakes or editing. The actor was the observant teacher himself. The video was 2 minutes and 50 seconds long.

The activity took place in the classroom. This was done as in the case of the other learned skills. The students watched the entire video, then named the objects needed to perform the task: shoe, shoelace. It was checked if the students have and use concepts of spatial orientation: up-down, right-left.

The fifth daily/social life skill learned by the middle school and high school students participating in this study was "traffic rules that must be respected by pedestrians". The

first session took place in the classroom, where the students watched the entire video about the traffic rules that pedestrians must follow.

In the first 2 sessions of each activity, students received verbal and physical support from the research teacher. In the sessions that followed, only the videos replayed in full or in sequences were used, depending on the need.

2.6.1. Consolidation, generalization, follow up

In the following two weeks after the end of the intervention, monitoring/ (follow-up) sessions of the four students participating in the study were conducted both at school and at home, without the use of video modeling. Twice a week, the students were asked to perform, individually and independently, one skill from those learned during the study. Where an error was observed in the performance of the activity, the video corresponding to that skill was presented in full, without verbal instructions and without physical help from the observing teacher. In the case of students who managed to perform a skill correctly (for example: arranging the table), they moved on to perform another skill learned in the same session. Each maintenance session lasted a maximum of 10 minutes.

We also requested the support of the parents to involve the children in the household activities that they learned during the research (setting the table, making sandwiches for all family members, tying shoelaces by themselves).

After 2 weeks from the end of the study (intervention and reinforcement), Student A. was able to independently perform four of the five daily life skills learned, and for "Laying and tying shoelaces", he needed only one viewing of the sequence which showed how to make the bow.

Student B. managed to independently perform the skill "Preparing the sandwich", with video support (a complete viewing of the video) the skills "Setting the table" and "Traffic rules that must be respected by pedestrians" and with the complete viewing of the video, as well as the resumption of twice the sequences in the video for 4 steps that had to be followed for the correct execution of the skills "Personal hygiene" and "Shoe laces and tying".

Student C. independently achieved the skill of "Setting the table", with video support (a complete viewing of the video), the skills of "Preparing the sandwich" and "Traffic rules that must be respected by pedestrians" and with the complete viewing of the video, as well as the retake from May many times of the sequences in the video for 6 steps that had to be followed for the correct execution of the skills "Personal hygiene" and "Shoe lacing and tying". For the last mentioned skill, the teacher's verbal support was also needed.

Student D. independently executed the skill of "Setting the table", for "Preparing the sandwich" she needed video support only for stages 1 and 2, for "Traffic rules that must be respected by pedestrians" she needed video support and verbal support from the teacher, the student still showing insecurity in the execution of the task. For the skills "Personal hygiene" and "Stringing and tying shoelaces" he needed video support

(watching the entire video and replaying the sequences that presented 5 stages necessary for the correct execution of the task) and verbal support from the teacher.

2.6.2. Social validity

At the end of the consolidation period, informal interviews were conducted with the participants, their parents and their teachers. All participants said they enjoyed watching the videos on the LCD screen at school, but also on their tablets, to learn how to wash their hands and teeth properly, how to cross the street safely without the help of a adult, how to tie shoelaces. The four participants in the study stated that, at home, they help their parents set the table and even clean it and put the dishes in the sink, which was also confirmed by their parents. We learned from their parents that, in addition to the daily life skills learned during the study, the children began to follow and copy them in other household activities (washing the dishes, putting the laundry in the washing machine), but also some social activities (making small purchases – bread, ice cream).

The leading teachers observed that the students involved in the study became much more motivated to complete the tasks they receive following a physical or video presentation in relation to a personal development activity (room or classroom hygiene), especially when they are encouraged, praised and congratulated for their achievements. Lead teachers stated that they have observed the effectiveness of video modeling in teaching daily living skills to students with ASD and will also use it in their classrooms for student development and other behaviors.

To answer the research question – *How will the daily living skills of students with ASD, performed at home and in society, learned through the video modeling technique improve?* the results obtained by the four participants in the four daily life skills that they perform at home and in society will be analyzed: Personal hygiene, Setting the table, Preparing a sandwich and Lacing and tying shoelaces. The results show that all four students managed to develop these skills in 100% by the end of the 7 weeks of intervention. From the discussions with their parents it was found that, at home, the children became independent regarding the execution of the four learned skills. In addition, all four children began to perform other tasks complementary to the skill of setting the table, at the urging of their parents, such as: setting and wiping the table and washing the dishes.

Therefore, for research question, the following answer can be formulated: the daily living skills of students with ASD, carried out at home and in society, were improved by using the video modeling technique, as a structured and directed activity by the researcher/observer.

3. Results and Discussions

The purpose of this study was to observe the effectiveness of using video modeling on the formation of daily life skills in middle and high school students with autism spectrum disorders.

The results confirmed to us that video modeling is a successful technique for teaching middle and high school students with ASD daily living skills, with all four study participants gaining skills in setting the table, making a ham and cheese sandwich, personal hygiene (washing hands, face and teeth). And previous studies have shown that video modeling is a useful medium for producing positive changes in the behavior of children with autism.

Thus, in the present study, during the intervention period, but also 2 weeks later, a rapid improvement in daily life skills could be observed. Student A. was able to complete the intervention in less than half the number of sessions allocated to the study. He maintained his learned skills best over time and because at home, the maternal assistant continued to train him in the learned household activities, but also in new ones: sweeping the yard, dusting the room, putting the laundry in the washing machine.

The difference between the four participants was made by the pace at which they developed all these skills, with some needing more sessions, others less. Important to note is that all students fit into the study time frame (7 weeks, 5 days/week) and showed equal success in the reinforcement sessions. Although the four children come from different social backgrounds (family, foster care), from urban and rural environments, this did not in any way influence the pace of their evolution.

The first two activities Setting the table and Making the sandwich were learned by all four participants at almost the same fast pace, the number of sessions being very close (2, 3, 4 sessions).

As the level of difficulty of the activities increased (activities 3, 4), the number of sessions, replays of the videos and certain sequences in the video was greater, and the degree of insistence of the research teacher in getting the students to perform these tasks without error was much higher.

In previous studies, it has been shown that video modeling is a useful method of teaching not only daily life skills, but also communication skills, social skills, changing the behaviors of children with autism, but also of children with learning difficulties.

Until now, in Romania, the effectiveness of video modeling on the formation of daily life skills in children with ASD has not been investigated. The results of this research demonstrated that video modeling offers many benefits to children with ASD

Following the analysis of the study "The effectiveness of video modeling for teaching daily life skills to children with autism spectrum disorder" (Merdan, Ozcan, 2020), it is possible to identify a relationship of similarity between the results of this study and the results obtained by the four participants in the current study following the application of the Waisman Scale post-test. This similarity is represented by the fact that in both studies the result was reached that video modeling is effective in training daily life skills in children with autism in middle and high school.

Through this research study that we conducted, we found a similarity with the study "Effects of video modeling with video feedback on vocational skills of adults with autism spectrum disorder" (Derek et al., 2017) regarding the effectiveness of video modeling

accompanied by the video request and the replay on sequences of videos, in order for the students to complete the more difficult stages without error.

A limitation of this research is the absence of a teacher observer distinct from the teacher researcher. Another limitation is making the videos with typical child actors close to the age of the child viewers.

Conclusions

The purpose of this study was to observe the effectiveness of using video modeling on the formation of daily life skills in middle and high school students with autism spectrum disorders. Following the obtained results, we can conclude that video modeling is an extremely effective method for teaching daily life skills to children with ASD in middle and high school.

Video modeling is an instructional method that can help children with autism gain independence of functional skills. Video modeling is a useful, easy-to-apply and cost-effective teaching method for individual education. By using this technique, the possibility of making a mistake is less and therefore makes the student more confident. Once social skills are formed through video modeling, they are maintained over time, and children with ASD gain the courage to interact with typically developing individuals.

It should be noted that video modeling has many advantages: it provides immediate feedback, the activity can be completed in smaller sequences, and these can be repeated whenever necessary so that the student can learn the correct way of working, the videos can be recorded on a portable device, the student being able to watch it independently, as often as needed, without the minimum assistance of an adult, regardless of the location (at school, at home, on the street, in the means of transport, etc.) and involves low costs. Independence in society and in everyday life is of particular importance for all children, but especially for those with autism spectrum disorders. Another advantage of using video modeling, of mobile technology in general, is that it allows for individualized intervention among multiple students (Burton et al., 2013). The same video clip can be uploaded to multiple devices.

No disadvantages were reported in the case of video modeling, only video self-modeling has a disadvantage, that the filmed video can only be used for one student, the one who was the actor. For other students, that movie can serve as basic video modeling.

Future research could further explore the effectiveness of video modeling on training both daily life skills and other activities (eg: playing games with peers, fire escape, and teaching activities) in preschoolers and school children.

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The implications of self-esteem development in primary school students

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Abstract

Studies that have been conducted on the topic of self-esteem have shown that it contributes considerably to various important areas of life. However, research has proven that there is ontogenetic variation in self-esteem, and the factors that contribute to its development are not yet very clearly defined (Robins et.al. 2002, Orth & Robins, 2022). Furthermore, researchers suggest that greater consideration should be given to the development of self-esteem in the context of close relationships (Erol & Orth, 2014), in addition to the implementation of engagements aimed at improving self-esteem. These engagements are intended to bring considerable benefits, both to the individuals and to society (Orth & Robins, 2022). In this context, the present research study aims to examine the impact of personal development activities on the level of self-esteem development in primary school students. For the purpose of this goal, we base our arguments on the hypothesis that personal development activities do determine the improvement of the level of self-esteem in primary school students. The design of the study entails quantitative, quasi-experimental, pre-posttest research. The trial was carried out on 40 subjects distributed in two groups, experimental and control. As a methodological tool, we used the LAWSEQ questionnaire (Lawrence, 1981), which measures the general level of self-esteem. After analyzing the data, it was observed that the average level of self-esteem felt by the students in the experimental group was higher than that of the students in the control group, nevertheless, differences were not significant from a statistical point of view.

In conclusion, the research hypothesis, according to which: Personal development activities determine the improvement of the level of self-esteem in primary school students, was not confirmed. Thus, it is necessary to reconfigure some of the personal development activities that were proposed, and the topic requires additional research.

Keywords: self-esteem; personal development activities; primary school students.

Introduction

As a result of former research carried out over the years, it is known that self-esteem represents an essential component to personal development. Studies by Trzeźniewski et al. (2003) showed that self-esteem remains relatively stable across the lifespan. Some studies have proven that self-esteem is different depending on age and culture (Lyu & Rios, 2019; Szczesniak et al., 2021). The explanation may be that, at a very young age, children place

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more emphasis on their parents' opinions, and as they grow, this emphasis is redirected towards friends (Lelord, 1999). Although theoretical studies, as well as data from longitudinal studies, suggest that self-esteem decreases from childhood to adolescence (Robins et al., 2002), the claim that self-esteem declines during middle childhood has not been consistently supported by studies, and for future research, the development of self-esteem in the context of close relationships should be taken into consideration (Cole et al., 2001; Huang, 2010; Kuzucu et al., 2013, apud. Orth & Robins, 2014).

Although the level of self-esteem fluctuates throughout life, it is an essential component of personal development and can be influenced by various factors. Some of the contributing factors that we mention are social, cognitive and biological changes (Trzesniewski et al., 2003), interpersonal relationships (Pyszczynski et al., 2004; Knee et al., 2008), personal beliefs (Crocker, 1999), values (Crocker & Luhtanen, 2003; Martinez & Garcia, 2007; Lyu et al., 2019), successes or failures, etc. (Jordan & Zeigler, 2018). These factors can positively or negatively influence the trajectory of self-esteem.

Self-esteem is reflected through an individual's lifestyle, and it represents an accurate predictor of life satisfaction (Brown et al., 2001, apud. Szczesniak et al., 2021). Orth and Robins (2014) claim that we need a better understanding of the factors that shape the development of self-esteem. While there is strong evidence to suggest that self-esteem influences life achievement, evidence on the causes of a healthy development of self-esteem is still limited.

Self-esteem prospectively predicts depression and anxiety, moreover a high level of self-esteem leads to fewer mental health problems (Sowislo & Orth, 2013, apud. Orth & Robins, 2022).

The fluctuations of self-esteem levels factoring in age and certain elements are an indicator for one's academic performance. Thus, studies have shown that self-esteem prospectively predicts academic performance (Valentine et al., 2004, apud Orth & Robins, 2022). However, intervention programs do not constantly enable improvements in self-esteem levels in schools. Since most programs are based on cognitive-behavioral therapy, it is difficult to apply such a routinely program in schools (Iwahori, 2022).

Several experiments have been carried out to check the effectiveness of engagements on self-esteem. One of the experiments (Iwahori et al., 2022) aimed to analyze the effectiveness of the "Treasure File Program (TFP)" intervention for improving the level of self-esteem of Japanese primary school students. It was concluded that TFP brought an improvement for primary school students with low and average self-esteem.

Considering the fact that most intervention programs have been mostly therapeutic and much less educational, it is suggested that further research is needed before new successful engagements can be proposed in order to develop other aspects of self-esteem (Arjan et al., 2006).

Orth and Robins (2022), demonstrated that although self-esteem has been shown to prospectively predict outcomes in various important life domains, these findings do not provide sufficient evidence to establish causality. They suggest that future studies should focus on identifying the specific mechanisms that can mediate the beneficial effects of high self-esteem. Thus, this will provide a more accurate explanation of the causality relationship. Furthermore, self-esteem is an adaptive trait. Its improvement can bring considerable benefits to the individuals and to society in general (Orth & Robins, 2022).

Following the already existing studies in literature, it is suggested that engagements are still necessary and relevant for the improvement of self-esteem. Accordingly, this paper investigates the impact of an educational intervention program based on personal development activities for improving the self-esteem of primary school students. The research that has been conducted focused on the involvement of students in activities such as: awareness and self-awareness, emotion and communication management and team-building, depending on the needs of the students.

Theoretical background

Personal development

Our lives represent continuous development, from the prenatal stage until old age. Furthermore, development does not stop when the person reaches physical maturity, it is rather a constant process (Atkinson et al., 2002, apud Crețu, 2009). Development is defined as a change that occurs in the body, depending on the path it is on, from conception to death (Golu, 2011; Gherguț, 2013). Thus, we can take into account that, during different stages of life, progress occurs more quickly than in others, such as the difference between the first year of life and the life stage of regression (old age) (Munteanu, 2018). It is important to consider how human development occurs. It cannot occur by itself in all aspects, but needs to be stimulated, learned by the person in question. Thus we bring up interfering factors that influence development: genetic inheritance, environment and education (Gherguț, 2013; Verza & Verza, 2017; Munteanu, 2018). Considering these factors, we can say that family and school play essential roles for the harmonious development of students.

Personal development can be achieved as a result of self-awareness, self-reflection and the decision-making capacity, in a responsible manner, harmonious interpersonal relationships, stress management, effective learning techniques, creativity and realistic vocational expectations. To be able to acquire these abilities, a person's self-esteem level should be developed enough so that it is in accordance with the factors mentioned above. Consequently, two of the most vital roles in an individual's life are represented by the familial context and the educational context (school) (Băban & Petrovai, 2003).

For this reason, modern schools can no longer ignore the aspects related to the physical, mental, spiritual and social health of students, to the detriment of the imperative need for knowledge and school results. If there is no foundation for the development of a

high level of self-esteem, the learning process is affected. It is known that self-esteem is an important predictor for children's development and adaptation (Tambelli et al., 2011, apud Dârjan et al., 2020), but also for measuring mental and physical health (Mann et al., 2004; Trzesniewski et al. al., 2006; Schwarzer, 2008; Begen & Turner-Cobb, 2012; Orth & Robins, 2014; Silva et al., 2016; King & Chi, 2017).

Self-esteem

Self-esteem can be defined as: "the evaluation of oneself, resulting from self-acceptance and self-valuation or through comparison with others. Although it can vary from one situation to another, there is a constant tendency in which everyone evaluates themselves, that functions as a personality trait" (Cliniciu et al., 2004, p. 46). This is a subjective self-evaluation (Donnellan et al., 2011; MacDonald & Leary, 2012, apud Orth & Robins, 2014). It is closely connected with self-perception, which represents a fundamental dimension of any human being. Self-perception refers to the manner in which a person considers oneself to be good enough, compared to others. Therefore, it can be argued that self-esteem has both an evaluative and an affective dimension to self-perception (Băban, 2003). Self-esteem prospectively predicts success and well-being in different aspects of life (relationships, work and health), motivates the person to work hard and succeed, while it also aids in reducing stress (Gallup, 1992; Orth & Robins, 2014; Schiraldi, 2013).

Self-esteem is one of the primary factors in building and maintaining one's well-being. Thus, a child who exhibits a healthy self-esteem is more likely to reach his/her maximum potential. He/she develops successful social relationships, compared to those who feel deprived of personal value (Plummer, 2004). Although self-esteem is part of the fundamental elements of our personality, it is still a complex and intangible phenomenon which is not always acknowledged (Andre & Lelord, 2015). Similarly, it is known that high self-esteem can reduce the impact of stressful events and failure (Blossom et al., 2022, Mann et al., 2004, apud. Mertens et al., 2022).

Self-esteem is an important factor in the optimal development of each person. Otherwise, we are dealing with a constant battle with ourselves, which results in an unsatisfactory lifestyle. It causes the feeling of unfulfillment, and it influences interpersonal relationships and personal success. This creates a vicious cycle. As low self-esteem is known to be linked to depression, eating disorders, compliance issues and even suicide (Brooks, 1999; Kuhlberg et al., 2010; Oy, 1995, apud Ersoy, 2018, Touyz et al., 2008, apud. Colmsee et al., 2021). Thus, it can be said that the process of humans has an intrinsic component of the development of self-esteem.

During the preschool stage, children can exemplify only general features about themselves, information related to: age, gender, height, hair color, etc. From the age of 7-8, self-perception becomes more specific and crystallized. However, their self-esteem is not well defined at this age. It is still anchored within physical aspects of themselves. Towards

adolescence, the focus begins to shift from physical characteristics to internal aspects, for example: the way they behave, their aspirations, the traits that they discover. All this contributes to an accurate self-awareness of teenagers in the present for adults in the future. Simultaneously, a person with high and healthy self-esteem develops the ability to make responsible decisions, life becomes more meaningful, is less anxious and depressing (Michou et al., 2016; Yavuzer, 2016, apud Ersoy, 2018). This person has the ability to cope with peer pressure while developing a high degree of empathy. Consequently, this would contribute to a gradual decrease in bullying on school premises. It is known that the rate of school aggression in Romania is quite high from a statistical point of view (Stănculeanu & Manole, 2016, apud Dârjan, et al., 2020). Law no. 221 for the amendment and completion of the National Education Law no. 1/2011, the law against aggression was instituted in 2019. Furthermore, among specialized literature, studies have shown that self-esteem plays a mediating role between bullying and depression in children (Cole et al., 2016; Xu et al., 2020; Zhou et al., 2020; Orth et al., 2014, cit. Zhong, Huang et al., 2021).

The way in which self-esteem develops is perceived as a trajectory over the course of life, which can fluctuate. Among the studies that have been conducted, we mention the research done by Orth and Robins (2014), which stipulates that self-esteem develops from adolescence to the middle-age adult stage, reaching its maximum around the age of 50-60, and then begins to decline at an alarming pace until elderliness.

Theoretical arguments and data from longitudinal studies suggest that self-esteem declines from childhood to adolescence (Robins et al., 2002, apud Orth & Robins, 2014). However, the decline during middle childhood has not been consistently supported by several studies. Thus, it is suggested that future research should strongly consider the development of self-esteem in the context of close relationships (Erol & Orth, 2014).

Methodology

The present study aims to investigate the impact of personal development activities on the level of self-esteem of primary school students. In order to accomplish this task, we intended to evaluate the students' self-esteem in the initial stage. In accordance with the results that were obtained, we implemented a program based on personal development activities. The impact will be quantified by reassessing the students' self-esteem.

The hypothesis is that: Personal development activities improve the level of self-esteem in primary school students.

Participants and data collection procedure

Data were collected from two different schools localized in an urban environment. The LAWSEQ questionnaire was applied to primary school students, in pretest and posttest. In order to receive consent to carry out the present study, the principals of the two schools were contacted, after which we could speak to the teachers. They, in turn, communicated to

the parents about the purpose of conducting the research, including the assurance about data confidentiality. This way, the informed consent of the students' legal guardians was obtained.

A total of 40 students participated in this research, who were equally divided into two groups, experimental and control, and all participants were aged between 7 and 11 years old. (Table 1)

Table 1: Socio-demographic data of the subjects

	Experimental (N=20)		Control (N=20%)		Total	
	N	%	N	%	N	%
Gender						
Female	10	50	7	35	17	42,5
Male	10	50	13	65	23	57,5
Grade						
0 (preschool)	1	5	-	-	1	2,5
1st	2	10	6	30	8	20
2nd	2	10	4	20	6	15
3rd	4	20	4	20	8	20
4th	11	55	6	30	17	42,5

The research tool used for data collection

The instrument used for the quantitative research was the LAWSEQ questionnaire, which measures the general level of self-esteem in primary school children. It is a standardized type of tool and comprises 16 items that can be answered with yes, no or don't know (Lawrence, 1981).

Conducted activities

As part of the "Salvați copiii" ("Save the children") program, organized in an urban school, 20 students with typical development and 3 students with special educational requirements are offered support in completing homework tasks and other types of recreational activities. Through this program, personal development activities were organized within a school semester.

Personal development activities took place over the course of 14 meetings, with each meeting lasting 50 minutes. They were organized in 3 modules: awareness and self-awareness, emotion management and communication and team-building, and for each module 5 topics were allocated. Each individual activity was organized according to specific operational objectives, which contributed to the completion of the general objectives, such as

- a better knowledge of oneself and others;

- identification of the emotions they feel and the ability to manage them depending on the situation;
- team-work, through effective communication.

The activities began with the module about awareness and self-awareness, to enable everyone to get to know each other and get familiarized with each other. During this first module, the following topics were addressed: favorite activities; traits; defects; valuable but different. The second module, about emotion management, the topics were: my feelings, what we feel and when; pleasant and unpleasant feelings; emotions are different depending on certain events and how we can handle unpleasant feelings. The third module entitled "Communication and team-building", was focused on facilitating better communication and collaboration between students, both in small teams and in the whole group. The topics elaborated in this module were: team communication; together we can; teamwork and playing nice together.

The end of the intervention consisted in a summarization of all the activities carried out up to that moment. This last activity was conducted by organizing a treasure hunt, which represented a summative assessment to check to what extent the objectives were achieved considering the initial expectations.

Results

Descriptive Data Presentation

In order to have an overview of the subjects who participated in the study and the findings, in Table 2 we present the data related to the scores obtained by the participants.

Table 2: Averages and Standard Deviations for the progressing scores of the participants related to self-esteem

<i>Variable</i>	<i>Mean</i>	<i>SD</i>	<i>Min.</i>	<i>Max.</i>
<i>Experimental T1 (N=20)</i>	<i>13.45</i>	<i>6.02</i>	<i>2</i>	<i>22</i>
<i>Experimental T2 (N=20)</i>	<i>14.70</i>	<i>5.45</i>	<i>3</i>	<i>22</i>
<i>Control T1 (N=20)</i>	<i>13.45</i>	<i>4.72</i>	<i>2</i>	<i>21</i>
<i>Control T2 (N=20)</i>	<i>13.10</i>	<i>4.35</i>	<i>2</i>	<i>22</i>

The descriptive data presented in Table 2 show that, on average, the experimental group reported a higher level of self-esteem, after the intervention (N=20, M=14.70, SD=5.45), than before (N = 20, M = 13.45, SD = 6.02), and the control group, although they did not participate in the activities, reported a lower level of self-esteem during the posttest

($N=20$, $M=13.10$, $SD=4.35$), in comparison to that during the pretest ($N = 20$, $M = 13.45$, $SD = 4.72$).

Table 3: Result for the independent pre-test Test t

Variable					t	p	df
	Experimental ($N = 20$)		Control ($N = 20$)				
	M	SD	M	SD			
Self-esteem	13,45	5,97	13,45	4,31	0,03	0,97	38

We used the t-test for independent samples to determine if there are significant statistical differences between the level of self-esteem in primary school students, experimental and control group, pretest. No significant statistical differences occurred at the level of the average results ($M=13.45$ - experimental group; $M=13.45$ - control group).

Verification of the research hypothesis Assessment

To check the research hypothesis according to which: Personal development activities determine the improvement of the level of self-esteem in primary school students, we carried out the statistical processing of the data by calculating the t-pairs test in comparison with the results from the pre-posttest, which aims to highlight the progress intercepted as a result of completing the personal development activities that had been proposed.

Table 4: Comparative Analysis between T1 and T2 for subjects in the experimental group, regarding the level of self-esteem

Lot experimental	Paired Differences			t	p	df
	Mean	Std. Deviation	Std. Error Mean			
T1	13.45	6.02	1.34	0.2	0,41	19
T2	14.70	5.45	1.22			

In Table 4, we used the t-test for paired samples to check if the students in the experimental group have a higher self-esteem, as a result of their involvement in the personal development activities. Participants reported on average a higher level of self-esteem after the intervention ($N=20$, $M=14.70$, $SD=5.45$) than before it ($N = 20$, $M = 13.45$,

SD = 6.02). The results indicate that these differences are not statistically significant ($t(19) = 0.2, p = 0.41$).

Table 5: Comparative Analysis between T1 and T2 for subjects in the control group, regarding the level of self-esteem

Control Group	Paired Differences			t	p	df
	Mean	Std. Deviation	Std. Error Mean			
T1	13.45	4.72	1.05	0.06	0,47	19
T2	13.10	4.35	0.97			

We used the t-test for paired samples to check whether students in the control group had higher self-esteem, even though they did not participate in the activities. Participants reported, on average, a lower level of self-esteem at the posttest ($N=20, M=13.10, SD=4.35$), compared to level at the pretest ($N = 20, M = 13.45, SD = 4.72$). The results indicate that these differences are not statistically significant ($t(19) = .06, p = .47$).

Table 6: The Results of the t independent posttest

Variable					t	p	df
	Experimental ($N = 20$)		Control ($N = 20$)				
	M	SD	M	SD			
Self-esteem	14,70	5,23	13,10	5,30	0,9	0,46	38

We used the t-test for independent samples to verify whether personal development activities improve the level of self-esteem in primary school students. The group of students in the experimental group had on average a higher self-esteem, after their participation in the activities ($N = 20, M = 14.70, SD = 5.23$), in comparison with the students in the control group ($N = 20, M = 13.10, SD = 5.30$). The test results indicate that these differences are not statistically significant ($t(39) = 0.9, p = .46$).

Discussions

The main objective of the present research project was to investigate the impact of personal development activities on the level of self-esteem of primary school students.

After doing a quantitative analysis of the data, we observed that, in terms of the level of self-esteem, the students in the experimental group reported a higher score, than the

students in the control group, but the difference was not significant from a statistical point of view. Thus, our research hypothesis was not confirmed.

As it is well-known that self-esteem does not fluctuate easily over time, the results of the present study can be justified by looking at the outcome from previous research. Research done by Orth and Robins (2014) demonstrated that self-esteem varies over time. Other studies have also shown that an intervention over a longer period of time is necessary in order to produce considerable effects in the improvement of the self-esteem level. A meta-analysis review, done on 116 studies, found that intervention effectiveness depends on the type and emphasis of the intervention (Haney & Durlak, 2010). The results of previous studies have also shown that intervention programs are more effective than primary prevention programs (Arjan et al., 2006). Intervention-based research has focused more on the global level of self-esteem. Thus, new research has been encouraged in order to develop intervention programs and to consider other dimensions of self-esteem (Emler, 2001, apud. Arjan et al., 2006). Given the results of the present research, we cannot say that our intervention had a significant statistical impact compared to previous research. However, our intervention study aimed not just to increase the level of self-esteem, but to improve it. The development of self-esteem entails chances of increasement as well as a healthy nature of improvement. Research conducted by Iwahori et al. (2022) has shown that an unstable level of self-esteem leads to narcissism. For this reason, it is important that the focus of an intervention remains on the manner in which the level of self-esteem improves, rather than just the degree to which it rises.

Taking into consideration the results of the present research paper, we observe that the average score obtained by primary school students in the experimental group increased in the posttest in contrast with the pretest. Quantitative analysis data, however, revealed that there were no significant statistical differences. This small difference could be a result of the possible idiosyncrasies the study might have had. The first limitation of the study could be represented by the criteria chosen for assigning the group of subjects: number, age, various specific needs. Consequently, it is recommended that for further research, one should separate participants into smaller, homogeneous groups, depending on their psycho-individual characteristics, as an initial criterion at the beginning of the intervention. Other studies have reached similar claims. One such study that we can mention is the study conducted in Japan by Iwahori et al. (2022), where there were two groups, one of 794 participants in the experimental group and 592 in the control group. In this study, participants with a discontinuous frequency of intervention activities were excluded from the study. This is a step which should have also been applied for the present study; as a consequence of the inconsistency of the subjects' participation in the intervention activities, we were able to find a decrease in the efficacy of the intervention.

Another limitation that we encountered was the number of topics contained in each module, as in it there were too many, considering the time that was available for the intervention.

An additional limitation of the study was the way in which the intervention was organized, in terms of the recurrence of meetings. For the present study, we resorted to increasing the number of meetings per week, as a measure of speeding up the intervention and as a result of the formative evaluation process. Therefore, it is recommended that from the beginning, for future studies, daily meetings should be held to carry out these activities.

Conclusions

If we take into consideration the limitations presented in the previous paragraphs, it is recommended that future research consider the number of participants per group, depending on personal characteristics. In terms of time allocated to the intervention, it would be advisable to resort to longitudinal studies, carried out during larger units of time, for example school years, school cycles. Another important aspect to consider is monitoring the attendance of the participants in the intervention. In addition, a similar study would benefit from the special contribution of a multidisciplinary team, such as a school counsellor, social worker and a teacher.

In conclusion, despite the fact that this research study was aimed to investigate the impact of personal development activities for measuring the improvement of self-esteem for primary school students, the recorded results, in quantitative analysis of the data, showed that the research hypothesis: *Personal development activities determine the improvement of the level of self-esteem in primary school students*, was not proved. This indicates that more in-depth studies are necessary for an effective intervention through personal development activities. Thus, accordingly, we believe that it is constructive to place more attention to the problem of self-esteem, taking into account the fragile age of the children. Moreover, we should consider the fact that this is the stage when the transition to puberty begins gradually, a stage that will be followed by adolescence, a time when self-esteem decreases (Orth & Robins, 2014). For this approach, it is absolutely necessary to involve both the teaching staff and the children's parents, as the family and the school represent the two extremely important and decisive factors in a child's development.

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