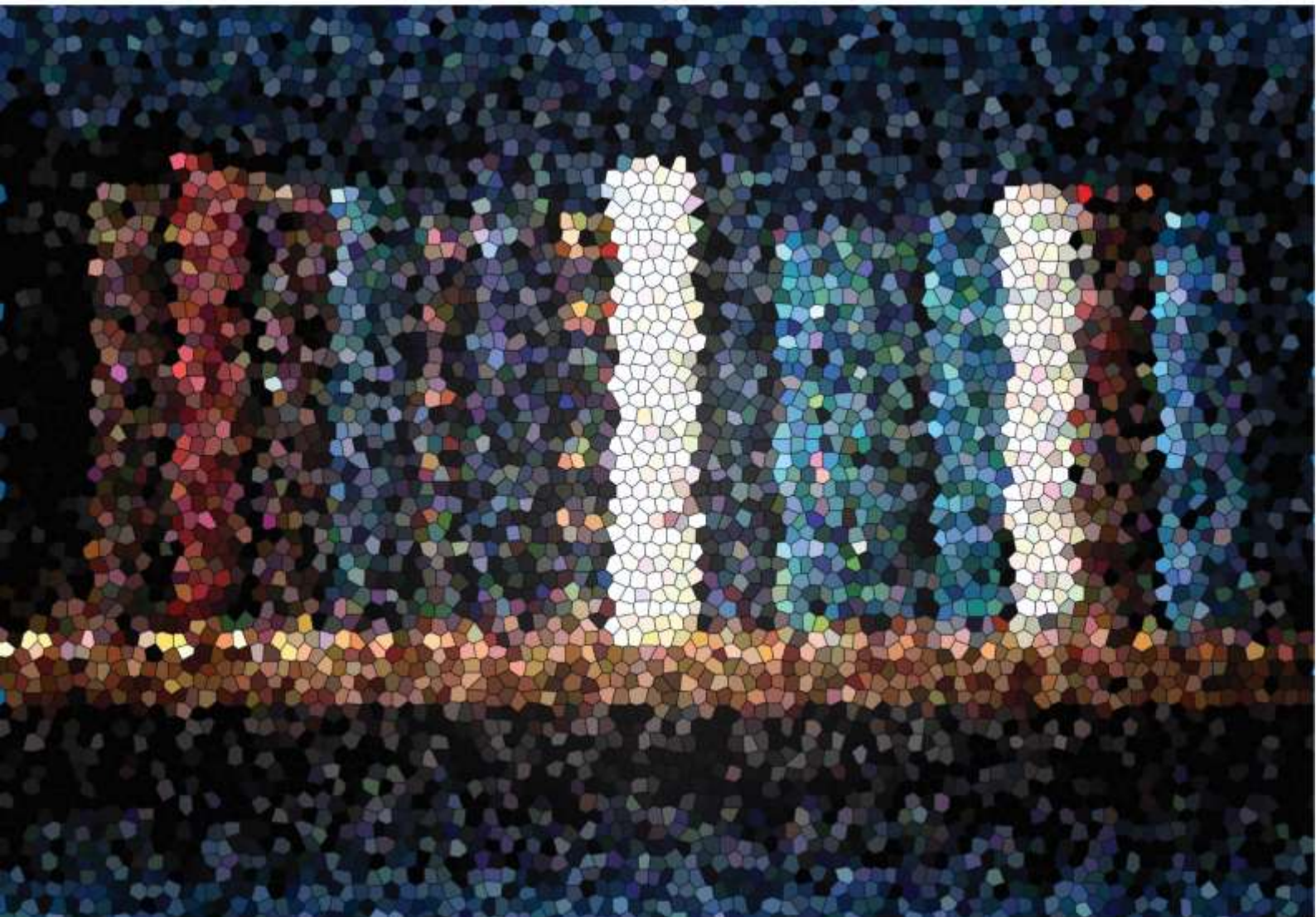


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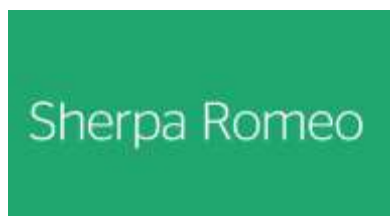


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Perceptions of Special Education Homeroom Teachers by Parents and Teachers in Israel

Rakefet Weidberg, Ciprian Ceobanu

Perceptions of Special Education Homeroom Teachers by Parents and Teachers in Israel

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Abstract

Keywords:

special education, homeroom teacher, parent-teacher relationship, professionalism, trustworthiness, availability, empowerment

Homeroom teachers in special education make outstanding efforts and are extremely devoted to their work. However, they must contend with frustrated parents who are disappointed with the inability of these teachers to meet their needs and expectations. Accordingly, it is of great interest to examine parents' perceptions of the role of the homeroom teacher in special education. The current study examines these perceptions regarding four dimensions of the homeroom teacher's functioning versus the parents: Professionalism, trustworthiness, availability, and empowerment. Parents' perceptions were examined in comparison with those of teachers at special education schools. The sample included 100 parents and 101 teachers in special education schools. The data were collected by a questionnaire constructed by the researchers in a previous study. The questionnaire includes four parts, examining the dimensions mentioned above. The teachers' questionnaire was identical, but they were instructed to refer to the relationship between the homeroom teacher and the parents. The findings show that the parents gave significantly lower evaluations than the teachers on all four dimensions: the homeroom teacher was perceived by the parents as less professional, less trustworthy, less available, and less empowering than evaluated by the teachers. The findings have practical implications for the training of special education teachers and for the professional development of teachers and also for coordinating expectations and defining boundaries that might help both homeroom teachers and parents form a constructive relationship.

Zusammenfassung

Schlüsselworte:

Besondere Bildung, Klassenlehrer, Eltern-Lehrer-Beziehung, Professionalität, Vertrauenswürdigkeit, Verfügbarkeit, Empowering

Klassenlehrer in der Sonderpädagogik leisten hervorragende Arbeit und sind äußerst engagiert bei ihrer Arbeit. Allerdings müssen sie sich mit frustrierten Eltern auseinandersetzen, die von der Unfähigkeit dieser Lehrer, ihre Bedürfnisse und Erwartungen zu erfüllen, enttäuscht sind. Dementsprechend ist es von großem Interesse, die Wahrnehmung der Eltern hinsichtlich der Rolle des Klassenlehrers in der Sonderpädagogik zu untersuchen. Die aktuelle Studie untersucht diese Wahrnehmungen in Bezug auf vier Dimensionen der Funktionsweise des Klassenlehrers im Vergleich zu den Eltern: Professionalität, Vertrauenswürdigkeit, Verfügbarkeit und Empowering. Die Wahrnehmungen der Eltern wurden im Vergleich zu denen der Lehrkräfte an Sonderschulen untersucht. Die Stichprobe umfasste 100 Eltern und 101 Lehrer an Sonderschulen. Die Daten wurden mithilfe eines Fragebogens erhoben, den die Forscher in einer früheren Studie erstellt hatten. Der Fragebogen besteht aus vier Teilen, in denen die oben genannten Dimensionen untersucht werden. Der Fragebogen der Lehrer war identisch, sie wurden jedoch angewiesen, sich auf die Beziehung zwischen dem Klassenlehrer und den Eltern zu beziehen. Die Ergebnisse zeigen, dass die Eltern in allen vier Dimensionen deutlich schlechtere Bewertungen abgegeben haben als die Lehrer: Der Klassenlehrer wurde von den Eltern als weniger professionell, weniger vertrauenswürdig, weniger verfügbar und weniger befähigt wahrgenommen als von den Lehrern bewertet. Die Ergebnisse haben praktische Implikationen für die Ausbildung von Sonderpädagogen und für die berufliche Entwicklung von Lehrern sowie für die Koordinierung von Erwartungen und die Definition von Grenzen, die sowohl Klassenlehrern als auch Eltern dabei helfen könnten, eine konstruktive Beziehung aufzubauen.

1. Introduction

Parents' involvement in schools has steadily increased in recent decades and has received a great deal of empirical attention. Studies show that parents' involvement can be a valuable source of instrumental and emotional benefit but can also trigger tensions and power conflicts (Johnston, 2015). Empirical evidence is needed in order to develop constructive communication between parents and educational staff, by revealing the enhancing and hindering factors for

developing a positive relationship. The current study focuses on the system of special education, in which parents' involvement is particularly complex due to the high dependence of parents on the educational staff. In view of the major role that homeroom teachers play in special education in Israel, the study examines parents' perceptions of homeroom teachers on four dimensions – professionalism, availability, trustworthiness and empowerment – and compares them to the perceptions



of teachers. These dimensions were chosen because they constitute the major components of the relationship between parents and homeroom teachers in Israel.

2. Theoretical foundation

2.1. *The homeroom teacher in special education*

The role of the homeroom teacher is described as in charge of a group of students who meet daily in a specific room at school and of that physical room as well (Zidkiyaho et al., 2008). (Alternative terms are "classroom teacher", "form teacher" and "primary teacher" for teachers in primary schools). In most western countries the homeroom teacher's role combines administrative, educational, and pedagogical duties (Nutov & Hazzan, 2014; Bakshi-Brosh, 2012). Additionally, primary teachers are responsible for teaching basic learning habits and skills and for immersing the children in the educational environment (Stone, 2022).

Homeroom teachers in special education schools serve children with unique educational needs. Aspiring to open equal opportunities for their students, they need to adapt contents, methods and tactics to meet these special needs so that the students will acquire appropriate skills and overcome difficulties (Al-Yagon & Margalit, 2001; Hampton & Chow, 2022). The demanding conditions of special education compel homeroom teachers to work harder than teachers in mainstream education. They need to develop deep understanding of their students and implement special skills and non-routine methods to teach them. They are also required to develop personal learning programs for each student (Ministry of Education, 1998). Research shows that special education teachers often experience fatigue and burnout because of these daily hardships (Hillel Lavian, 2015). One of the major concerns in the role of homeroom teachers is the relationship with the parents.

2.2. *Parent-teacher relations in special education*

The parent-school relationship can be conceptualized within a few theoretical perspectives. The ecological theory presents parent-teacher interactions through the social environmental context. The child's environment is described through 4 circles: the microsystem – close family, friends and daily teachers; the mesosystem – including subject teachers and the school; the exosystem; and the macrosystem (Bronfenbrenner, 1986; Tudge et al., 2016). Social exchange theory explains the motivations of parents

and teachers for engaging and cooperating for the benefit of the children and focuses on the balance of profits and costs of each party (Blau, 1986/2017; Homans, 1961; Kozloff, 1967/2021; Mahmood, 2013; Pek & Mee, 2020). Epstein's partnership model presents parent-school relations as a multidimensional partnership that includes six domains, each with its unique fields of responsibility and desired results for the child: Parenting, communication, volunteer work, learning at home, decision making and community (Epstein & Sanders, 2002).

The quality of the relationship between the parents and the homeroom teacher can be manifested in both positive aspects and negative aspects. Good relations between parents and teachers positively impact student achievements, goal attainment and social behaviour in mainstream and special education schools (Sheridan et al., 2012; Wilkinson, 2013). Causes for conflict between parents and teachers in special education, however, might be somewhat different. Such causes are the lack of congruence regarding student needs and abilities and the provision of services to students; the lack of resources; communication difficulties and the lack of knowledge for solving problems; power struggles; parent feelings that they are not appreciated by the teachers; trust and mistrust (Lake & Billingsley, 2000). Nonetheless, compared to mainstream schools, both parents and teachers in special education were found more accustomed to two-way communication (Leenders et al., 2018). In Israel, collaboration between staff and parents in special education schools was found to include structural, organisational, and social aspects. Relationships between parents and homeroom teachers were found to be especially close, warm, and familial (Manor-Binyamini, 2003).

A few components are of value in evaluating the role of the homeroom teacher: professionalism, availability, trustworthiness, and empowerment.

2.2.1. *Professionalism*

Many studies have indicated a positive correlation between teacher professionalism and student achievements (Cohen & Hill, 2000; Wenglinsky, 2002; Nye et al., 2004; Goe, 2007; Dodeen et al., 2012). Primary teachers from England and New Zealand perceived teacher professionalism not only as professional skills but as including love for working with children, altruistic concern for their growth and welfare, and the desire to make a difference. They also saw professionalism as the experienced tension between autonomy and accountability regarding

curriculum and exams, and 'good teaching' vs. performance and achievements (Locke et al., 2005; Browes & Altinyelken, 2022). The professional identity of teachers might develop during their academic studies or through continuous professional training (Zeevi & Cretu, 2020).

Homeroom teachers in special education need to expand their professional skills to be able to assist students, help parents deal with various situations, calm them down sometimes and direct them according to professional principles (Lake & Billingsley, 2000). The professional identity of special education teachers in China was defined as a sense of belonging to a profession and seeing it as part of the personal identity, associated with self-efficacy (Chen et al., 2020). Professional teachers in special education should have the ability to modify the curriculum and assignments and to adapt teaching to individual needs (Byrd & Alexander, 2020).

2.2.2. *Trustworthiness*

A key element of parental involvement, partnership and good relations with teachers is parent-teacher mutual trust (Ogg et al., 2021). According to social exchange theory, trust is "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (Mayer et al., 1995, p. 712). Parental trust in teachers is the confidence of parents that the teacher's actions will benefit their child's success at school or the parent-teacher relationship. Improving home-school communication was identified as a primary way of enhancing trust, and parents who present higher levels of trust in teachers were found to be more involved in school (Adams & Christenson, 2000; Hourii et al., 2019). Trust in teachers was highest among parents of children in primary school, especially among mothers (Penttinen et al., 2020). It was positively related to students' academic progress and negatively to behavioural problems (Santiago et al., 2016; Ogg et al., 2021).

2.2.3. *Availability*

According to the attachment theory, parents' availability for their child means their emotional availability, while offering a 'safe base' for the infant and allowing a supportive atmosphere, consistency, and responsiveness to the infant's signals (Ainsworth et al., 1978).

It seems that the literature deals more with the psychological and emotional availability of teachers for students (for example, Spilt et al., 2010), but lacks research about teachers' time availability for students and parents. Indeed, in many countries, teachers' working hours are formally defined; in Israel, however, parents may contact the homeroom teacher all day long and not only during the official working hours. E-mail correspondence was found useful in increasing teachers' availability for parents (Thompson, 2008). In recent years there has been growing use of the WhatsApp application that allows parent-teacher communication but requires an awareness of the need to set boundaries in order to protect the teacher. (Wasserman & Zwebner, 2017). Although technology may enhance parent-teacher communication, overly intensive digitized communication may raise parents' expectations that teachers are available to them at any time (Beilmann et al., 2020).

2.2.4. *Empowerment*

Empowerment is a theoretical concept that connects between the strengths and skills of individuals and systems, ultimately manifested in proactive behavior of those involved (Rappaport, 1984). Regarding homeroom teachers in special education this means placing the child and the parents at the center of the learning process in order to generate synergistic cooperation (Bronfenbrenner, 1979). These relations in special education focus on the abilities of the parent and child rather than on their absence; on strengths and not on weaknesses; on hope and not on despair. The purpose of empowerment is to reach a situation where the parent can cope independently with the tasks, difficulties, and pressures and to arouse the parent's awareness of not being merely a passive recipient of decisions reached by others (headmasters, teachers) rather a person who takes an active role with a sense of self-control (Conor & Cavendish, 2018). The special importance of parent empowerment is associated with its ability to improve the scholastic achievements of the students, in addition to their emotional well-being (Korosidou et al., 2021; Beard & Thomson, 2021).

Decker et al. (2022) reviewed 73 articles dealing with professional ethics in the preparation of special education teachers and identified a lack of empirical studies examining the subject. It seems that there is a lack of empirical research on parental perceptions of special education teachers in general, and hardly any

research on professionalism, availability and trustworthiness of teachers as perceived by parents.

Considering the literature review and the lack of empirical evidence on parents' and teachers' perceptions of homeroom teachers in special education in Israel, the purpose of the present study was to compare parents and teachers regarding their perceptions of homeroom teachers in special education, on four dimensions: professionalism, availability, trustworthiness, and empowerment. The research hypotheses deriving from the research purpose are based on the professional literature concerning the parent-teacher relationship in special education.

The research hypotheses are:

- Parents' perception of the homeroom teacher's availability will be lower than teachers' evaluation.
- Parents will perceive the homeroom teacher's trustworthiness as lower than will teachers.
- Parents' perception of the homeroom teacher's empowerment will be lower than teachers' evaluation.

These hypotheses are based on the claim that the relationship between parents and homeroom teachers in special education is unique: Parents in special education are more dependent on homeroom teachers to meet their needs, than parents in the regular education, and they need continuous assistance and support, sometimes on an immediate basis. Consequently, they may be disappointed and frustrated, and perceive the homeroom teacher as less trustworthy and less available than do teachers (Bryk, & Schneider, 2002; Adams & Christenson, 2000; Dashevski, 2009; Vladovsky Yuval, 2018; Hillel Lavian, 2012). No hypothesis was formulated regarding professionalism because the literature does not provide enough evidence to offer such a hypothesis.

3. Methodology

3.1. Research population

The sample was comprised of 201 participants, 100 of whom were parents of students in special education (87% mothers, mean age 45.10, SD 7.60). As for the students, 73% were male, mean age 12.81, SD 4.3. The types of disabilities were emotional problems, behavioural problems, cognitive impairment, learning disabilities ASD and sensory-motor disabilities. The second part of the sample was comprised of 101 teachers in special education schools (85% women, mean age 41.65, SD 11.96).

The participants were recruited during the COVID-19 pandemic, when access to parents and teachers was limited, such that most of the data gathering from teachers was done via the "snowball" method (Gliner & Leech, 2009). The initial group of questionnaires were sent on the basis of personal acquaintance and with a request to send them on to colleagues. The parents were recruited through social media and WhatsApp groups of parents with children in special education. Owing to this method of data collection, the final sample was more varied than the initial plan and comprised a larger variety of schools and geographical districts.

3.2. Research tool

Data were gathered via a questionnaire developed in a previous study (Weidberg & Ceobanu, 2021). The questionnaire measures perceptions of parents and teachers regarding homeroom teachers on four dimensions: Professionalism (example of a statement: "The homeroom teacher has a great deal of professional knowledge concerning special education"); trustworthiness (example of a statement: "Sometimes it appears to me that the homeroom teacher acts on interests that are not in the child's favour"); availability of the homeroom teacher as perceived by parents and teachers (example of a statement: "When I experience personal distress, I feel comfortable contacting the homeroom teacher"); empowerment (example of a statement: "I feel that the homeroom teacher strengthens me"). The agreement with the statements was measured on a five-point scale ranging from 1 (not at all) to 5 (strongly agree). Two versions of the questionnaire were used – one for parents and one for teachers. The reliability of the professionalism, availability, trustworthiness, and empowerment was measured by Cronbach's alpha and yielded values of .93, .74, .94 and .92, respectively, among parents, and .83, .73, .75, and .81, respectively, among teachers.

3.3. Procedure

The study was approved by the ethical committee of the university. The anonymous questionnaires were sent to the participants in an online version. The responses were sent directly to an online site, with no intervention by the researcher.

4. Findings

4.1. Comparison between parents and teachers on perceptions regarding the homeroom teacher

To examine the questions and the hypotheses, a multivariate analysis of variance (MANOVA) was

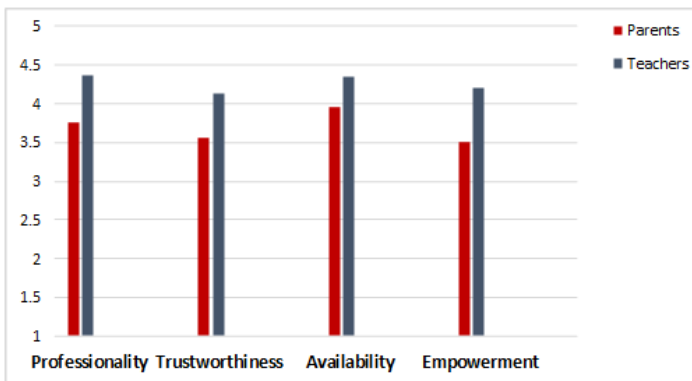
conducted, with group (parents / homeroom teachers) as the independent variable and perceptions of the four dimensions as the dependent variables. The analysis yielded an overall significant effect of group ($F(1,198) = 46.10, p < .001$). Table 1 presents the descriptive statistics and the results of the univariate analyses. The means are also presented in Figure 1.

Table 1: Results of MANOVA comparing parents and homeroom teachers on dimensions of the relationship between parents and homeroom teachers (range 1-5)

	Means (SDs)		F (1,199)
	Parents	Teachers	
Professionalism	3.75 (0.79)	4.37 (0.44)	46.91***
Trustworthiness	3.55 (1.06)	4.13 (0.49)	38.94***
Availability	3.96 (0.94)	4.34 (.45)	13.11***
Empowerment	3.50 (0.99)	4.20 (0.48)	40.45***

*** $p < .001$

Figure 1: Comparison between parents and teachers on perceptions of the homeroom teacher



The findings reveal that parents perceive the homeroom teachers' availability, trustworthiness, and empowerment as significantly lower than do teachers. These results support all three

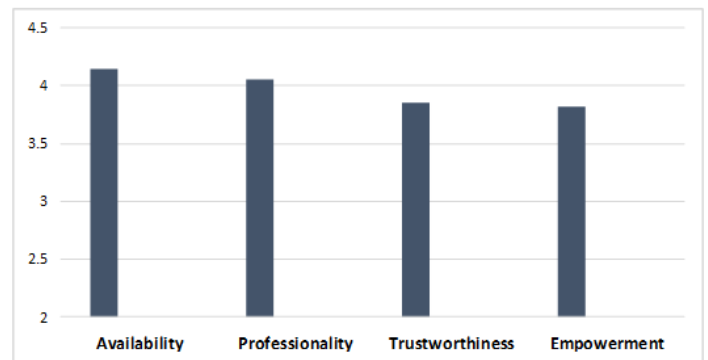
hypotheses. In addition, the homeroom teacher's professionalism is perceived by parents as significantly lower than by teachers.

4.2. Comparisons between the four dimensions of the relationship

The findings presented so far focused on comparisons between the two groups (parents and teachers) regarding perceptions of the four

dimensions. Beside this comparison, an analysis was conducted to examine differences between the four dimensions. A two-way ANOVA was conducted, with group (parents / teachers) and dimension (trustworthiness, availability, empowerment, professionalism) as independent variables, and evaluation of the homeroom teacher as the dependent variable. The analysis yielded a significant main effect of dimension ($F(3,594) = 33.01, p < .001$). Post hoc Tukey analysis ($p < .05$) revealed that availability and professionalism are perceived as higher than trustworthiness and empowerment. The means are presented in Figure 2. The findings presented in the Figure are based on the two groups together – parents and teachers.

Figure 2: Perceptions of the four dimensions among parents and teachers



Up to now, the focus was on the comparison between parents' and teachers' perceptions of homeroom teachers. Although the parents' perceptions were lower than those of the teachers, a look at the absolute values of parent perceptions (on a 5-point scale) discloses that they were not low. For example, homeroom teachers' availability was perceived as high (with a mean of 4 on a 5-point scale) and perceptions of their empowerment, trustworthiness and professionalism were medium-high (means of 3.5 and higher on a 5-point scale). The significant differences resulted from the high perceptions of the teachers, rather from the low perceptions of the parents.

5. Discussions

The research findings reveal that the parents perceived the homeroom teacher as less available, less trustworthy, less empowering, and less professional than did the teachers.

It seems that these findings are somewhat inconsistent with the findings of other studies conducted in various countries, indicating high appreciation of special education teachers by parents, regarding devotion, professionalism, and other

dimensions (Manor-Binyamini, 2003; Hillel Lavian, 2015). A closer examination, however, shows essential differences between the homeroom teacher's role in Israel and in most other countries, which probably affect parental appreciation (Romi et al., 2013). The role of the homeroom teacher in Israel is more intensive than in other countries, and homeroom teacher - parent relationships are less formal and more friendly. Parent-teacher relationships in other places are characterized by a larger status gap and distance than in Israel (Manor-Binyamini, 2003).

Furthermore, previous studies focused on teacher perceptions or parental perceptions of the relationship between parents and the homeroom teacher (for example, Adams & Christenson, 2000; Hourri et al., 2019). The current study illuminates the two perspectives – of teachers and parents – within the same research.

Another possible explanation of the current study's findings stems from the different way parents and teachers perceive the efforts of special education teachers to invest in parent-teacher relationships. While parent-teacher communication in mainstream education takes place mostly during the workday, in special education it takes place later, when the massive demands of the workday are over. It seems that teachers are more familiar with the homeroom teacher's efforts, and therefore they may project their own perceptions on the parents and contend that parents too see homeroom teachers as available, trustworthy, and empowering. Moreover, special education teachers made exceptional educational efforts during the Covid-19 pandemic (Gilat et al., 2021); perhaps this also contributed to the higher teacher appreciation for their colleagues.

The unformal, close, and warm parent-teacher relationship in Israel creates a culture of familiarity (Noy, 2017), which may encourage parent expectations of continuous support without boundaries. When the homeroom teacher in special education must set boundaries nonetheless – parents sometimes respond with disappointment, frustration and even anger.

The findings show that homeroom teachers' availability and professionalism were perceived as higher than teachers' trustworthiness and empowerment by both parents and teachers. This might be explained by the major importance of teacher availability for parents, especially in special education where homeroom teachers tend to allow parents to approach them during most of the day, assuming that

this is part of their job and commitment. This high availability also stems from the belief that in this way a deterioration of problems handled by parents could be prevented. The relatively low appreciation of teachers' empowerment and trustworthiness might be a result of a lack of awareness by parents and teachers to the time, efforts and physical and emotional involvement of the homeroom teacher.

The current study has several limitations. The study was conducted in Israel, so its findings are valid for the Israeli educational system. Since the homeroom teachers operate in Israel's unique social-educational culture, designed over the years in correspondence with the nature of Israeli society, it is not clear to what degree the findings can be generalized to other countries as well.

Another limitation relates to the methodology – the current study utilized a quantitative approach. This type of approach makes it possible to reach statistical generalizations and to compare between groups but is limited in its ability to reach a thorough understanding of the processes that occur within the studied phenomena.

For this purpose, further qualitative research, which may reach respondents' inner world, would be useful. Further studies may include comparative, intercultural research that will compare parents' perceptions of homeroom teachers in different cultures and investigate common and culturally dependent patterns. Another suggestion is a study that will compare the perceptions of homeroom teachers in special education and in mainstream education.

6. Conclusions

The lower evaluations of homeroom teachers by parents, compared to teachers, may lead to tensions: Parents may develop unrealistic expectations and the homeroom teachers may not be aware of these expectations. One practical way of coping with these tensions involves teacher training. It is highly important to raise the awareness of future teachers regarding the four dimensions that affect the relationship with parents: professionalism, availability, trustworthiness, and empowerment. An additional recommendation is to clarify the mutual expectations of parents and homeroom teachers regarding their cooperation in the mission of providing a supportive and nurturing environment for students.

Authors note:

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Investigating Dissertation Supervisors' Characteristics Valued by Supervisees and their Effect on the Supervision Process

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Investigating Dissertation Supervisors' Characteristics Valued by Supervisees and their Effect on the Supervision Process

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Abstract

Keywords:

supervision process, supervisor characteristics, supervisees' preference, supervisor selection

The Supervision process requires both supervisors and supervisees to perceive supervisors' qualities as a determining criterion in the selection of supervisors. In order to investigate supervisors' characteristics valued by supervisees and their effect on the supervision process in the English department at the University of Tiaret, two questionnaires were handed to 40 Master 2 Didactic students and 10 teachers selected through purposive sampling. The data generated were subject to quantitative and qualitative analysis. The findings revealed that supervisees appreciate supportive, flexible, responsive, available and knowledgeable supervisors. Results also suggested that directive, demanding, unresponsive and inaccessible supervisors are not appreciated. Further, it was found that lack of clear guidelines on how to choose a good supervisor, lack of awareness of the roles of supervisors and supervisees and obliviousness of supervisors' contribution to supervisees' overall development were the principal reasons causing challenges in finding a suitable supervisor. The findings also showed that supervisors' selected characteristics enhance supervision by creating an inclusive and productive environment that reaches intended outcomes efficiently. Considering these results, the following pedagogical implications are offered. The study argues for organizing seminars to inform (future) supervisees of characteristics of good supervisors and how to choose a suitable one, cultivating a positive relationship between supervisors and supervisees by clarifying the roles of each, scheduling meetings between supervisors and supervisees to create a code of conduct for working together on long terms, regulating guidelines for supervisor selection and tailoring supervisory programs that prioritize the characteristics identified in this research.

Zusammenfassung

Schlüsselworte:

Betreuungsprozess, Eigenschaften vom Betreuer, Betreuten-Vorzüge, Vorgesetzter Auswahl

Der Überwachungsprozess erfordert sowohl von den Aufsichtspersonen als auch von den Betreuten, die Qualitäten der Aufsichtspersonen als entscheidendes Kriterium bei der Auswahl wahrzunehmen. Um die von den Betreuten geschätzten Eigenschaften der Aufsichtspersonen und deren Auswirkungen auf den Überwachungsprozess am Fachbereich Englisch an der Universität von Tiaret zu untersuchen, wurden zwei Fragebögen an 40 Master-2-Didaktikstudierende und 10 Lehrkräfte im Rahmen einer gezielten Stichprobenauswahl verteilt. Die generierten Daten wurden quantitativ und qualitativ analysiert. Die Ergebnisse zeigten, dass die Betreuten unterstützende, flexible, reaktionsfähige, verfügbare und sachkundige Aufsichtspersonen schätzen. Die Ergebnisse legten auch nahe, dass aufsichtsführende, fordernde, unreaktive und unzugängliche Aufsichtspersonen nicht geschätzt werden. Darüber hinaus wurde festgestellt, dass mangelnde klare Richtlinien zur Auswahl einer guten Aufsichtsperson, mangelndes Bewusstsein für die Rollen von Aufsichtspersonen und Betreuten sowie Unkenntnis des Beitrags von Aufsichtspersonen zur Gesamtentwicklung der Betreuten die Hauptgründe für Schwierigkeiten bei der Suche nach einer geeigneten Aufsichtsperson sind. Die Ergebnisse zeigten auch, dass die ausgewählten Eigenschaften der Aufsichtspersonen die Überwachung verbessern, indem sie eine inklusive und produktive Umgebung schaffen, die die beabsichtigten Ergebnisse effizient erreicht. Angesichts dieser Ergebnisse werden folgende pädagogische Implikationen angeboten. Die Studie plädiert für die Organisation von Seminaren, um (zukünftige) Betreute über die Eigenschaften guter Aufsichtspersonen und deren Auswahl zu informieren, eine positive Beziehung zwischen Aufsichtspersonen und Betreuten durch Klärung der Rollen jeder Partei zu fördern, Treffen zwischen Aufsichtspersonen und Betreuten zu planen, um einen Verhaltenskodex für die langfristige Zusammenarbeit zu erstellen, Richtlinien für die Auswahl von Aufsichtspersonen festzulegen und Betreuungsprogramme zu gestalten, die die in dieser Forschung identifizierten Eigenschaften priorisieren.

1. Introduction

According to Marsh et al. (2002), research is a process that it considered a pre-requisite constituent of higher education that can only occur under the direction of a supervisor. Dissertation supervisors are considered as indispensable agents in all the stages of

the supervision process. Hence, it is significant that supervisees select the suitable supervisor for themselves. This is a process that depends on their perceptions of an appreciated supervisor. This often results in a situation where some supervisors are



requested by many supervisees while others end up with few or no supervisees.

In the English Department at Ibn Khaldoun University of Tiaret, supervisors used to be chosen by supervisees. However, in recent years, only half of students who were ranked at the top were offered the privilege to choose their own supervisor while the administration assigned supervisors to the other half of students who obtained lower results. The rationale behind this internal policy is to ensure that workload is equitably distributed across supervisors. Naturally, students who were assigned their supervisor expressed a general discontent and dissatisfaction against this process of supervisors' repartition that they perceived as totally unfair since they had little or no say. Top students, on the other hand, tackled the challenge of selecting the adequate supervisor being aware that this choice will likely have a positive or a negative impact on the quality of the supervision process and its outcomes. Acker et al. (1994) argue that supervisees experience trepidation regarding their aptitude for this task because of a variety of reasons including lack of communication with supervisors, solitude in case problems arise during the supervision process and not receiving feedback regarding their progress. Being in contact with Master 2 students in the aforementioned department allowed to easily conduct some informal interviews with supervisees and supervisors to get a preliminary idea about their perspectives concerning what supervisees they look for in a supervisor.

This aroused the need to explore the perceptions of supervisees' and supervisors about supervisees most appreciated traits in supervisors and to scrutinize the influence of these characteristics on the supervision process from the perspective of students and teachers. Accordingly, this study seeks to provide answers to the two following research questions:

RQ1: What characteristics Master supervisees expect to find in their supervisors?

RQ2: How are these characteristics expected to affect the supervision process?

To answer the research questions, the following hypotheses are generated:

RH1: Master supervisees expect their supervisors to be available, supportive and expert.

RH2: These characteristics are expected to have an enhancing effect on the supervision process.

This investigation is significant as it aims to provide valuable insights into the complex dynamics

of supervisory relationships. From a theoretical standpoint, it expands the existing literature and knowledge base on dissertation supervisors' most appreciated traits; more specifically supervisors' characteristics sought by Master supervisees through an in-depth investigation of students' and teachers' perspectives. Our study seeks to raise students' and teachers', awareness of the attributes of a successful supervision and provide them with insights into the effects that these characteristics might produce on the supervision process. It is hoped that the findings of this study will contribute in informing the development of interventions aimed at enhancing supervisory skills. It also expands to selection criteria for individuals entering supervisory roles. Higher education institutions and stakeholders can use the study's results to improve overall quality of supervision. Last but not least, by identifying the effects that these characteristics might produce on the supervision process, this investigation aspires to have significant implications for Didactics Master's students and their supervisors to improve the supervisory experience.

2. Theoretical background

According to Al-Muallem et al. (2016), supervision is an intricate multifaceted process. This signifies that supervision encompasses various stages and aspects that collectively shape it. Sambrook et al. (2008) aver that the essence of supervision lies in its function to guide and support supervisees. Van Rensburg et al. (2016) argue that this process requires two parties: a supervisor and a supervisee who acquire knowledge and evolve jointly while Ismail et al. (2011) and Zaaba et al. (2015) expand on this idea affirming that these two parties target the same objective. In its essence, this process epitomizes a collaborative endeavour grounded in a journey of mutual growth and knowledge accumulation striving towards a shared provision. Besides, Van Rensburg et al. (2016) state that research supervision aims at transmitting supervisors' research and related skills to their supervisees. Therefore, Wisker (2005) considers research supervision as a transformation process supervisees undergo from being first time researchers into becoming autonomous researchers. That is, this dynamic exchange of knowledge marks the birth of a new pedagogical relationship. Supervisees need to gradually reveal and come to terms with the new pedagogical contract which is established within the supervisor-supervisee pair.

A huge body of literature including Moskvicheva et al. (2015), McAlpine (2013), Taylor and Frsa (2016)

and Wolff (2010) attest that supervisees need supervisors in all stages of the supervision process from choosing a suitable research topic till refining the final version of the dissertation. Another group of researchers namely Lekalakala- Mokgele (2008), Severinsson (2015), Sidhu et al. (2014) and Chikte and Chabilall (2016) affirm that supervisees need also their supervisor's support in establishing a professional relationship between the supervisor and the supervisee. Expecting supervisors to actively participate in all supervision phases denotes the recognition of their contribution to the overall process. For Lee (2009) and Thompson et al. (2005), supervisors are required to be accessible and ready to help when necessary. Supervisors are required to be easy to reach and ready to help. Abiddin et al. (2011) see supervisors responsible for gaining access to relevant sources while researchers like Sidhu et al. (2013), Moskvicheva et al. (2015) and Mehrani (2017) believe that supervisors are needed to assess supervisees through constructive feedback. In addition to all the above mentioned researchers, Severinsson (2015) and Eley and Murray (2009) suggest that supervisors are expected also to schedule regular and purposeful supervision sessions, to plan and design attainable objectives and even to prepare for viva voice.

Speaking about supervisors' role, Assakrane (2016) confirms that teachers perform multidimensional roles. Researchers like Hockey (1994), Ismail et al. (2013) and Rademeyer (1994) consider the supervisor as responsible for finishing the supervision process successfully. Al-Torkhi (2011) highlights that supervisors are also teachers, administrative members and researchers simultaneously. Heath (2002) sees the supervisor as responsible for offering expertise, support and time to supervisees and guiding them for a supervision process that adheres to acceptable standards while Doğan and Bıkmaz (2015) believe that supervisors are critical agents in supervisees' cognitive, emotional and professional development. Other researchers namely Phillips and Pugh (2000) and Frischer and Larsson (2000) believe that effective supervisors are expected to possess a proven record of research publications showcasing a significant contribution to their field of research. Yeatman (1995) argue also for a track record of supervising a considerable number of students. Furthermore, Abiddin (2007b) believe that the supervisor is expected to possess leadership qualities and counselling aptitude while researchers like Wisker (2007), Tahir et al. (2012), Talebloo and Baki (2013)

and Easterby-Smith et al. (2002) believe that supervisors need to demonstrate readiness to assist supervisees and proficiency in providing feedback that is constructive. On the same line of thoughts, Seagram et al. (1998) argue that the supervision process is positively influenced by supervisors who express a positive attitude towards it. This implies the need for versatility and adeptness in multitasking to fulfil the mandate of active participation.

An extensive body of research including Holbrook et al. (2014), Alam et al. (2013), Stubb et al. (2012) and Meyer (2007) accentuate the perplexity between supervisors and supervisees in defining, on the one hand, the responsibilities and roles of each. Tahir et al. (2012), Latona and Browne (2001) and Shariff et al. (2014) explored, on the other hand, the confusion in meeting research supervisees' expectations of the qualities of the supervisor throughout the process of supervision. Evidence from research undertaken by Tahir et al. (2012) and Talebloo and Baki (2013) suggests that ambiguity and divergence between supervisors' practices and supervisees' expectations can lead to challenges in the supervisory relationship. Claudius and Vincent (2017) argue that research has uncovered intriguing findings that elevate the relationship between supervisees and supervisors as pivotal in enhancing good supervisory outcomes. The authors advocate the establishment of 'work alliance' between supervisors and supervisees at the outset of the process. Furthermore, Tahir et al. (2012), Shariff et al. (2014), Murphy et al. (2007) and Bair and Haworth (2004) agree with them and call for establishing a collaborative relationship.

From a similar viewpoint, Wright (2003), Meissner (2012), Latona and Browne (2001) and Peterson (2007) classify the relationship between the supervisor and supervisees as a crucial determinant of the supervision quality. Thompson et al. (2005) and Polonsky and Waller (2014) call for the urge of communicating a comprehensive distinction between the roles of each in order to build a supervisory relationship that is productive and healthy. Conversely, if there is a mismatch between supervisees' expectations of the supervisor characteristics and his real characteristics, quality of the supervision process is at risk. Any bewilderment often leads to incomplete or delayed degrees (Malfroy, 2005) and the formation of unfavourable educational experiences for students (Manathunga, 2012; Guerin & Green, 2015; Taylor & Frsa, 2016; Lahenius & Ikavalko, 2014).

Hockey (1996) listed the following characteristics for effective supervisors: empathy, respect, honesty, genuineness and flexibility. According to Chikte and Chabilall (2016), a supervisor embodies devotion, forbearance, zeal, approachability, positive attitude and constructive criticism. Ali et al. (2016) added to the abovementioned qualities encouraging autonomy and enhancing supervisees' time management skills. From a close standpoint, Sidhu et al. (2014) and Calma (2007) suggest that supervisors should be well versed in the field of the study whereas Polonsky and Waller (2014) advocate being expert in the topic of research, in methodology, in the research process and in boosting motivation (Sidhu et al., 2014). Mainhard et al. (2009) emphasised that supervisors are expected to possess a set of qualities, including understanding and caring, being attentive, encouraging discussions about the topic of research when appropriate and providing feedback and support (Ribau, 2020). Cekiso et al. (2019) advocate that effective qualities are essential not only for supervisors, but also for supervisees, both play equally important and influential roles. Fan et al. (2018) assert that when these characteristics are possessed by both parties, they yield reciprocal reliance and understanding and foster an environment conducive to research.

On the same line of thoughts, Denicolo (2004), in his study, examined supervisees' favourable traits in a supervisor and found out that they prefer supervisors who are knowledgeable, encouraging, dependable and informative. Ghani et al. (2012) through their study suggest that supervisees select supervisors who exhibit qualities such as friendliness, approachability, flexibility and resourcefulness. Abiddin and West's (2007a) empirical study about the traits of an effective supervisor underscores the importance of supervisors embodying qualities like active engagement, competence and knowledge. The supervisor needs to be a researcher who can analyze and improve supervisee's research practice through personalized ongoing reflection and professional development. On the contrary, Frischer and Larsson's (2000) investigation revealed that supervisors characterised by the lack of timely, frequent and appropriate guidance proved unfavoured. Burns et al. (2016) emphasized the multifaceted role of the supervisor in providing both technical expertise and emotional support. Based on this, supervisors need to be attentive in balancing their personality traits in dealing with supervisees as learners and supervisor skills in responding to supervisees as novice researchers. They must cultivate a personal positive demeanour on the

one hand and demonstrate expertise in the research topic and research.

Research has explored also the effect of supervisors' characteristics on supervisees' completion of research works. According to Ellison and Dedrick (2008) and Eyangui et al. (2014) supervisors' supervisory characteristics affect students' completion of their dissertation as well as their future career choices. Tahir et al. (2012), Akparep et al. (2017) and Ali et al. (2019) emphasize the significance of supervisory practices in ensuring successful completion of dissertations, thereby effective supervision practices contribute to the advancement of knowledge and academic achievement. The study of Latona and Browne (2001) provides valuable insights on the significance of effective supervision that plays a significant role in achieving successful academic outcomes. Shariff et al. (2014) elaborate on the previous ideas by delving into the multidimensional dynamics of supervision highlighting how it influences various aspects of research including methodology, data interpretation and manuscript preparation. Other researchers namely Ndayambaje (2018), Motseke (2016), Kimani (2014) see effective supervision as a unique pedagogical process that results in timely academic research completion. To reduce attrition, improve the rate of degree completion and maintain general and stable satisfaction levels, honesty is a must (Al-Muallem et al., 2016). These studies contribute to a deeper understanding of the effect of dissertation supervisors' traits on research.

Despite the availability of the aforementioned literature on supervisors as determinant agents in the supervision process, the studies did not take into account both supervisees' and supervisors' perspective about their preferred criteria in selecting supervisors. Moreover, studies carried out by researchers as Denicolo (2004), Ghani et al. (2012), Abiddin and West's (2007a) and Burns et al. (2016) dealt with the characteristics that supervisees look for in their supervisors but lacked clear guidelines on how to evaluate a supervisor before selection. Ellison and Dedrick (2008), Eyangui et al. (2014), Tahir et al. (2012), Akparep et al. (2017) and Ali et al. (2019), Latona and Browne (2001), Shariff et al. (2014), Ndayambaje (2018), Kimani (2014) explored effective supervision which results in the completion of research works from students' perspective only, they did not compare supervisees' and supervisors' points of view. Furthermore, only a few researchers such as Denicolo (2004), Abiddin (2007b) and Ghani et al.

(2012) dealt with the topic under investigation at PhD level in different departments, however; preferences of supervisees regarding their supervisors at PhD level differ from preferences of supervisees at Master level. This variation stems from the demands; developmental stages of each level and experience in undertaking research, i.e., Master supervisees are first time researchers who need a broader range of characteristics from supervisors compared to their PhD counterparts.

In the Algerian context, be it a case in point, the majority of studies investigated supervisors' impact on the supervision process pace and perceptions of the supervision process. Based on our current knowledge, no study explored supervisors' valued characteristics by supervisees from the perspective of both supervisees and supervisors. The paucity of available literature prompted our scholarly interest in this topic thereby directing our attention towards exploring supervisors' valued characteristics by supervisees at Tiaret University from the perspective of both supervisees and supervisors. Hence, our study aims to serve as a guiding resource for Algerian researchers, by extension researchers in general, embarking on similar or related inquiries.

3. Research methodology

In order to meet the objectives of the research, a descriptive exploratory study was conducted with 40 Master 2 students and 10 teachers enrolled in the English department at Ibn Khaldoun University. The study was carried out at the end of the first semester of the academic year 2023/2024 after students finished their studies and the supervision had process actually started.

3.1. Participants and sampling procedures

The participants (both supervisees and supervisors) were selected according to purposive sampling procedures. We believe that the most appropriate type of sampling is the purposeful/purposive sampling as we deliberately selected only supervisees who selected their supervisors and supervisors who were voluntarily selected by supervisees. That is, the supervisees were selected to take part in this research based on the researchers' personal judgment as whether the participants could best describe the situation, provide researchers with rich and reliable information, and help them better understand the problem under discussion.

Before selecting the participants, the researchers clearly defined the specific characteristic, based on the

research objectives, which is supervisees' personal selection of supervisors. The participants must meet this criterion (to select and being selected) to be eligible for inclusion in the study. Once the criterion was identified, the researchers referred to the administration to reach out to these participants

Therefore, the questionnaire was handed only to supervisees who were given the opportunity to choose their supervisor and to supervisors who were selected by supervisees. Supervisees who did not choose their supervisors and supervisors who were not selected by supervisees and who were dispatched by the administration according to specific criteria did not serve the purpose of this study. Sampling continued until data saturation was reached. After including 40 students and 10 teachers, gathering additional data from other participants ceased to provide new insights. This saturation indicates that the collected data is sufficiently comprehensive to address the research questions and objectives.

Purposive sampling facilitated the inclusion of participants who meet this specific criterion of interest. Although this kind of sampling, which excludes participants who do not meet the criterion, may inadequately represent the diversity of perspectives of our target population; its pragmatic advantages in terms of accessibility and efficiency justifies its use.

3.2. Data collection instruments and procedures

To reach answers to the research queries, two questionnaires were designed for gathering and triangulating data to elicit respondents' specific answers. The students' questionnaire contains 09 questions divided on three sections (see appendix A) while the teachers' questionnaire contains 10 questions divided on three sections (see appendix B). Two questions included in the students' questionnaire (Q 06 and 07) in addition to two questions in the teachers' questionnaire (Q 07 and 08) are adapted from two prominent measurement means which are the Supervision Styles Inventory (SSI) and the Supervisory Relationship Questionnaire (SRQ).

3.2.1. Description of the teachers' questionnaire

Section 01 is entitled 'general information about supervisees'. It contains two questions related to gender and age distribution respectively. Though the data obtained from these two questions do not serve any research purposes (i.e., they are irrelevant to our research), we included them as warming up (or

opening) questions to encourage the respondents' participation in the study.

Section 02 entitled 'finding your dissertation supervisor' contains 03 questions (Q3,4 and 5). Question 03 aims at discovering whether the students encountered difficulties/challenges in finding a supervisor and at scrutinising the nature of these challenges if any. Question 04 seeks to know if supervisees were aware about the characteristics they value in supervisors when they started to look for their supervisor while question 05 seeks to find out whether students were informed about and taught how to choose a supervisor during their undergraduate studies.

Section 03 entitled 'characteristics of a good supervisor' comprises 04 questions (Q 6,7,8 and 9). Question 06 attempts to uncover the qualities/characteristics supervisees focus on in choosing a supervisor. The items of this question are adapted from SSI which was designed by Friedlander et al. (1984). The authentic version included 27 items; however, only 18 items are included in an attempt to serve the purpose of this study. This question is complemented by a follow up question which requires respondents to specify other qualities/characteristics that are not mentioned among the options. Question 07 focuses on identifying the qualities/characteristics supervisees seek to find in their supervisor. The categories and statements of this question are adapted from SRQ which was developed by Palomo et al. (2010) and comprises six components:

The safe base is the first constituent. It describes a cooperative supervisory setting where supervisees comfortably exchange viewpoints with the supervisor who is expected to be receptive and responsive to their needs.

Structure is the second constituent. It addresses practical boundaries established and maintained by supervisors in terms of structure, organization and timing of the supervisory meetings.

The third component is commitment. It is related to the supervisor's interest and commitment to the supervision task, not perceiving supervisees as a burden.

Reflective education makes up the forth element. In this component, the supervisor is supposed to simplify the use of theory in practical situations.

Role models are the fifth constituent. Supervisors are seen as highly credible, experts with exceptional knowledge and integrity.

Formative feedback is the final component. It involves supervisors providing timely and relevant input on the research of their supervisees on a regular basis.

The original version of the questionnaire consists of 67 items. However, for the sake of practicality, only 23 items were used to design our questionnaire. The modifications on the items of these two questions were applied to suit the participants, to ensure that these items are understood and accurately reflect characteristics/qualities supervisees value in a supervisor. Question 08 is meant to decipher the impact of traits of supervisors on the supervision process from supervisees' point of view and question 09 aims at exploring the qualities/characteristics of supervisors, which are not appreciated by supervisees.

3.2.2. Description of the teachers' questionnaire

The supervisors' questionnaire examined similar aspects covered in the students' questionnaire with slight variation. The purpose behind addressing the same points in both questionnaires is to double check the findings and validates them by investigating the topic under research from bipartite perspectives (supervisees vs. supervisors). Cross-checking serves as a crucial technique in assuring the validity and reliability of the results.

Section 01 is entitled 'general information about supervisors'. It contains 04 questions. Q01 is related to participants gender, it does not serve any research purposes (i.e., it is irrelevant to our research), we included it as a warming up (or opening) question to encourage the respondents' participation in the study. Q02, 03 and 04 aim at obtaining information regarding teachers' professional background (academic degree, year of experience and training in dissertation supervision respectively) in order to investigate their readiness to be supervisors.

Section 02 entitled 'finding a dissertation supervisor' contains 02 questions (Q05 and 06). Question 05 aims at discovering whether students were informed about and taught how to choose a supervisor during their undergraduate studies. The aim of question 06 is to discover whether the students encountered difficulties/challenges in finding a supervisor and at scrutinising the nature of these challenges if any.

Section 03 entitled 'characteristics of a good supervisor' comprises 04 questions. Q07 attempts to uncover the qualities/characteristics supervisees focus on in choosing a supervisor. This question is

complemented by a follow up question which requires respondents to specify other qualities/characteristics that are not mentioned among the options. Question 08 focuses on identifying the qualities/characteristics supervisees seek to find in their supervisor. These two questions are identical to Q06 and 07 in the students' questionnaire; they pertain to the same models (SSI and SRQ respectively) and underwent the same adaptation process. The sole difference lies in their derivation from supervisors' perspective.

Following their design, the questionnaires were piloted with five supervisees and three supervisors who participated in the study afterwards. Respondents offered feedback about the questionnaires relating to their length and comprehensibility. The researchers used this input to refine the questionnaires by shortening their length, reformulating some statements and adding follow-up questions.

Then the questionnaires were reviewed by two experienced researchers to ascertain their face and content validity. To guarantee the content validity of our instruments, we meticulously tried to assess the relevance of their content to the objectives of the study and the review of literature before administering the final version.

For face validity, we deliberated on the questionnaires layout, length and response formats for some items with reference to the feedback received from the consulted researchers. Additionally, the pilot study also contributed to establishing face validity. Both questionnaires tackled the same questions to ensure concurrent validity.

Before administering the questionnaires to the participants, they were sent a consent form (See Appendix C). The latter was designed to incite respondents' participation while ensuring a clear understanding of the research aims, data collection methods and procedures and agreement on participation conditions. Additionally, they were informed that their responses would be analyzed and interpreted by the researchers only. The consent also assures anonymity and confidentiality of data which would be used solely for research purposes.

3.3. Data Analysis procedures

In the present study, quantitative data obtained from close ended questions were analysed through the use of statistical descriptive analysis. Supervisees' and supervisors' responses were classified and underwent conversion either to percentages or means. Descriptive

analysis was conducted to summarize the participants' responses to each item.

Responses to open-ended questions, on the other hand, were subject to content analysis. They were thematically organized depending on their common key concepts. Finding connections between data sets is the main goal of the process. After determining the thematic categories in each questionnaire, themes found in the teachers' questionnaire were compared to those found in the students' questionnaire to determine whether the experiences and assertions made in relation to the phenomenon being discussed are unique to individual cases or shared by all respondents (i.e., supervisors and supervisees). This comparison between data aims at strengthening the findings' validity by cross-checking them to detect similarities and discrepancies.

4. Results

4.1. Students' questionnaire

Section 01: General information about the supervisee

Q1: Specify your gender

Q2: Specify your age group

Table1. Age and gender distribution of participants

Age group	20 - 25	26 - 30	31 - 35	+ 36	Total percentage
Gender					
Males	10	03	00	02	37%
Females	16	01	02	06	63%
Total percentage	65%	10%	5 %	20 %	100 %

As reveals the Table 1, the group of participants of this study is not balanced in terms of gender distribution as there is a dominance of females (63%) over males (37%). The average age of most participants (65%) ranges between 20 and 25 years while four students' ages are between 26 and 30 years, two students' ages are between 31 and 35 and eight students are more than 36 years old. As a reminder, the two previous questions about age and gender were just included as warming-up questions and did not serve any of our research objectives.

Section 02: Finding a supervisor

Q3: Did you have any idea about the desirable characteristics of a supervisor before you started looking for your own supervisor?

The majority of respondents (85%) attested that they had formed an idea about the

characteristics/qualities of supervisors they want to work with. They unanimously mentioned that they look for knowledgeable, collaborative, available, flexible and kind supervisors. From a similar stand point, 20% want strict and prescriptive supervisors, 5% look for a permissive supervisor and two informants (5%) highlighted generation gap and search for a supervisor belonging to ‘gen Z’. These respondents prefer supervisors who were born in the 1990s and raised in the 2000s during the most significant technological transformations in the century in order to avoid generation gap between the two. The rest of the participants (15%) reported that they did not know what to look for in a supervisor.

Q4: During your undergraduate studies, were you informed about the procedure to choose a good supervisor?

The participants reported unanimously (100%) that during their studies they were not informed about the procedure of choosing a good supervisor. Therefore, no one (0%) answered the follow-up question ‘If yes, how did it help?’

Q5: Did you meet any challenges/difficulties in finding a dissertation supervisor?

The results reveal that most participants (77%) did not face any problem in finding a supervisor while the rest of the respondents (23%) confirmed that they did. All the participants belonging to this category attributed the difficulty of finding a supervisor to their themes; they argued that the supervisors rejected them because of their research topics. One student stated that the supervisor refused to supervise him because of the low mark the student got in the module taught by that supervisor.

Section 03: Characteristics of a good supervisor

Q6: What qualities/ characteristics did you accentuate in choosing your supervisor?

Table 2. Supervisors’ characteristics/ qualities focused on by supervisees

<i>Qualities/ characteristics (%)</i>					
Goal oriented	40%	Focused	35%	Demanding	15%
Perceptive	20%	Creative	15%	Evaluative	35%
Committed	70%	Supportive	70%	Friendly	60%
Practical	20%	Resourceful	35%	Responsive	40%
Intuitive	15%	Thorough	15%	Prescriptive	05%
Reflective	15%	Didactic	35%	Flexible	60%

As shows the Table 2, the majority of participants (70%) emphasize that their supervisors need to be committed and supportive. More than half of the

respondents (60%) accentuate on being friendly and flexible. Less than half of the students involved in the study (40%) stress goal orientation and responsiveness as qualities they look for. Additionally, 35% of the informants want supervisors who are focused, resourceful, didactic and evaluative. Perceptive and practical supervisors’ traits are highlighted by 20% of the sample. Furthermore, only few (15%) esteem intuitive, reflective, creative, thorough and demanding supervisors whereas only two supervisees (5%) esteem prescriptive supervisors. No respondent (0%) suggested any additional traits in the follow up question.

Q7: Tick the statements that match your opinion most closely.

With reference to safety base, all participants (100%) reported that they appreciate supervisors who respect their person and ideas, collaborate rather than prescribe, and provide constructive criticism without judging them. Only few participants (15%) value supervisors who listen to supervisees openly. No participant (0%) showed appreciation to supervisors who ensure supervisees’ feeling of safety. In terms of structure, all supervisees (100%) esteem supervisors who are organized and plan regular meetings whereas no one (0%) showed discontent towards interrupting /cutting short supervision sessions. For commitment traits, participants unanimously (100%) admire supervisors who are enthusiastic about supervision, approachable and easy to talk to, available and easy to reach and do not make supervisees feel like a burden. With reference to reflective education, most appreciated supervisors according to the participants are those who have a command of theoretical knowledge, half of the respondents (50%) want supervisors to pay attention to unspoken anxieties and feelings. No one of the supervisees involved in the study (0%) appreciate supervisors who incite them to reflect upon their practice. With reference role model traits, all participants (100%) appreciate supervisors who are knowledgeable in the topic of research, provide practical solutions and have respect among colleagues and administration staff. With reference to formative feedback, 80% of respondents reported that they appreciate supervisors who provide regular feedback on their performance, 35% esteem supervisors who balance positive and negative feedback and 5% value supervisors who help them identify their needs. No respondents (0%) reported admiration to supervisors who pay attention to their level of competence.

Q8: In your opinion, how would the characteristics you selected affect the supervision process?

All respondents provided different answers pertaining all to the same idea. They strongly believe that the supervisors' selected characteristics play a vital role in maintaining a good relationship with supervisees, creating an encouraging, orderly, respectful and productive supervising environment and reaching intended outcomes efficiently. To illustrate, some of the students' answers are quoted as follows:

- “Having a supervisor with these characteristics would help establishing a good and constructive supervisory relationship and prevent wasting time in problems and misunderstanding....”
- “... there will be no constraints at the level of communication nor the research work, order and organization are ensured and supervision goes smoothly...”
- “These characteristics would strengthen the sense of cooperation and collaboration which boosts motivation also and eventually supervision sessions will be fruitful.”
- “.... supervision would not be exhausting nor mentally draining, it would rather be encouraging and effective.”
- “It makes supervision smooth and the work will finish within time limits...”
- “..... these would facilitate the work, keep us engaged and steady, make us gain time and effort and put us in a respectful atmosphere...”

Q9: Are there any traits you do not appreciate in a dissertation supervisor?

The results show that all participants (100%) shared with us the characteristics that they do not appreciate in their supervisors. 90% of respondents do not appreciate supervisors who are too directive, demanding, lack responsiveness, not motivated, do not provide enough feedback, cannot be reached easily, procrastinate supervision sessions or corrections . Some respondents (30%) do not esteem supervisors who suddenly decide to change the topic of research because they lack the necessary knowledge/skills related to it. Few informants (5%) reported that they do not value supervisors who are disobliging and without clear rationale/justifications.

4.2. Teachers' questionnaire

Section 01: General information about the supervisor

Q1: Specify your gender

The group of participants of this study is not balanced in terms of gender distribution as there is a dominance of females (70%) over males (30%). As a reminder, this question about age was included as warming-up question only and did not serve any of our research objectives.

Q2: Specify your academic degree

Q3: Specify the duration of your experience in dissertation supervision

Table 3. Supervisors' academic degree and duration of supervisory experience

Years	01 - 05	06 - 10	11 - 15	+ 16	Total percentage
Diploma					
PhD	02	03	02	01	80%
Magister	00	02	00	00	20%
Total percentage	20%	50%	20%	10%	100%

As shows the Table 3, the majority of participants (80%) are PhD holders while only (20%) hold a Magister diploma and are already enrolled in PhD studies. It is worth mentioning that none of them (0%) holds another academic degree. For years of supervisory experience, 02 PhD holders (20%) are novice supervisors with less than 05 years of experience, precisely 04 years. Half of the participants' (50%) supervision experience ranges between 06 and 10 years, among the 03 are PhD holders and 02 hold a Magister degree. One PhD holder (10%) has more than 16 years of experience in dissertation supervision. Since the participants' supervision experience ranges from 04 to more than 16 years, they can provide reliable data required for answering the research questions and reaching the objectives of the study.

Q4: Did you benefit from any training in dissertation supervision?

Despite the importance of training in assisting supervisors in developing an informed approach to supervise Master students, the participants unanimously asserted (100%) that they did not benefit from any training in dissertation supervision. Their

supervision is guided by their personal experience as former students and/or by their readings on the topic.

Section 02: Finding a dissertation supervisor

Q5: Are students informed about the procedure to choose a good supervisor during their undergraduate studies?

The participants reported unanimously (100%) that, during undergraduate studies, students are not informed about the procedure of choosing a good supervisor. Therefore, no one (0%) answered the follow-up question ‘If yes, how did it help?’ However, all participants (100%) answered the other follow up question and suggested a set of characteristics which they perceive as important to be a good supervisor. Precisely, all participants (100%) believe that it is important for a supervisor to be domain and research expert, effective communicator, adaptable, accountable, patient and decision maker. Other characteristics mentioned by the majority of respondents (70%) include being evaluative, practical and resilient. (20%) perceive organization, integrity and motivation to be among the most important characteristics that should be possessed by supervisors.

Q6: Do you think supervisees meet challenges/difficulties in finding a dissertation supervisor?

The results reveal that half of the participants (50%) attest that students do not meet any difficulties in finding a supervisor while the other half (50%) confirmed that supervisees face challenges in finding a supervisor. The respondents of this category attributed the difficulties to specialization mismatch and workload constraints which are generally discarded by supervisees when choosing a supervisor. One respondent only (10%) relate the difficulty in finding a supervisor to teachers’ biases against certain students either for personal, behavioural or students level-related reasons.

Section 03: Characteristics of a good supervisor

Q7: In your opinion, what qualities/ characteristics do your students accentuate in choosing their supervisor? (You may tick more than one option)

As shows the Table 4, the majority of teachers (80%) agree upon the fact that supervisees in their search for a supervisor focus on traits like commitment, support, resourcefulness, friendliness, responsiveness and flexibility. Less than half of the

respondents (40%) reported that supervisees appreciate supervisors who are thorough and goal-oriented. Furthermore, only a few respondents (30%) consider that students esteem perceptive, intuitive and practical supervisors. (20%) of teachers believe that supervisees value supervisors who are reflective and creative while no one (00%) believe that demanding and prescriptive teachers are valued by supervisees. One respondent considers that supervisees value focused, didactic and evaluative supervisors. No respondent (0%) suggested any additional traits in the follow up question.

Table 4. Supervisors’ characteristics/ qualities focused on by supervisees from supervisors’ perspective

<i>Qualities/ characteristics (%)</i>					
Goal oriented	40%	Focused	10%	Demanding	00%
Perceptive	30%	Creative	20%	Evaluative	10 %
Committed	80%	Supportive	80%	Friendly	80%
Practical	30%	Resourceful	80%	Responsive	80%
Intuitive	30%	Thorough	40%	Prescriptive	00%
Reflective	20%	Didactic	10%	Flexible	80%

Q8: Tick the statements that match your opinion most closely. (You may tick more than one option)

With reference to safety base, all participants (100%) reported that supervisees appreciate supervisors who respect their person and ideas, collaborate rather than prescribe, and provide constructive criticism without judging them, who listen to them openly and who ensure supervisees’ feeling of safety. In terms of structure, all teachers (100%) believe that students esteem supervisors who are organized and plan regular meetings, who do not interrupt/cut short supervision sessions. For commitment traits, participants unanimously (100%) reported that supervisees admire supervisors who are enthusiastic about supervision, approachable and easy to talk to, available and easy to reach and do not make supervisees feel like a burden. With reference to reflective education, most appreciated supervisors according to the participants are those who have a command of theoretical knowledge and who pay attention to unspoken anxieties and feelings. No one of the supervisors involved in the study (0%) believe that supervisees appreciate supervisors who incite them to reflect upon their practice. With reference to role model traits, all participants (100%) think that supervisors who are knowledgeable in the topic of research, provide practical solutions and have respect among colleagues and administration staff are most appreciated. With reference to formative

feedback, all respondents (100%) do not believe that supervisees appreciate supervisors who help them identify their needs and who pay attention to their level of competence. Less than half of the participants (40%) think that supervisees value supervisors who provide both positive and negative feedback.

Q9: In your opinion, how would the characteristics you selected affect the supervision process?

According to the respondents' answers, the supervisors' selected qualities of supervisors play a pivotal role in fostering a positive relationship with supervisees, establishing a supportive, orderly and productive supervising environment and achieving desired outcomes efficiently. To illustrate, some of the supervisors' answers are quoted below:

- "Possessing the selected qualities help supervisors maintain active engagement and satisfaction which lead to better supervision process."
- "... they can prevent supervision barriers such as: mismatched expectations, communication breakdowns, conflicts and tension..."
- "the aforementioned characteristics help maintaining high productivity and progress in the supervision process"
- "...they ensure the smooth running of supervision process and make it effective and efficient..."

Q10: From your experience, what are the traits your students would not appreciate in a dissertation supervisor?

The results show that all participants shared with us, depending on their experience, the characteristics that their supervisees do not appreciate in supervisors. All respondents (100%) attest that supervisees do not appreciate supervisors who are micromanagers and too controlling and overly critical. The great majority (90%) confirm that supervisees do not value supervisors who are unapproachable, unsupportive and apathetic. Most of the participants (80%) affirm that supervisors who are inaccessible, rigorous and demanding are less preferred by supervisees.

5. Discussions

Our study focused on supervisors' traits looked for by Master's supervisees from the perspective of students and teachers. With reference to the first question of this research, the students' and teachers' questionnaires revealed similar results. The findings of

the students' questionnaire revealed that only a few students (3%) and a few supervisors (10%) reported that supervisees value essential traits as evaluation, resourcefulness and being didactic while the majority of students (70%) and teachers (80%) confirmed supervisees' focus on some qualities such as commitment, responsiveness, flexibility and kindness neglecting other crucial characteristics like perception, creativity and reflection. These findings are in accordance with the studies of Polonsky and Waller (2014), Calma (2007), Ghani et al. (2012), Abiddin (2007b), Abiddin and West's (2007a), Denicolo (2004) and Sidhu et al. (2014). This implies that supervisees lack awareness regarding other important characteristics that make a good supervisor including focus on growth, reflection, motivation and practicality. This can be attributed to supervisees' lack of awareness and prior knowledge of the most important criteria in choosing a supervisor. Providing a clear set of criteria or guidelines that guide supervisees in choosing their supervisors can be an effective solution to overcome supervisees' subjectivity in their choice. This absence of awareness may also cause a potential disconnect between the expectations of supervisees and the qualities exhibited by supervisors. This reveals that supervisees did not develop a comprehensive understanding of the attributes that contribute to a successful supervision.

Furthermore, relying on supervisees' answers to question 7, and supervisors' answers to question 8, supervisees do not seem to be disturbed by interruption in sessions, and do not value supervisors who either pay attention to their competence nor incite them to reflect on their practice. Hence, it would be acceptable for supervisees that supervisors cancel supervision sessions, but not to be asked to critically think of their competence and practice. This indicates supervisees' misconceptions of their supervisors' roles and responsibilities as well as their own. This accords the results of the studies undertaken by Holbrook et al. (2014), Alam et al. (2013), Stubb et al. (2012), Meyer (2007), Tahir et al. (2012) and Talebloo and Baki (2013) which report supervisees' confusion in defining supervisors and supervisees' roles. Besides, supervisees' indifference towards supervision sessions which constitute the sole opportunity in which supervisors and supervisees can meet is prevailing. This reveals the absence of a thorough and holistic understanding of the importance of supervisory sessions as a requirement of the supervision process and highlights the need to fulfil it. This finding is in accordance with the conclusions Thompson et al.

(2005), Malfroy (2005) and Polonsky and Waller (2014) drew.

It can also be inferred from the results that supervisees are unaware of supervisors' contribution to their cognitive development. Relying on participants' answers, half of the students (50%) and the majority of teachers (80%) confirm that supervisees value supervisors who are supportive and who pay attention to their anxieties and unspoken feelings but all of them (100%) do not value supervisors who pay attention to their level of competence nor who incite them to reflect on their practice. This shows that students are aware of supervisors' influence on their emotional status but are unaware of their impact on their cognitive development. These results support Burns et al. (2016) findings and align with Doğan and Bıkmaz's (2015) and Sambrook et al., (2008) findings with regard to supervisors' contribution to supervisees' emotional development. Yet, our study reached opposing findings to Doğan and Bıkmaz's (2015) study concerning supervisors' contribution to supervisees' cognitive development. Moreover, it can be deduced that there is a mismatch in priorities and/or perceived needs. While supervisors may prioritize assessing and enhancing students' competence, supervisees prioritize the pragmatic completion of the research work. Similarly, there is a resistance against self-reflection from students' part. A solution to the aforementioned issues relies in raising supervisees' awareness about the qualities that make supervisors effective and informing them about supervisors' contribution to the overall development of supervisees in addition to clarifying the roles of each.

Moreover, the results of the students' and teachers' questionnaires showed that supervisees met difficulties to find a supervisor because they did not submit their request to the right supervisor who shares their specialism. Being enrolled in a Master's in Didactics, students cannot be supervised by a literature teacher for example. Supervisees value supervisors who tend to be friendly, approachable and supportive at the expense of important variables such as specialism which is a key criterion in the process. Said differently, supervisees discard the fact that they cannot be supervised by supervisors they appreciate because the latter are specialised in a major different from their specialism. This sheds light on the mismatch between what supervisees value and the constraints imposed by the specialized nature of academic expertise. Supervisees must get into a decision making process in an attempt to find a

supervisor who is appreciated and is an expert in the research area. Supervisees should not overlook the fact that their preferred supervisor may not be suitable because of his different specialism. If these two attributes are ranked according to priority, specialism will outweigh preference. This research finding cannot be discussed in relation to previous studies. Rather, our explanations relied exclusively on the participants' answers. The results of the supervisors' questionnaire elucidate that workload is also an obstacle that may hinder supervisees in their search for a supervisor; this result aligns with the findings revealed by Assakran's (2016) study. Supervisors reported that students fail to understand that supervisors are required to deal with other commitments like teaching, fulfilling administrative duties and pursuing postgraduate studies besides supervising them. These findings align with the findings of Al-Torkhi (2011).

With reference to the second question of this research which sought to explore the effect of these characteristics on the supervision process, both groups of participants are aware of the significant effect of supervisors' characteristics/qualities/traits on the supervision process. Supervisees and supervisors concede that supervisors who are committed, responsive, flexible and expert have an enhancing effect on the supervision process. This effect manifests in optimizing and enriching the quality of supervision process by fostering a constructive relationship with supervisees, nurturing a structured, productive and an inclusive supervisory context that accomplishes intended outcomes efficiently. As already noted in the results section, the findings of the study conform to the findings of Seagram et al. (1998) and Latona and Browne (2001) which are referred to in the literature review section.

Considering the results discussed in the aforementioned paragraphs, it is recommended to schedule seminars allowing supervisees and potential supervisors to meet and agree upon broad terms to verify the possibility of compatibility between the two parties on long term. It is preferable to set out clear expectations through a discussion between the supervisee and the supervisor in the early stages of the supervision process regarding their roles to avoid any mismatch in expectations.

In our investigation we sought to explore dissertation supervisors' characteristics valued by supervisees. In doing so, we formulated two main research objectives. The first objective aims at uncovering the dissertation supervisors'

characteristics that are most appreciated by supervisees. To attain this objective, we generated hypothesis 1 which proposed that Master supervisees expect their supervisors to be available, supportive and expert. This hypothesis is confirmed and supported by our findings as participants constantly reported a preference for supervisors who are accessible, supportive and approachable. Furthermore, respondents expressed their prioritization for supervisors who exhibit expertise and competence that is reflected in their responsiveness and resourcefulness.

The second objective seeks to ascertain whether there exists a significant effect of these characteristics on the supervision process. To reach this objective, we formulated hypothesis 2 which suggested that these characteristics are expected to have an enhancing effect on the supervision process. Our findings validate this hypothesis as the results demonstrated the relevance of dissertation supervisors' characteristics as perceived by supervisees in influencing positively the supervision process making it inclusive and productive. By identifying and prioritizing the aforementioned traits, the supervisory experience is enhanced and contributes to academic success.

6. Conclusions

To conclude, this study explored supervisors' characteristics that are most appreciated by graduate students in the English Department at Ibn Khaldoun University. To this end, a questionnaire was administered to supervisees. The study revealed that supervisors' characteristics that are most valued by supervisees include being committed, supportive, friendly, flexible, responsive, available, organised, enthusiastic, knowledgeable and providing constructive feedback. Supervisors who are too directive, high in demanding low in responsiveness, not motivated, who do not provide enough feedback, who cannot be reached easily, and who procrastinate supervision sessions or corrections are not preferred by supervisors.

The impact of supervisors' chosen traits is critical to upholding positive relationships with supervisees, fostering a supportive, disciplined, courteous, and productive supervision environment, and effectively achieving goals. These results and the findings of the previous studies mentioned in the literature review section are in accordance.

Lack of clear guidelines on how to choose a good supervisor and lack of awareness of roles attributed to supervisors and supervisees in addition to lack of

awareness of supervisors' contribution to supervisees' overall development were the principal causes behind the challenges encountered by supervisees in finding a suitable dissertation supervisor.

Therefore, considering the results of the present investigation, the following implications, according to us, would benefit both supervisors and supervisees:

- Organizing seminars at the end of the 1st year Master degree or in the beginning of 2nd year to inform (future) supervisees of what makes a good supervisor and how to choose a suitable supervisor.
- Clarifying the roles of supervisors and supervisees. This leads to the cultivation of a more effective relationship between the two.
- Scheduling meetings between supervisees and potential supervisors to agree upon broad terms to confirm whether the two parties may possibly be congruent to work together on long terms.
- Informing policy decisions in which policy makers ensure that guidelines for supervisors' selection align with effective practices and students' success.
- Tailoring supervision programs that prioritize the characteristics identified in this research.

While considerable effort was invested in conducting this study and produce rigorous findings, it is important to admit that the current study, like any other survey, has a number of limitations. Despite our efforts to mitigate potential biases and methodological constraints, certain factors may have influenced the results or restricted the generalizability of our findings. Therefore, it is imperative to acknowledge these limitations and provide recommendations for a more comprehensive understanding of the scope and implications of the research.

One shortcoming is the scarce literature on our research topic which caused challenges in comparing findings of earlier studies to our research findings and discussing them. Therefore, we recommend that future research take into consideration this limitation and thoroughly delve into this crucial topic.

Another deficiency is associated with the sample who took part in our study and its limited context. This study cannot be generalized because it is limited to an exiguous size of participants at Tiaret University. Viewpoints expressed by the small number of supervisors and supervisees belonging only to Tiaret University included within the study cannot be representative of all Algerian universities, teachers

and students. Thus, there is a need to carry out further research to scrutinize the results of this study in a different setting with a larger sample of supervisees and supervisors belonging to different universities to reach conclusions that are more valid and reliable.

The last limitation is related to the focus of study. Our research concentrated solely on personality traits and competence-related qualities supervisees seek in a supervisor disregarding other pertinent characteristics such as gender, age and experience. Hence, we aspire for this exploratory study to set the groundwork for future studies to examine these attributes and analyse their effect on the supervision process.

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Section 03: Characteristics of a good supervisor

5- What qualities/ characteristics did you accentuate in choosing your supervisor? (You may tick more than one option)

<i>Qualities/ characteristics</i>					
Goal oriented		Focused		Demanding	
perceptive		Creative		Evaluative	
committed		Supportive		Friendly	
Practical		Resourceful		Responsive	
Intuitive		Thorough		Prescriptive	
Reflective		Didactic		Flexible	

In case there are other characteristics, please specify them.....

6- Tick the statements that match your opinion most closely. (You may tick more than one)

With reference to safety base, you appreciate supervisors who:

- a) Respect the supervisee as a person
- b) Collaborate rather than prescribe
- c) Ensure the feeling of safety
- d) Respect supervisees' ideas
- e) Provide constructive criticism without judging
- f) Listen to supervisees openly

In terms of structure, you appreciate supervisors who:

- a) Meet their supervisees regularly
- b) Are organized and plan the sessions
- c) Avoid interruption /cutting short the supervision sessions

For commitment traits, you appreciate supervisors who:

- a) Show enthusiasm about supervision
- b) Avoid making supervisees feel a burden
- c) Are approachable and easy to talk to
- d) Are available and easy to reach

With reference to reflective education, you appreciate supervisors who:

- a) Have a command of theoretical knowledge
- b) Incite supervisees to reflect on their practice
- c) Pay attention to unspoken feelings and anxieties

With reference to role model traits, you appreciate supervisors who:

- a) Are Knowledgeable/well versed in the topic of research
- b) Are practical and provide practical solutions
- c) Have respect among colleagues and administration staff

With reference to formative feedback, you appreciate supervisors who:

- a) Provide regular feedback on supervisees' performance
- b) Balance praise and negative feedback
- c) Pay attention to supervisees' level of competence
- d) Help identify their supervisees' needs

7- *In your opinion, how would the characteristics you selected affect the supervision process?*

.....

.....

8- *Are there any traits you do not appreciate in a dissertation supervisor?*

If yes, what are they?

.....

.....

Thank you very much for your cooperation. 😊

Section 03: Characteristics of a good supervisor

7- In your opinion, what qualities/ characteristics your students accentuate in choosing their supervisor? (you may tick more than one option)

<i>Qualities/ characteristics</i>					
Goal oriented		Focused		Demanding	
perceptive		Creative		Evaluative	
committed		Supportive		Friendly	
Practical		Resourceful		Responsive	
Intuitive		Thorough		Prescriptive	
Reflective		Didactic		Flexible	

In case there are other characteristics, please specify them.....

8- Tick the statements that match your opinion most closely. (You may tick more than one option)

With reference to safety base, supervisees appreciate supervisors who:

- a) Respect the supervisee as a person
- b) Collaborate rather than prescribe
- c) Ensure the feeling of safety
- d) Respect supervisees ideas
- e) Criticize without judging
- f) Listen to supervisees openly

In terms of structure, supervisees appreciate supervisors who:

- a) Meet their supervisees regularly
- b) Are organized and plan the sessions
- c) Avoid interruption /cutting short the supervision sessions

For commitment traits, supervisees appreciate supervisors who:

- a) Show enthusiasm about supervision
- b) Avoid making supervisees feel a burden
- c) Are approachable and easy to talk to
- d) Are available and easy to reach

With reference to reflective education, supervisees appreciate supervisors who:

- a) Have a command theoretical knowledge
- b) Incite supervisees to reflect on their practice
- c) Pay attention to unspoken feelings and anxieties

With reference to role model traits, supervisees appreciate supervisors who:

- a) Are Knowledgeable/well versed in the topic of research
- b) Are practical and provide practical solutions
- c) Have respect among colleagues and administration staff

With reference to formative feedback, supervisees appreciate supervisors who:

- a) Provide regular feedback on supervisees' performance
- b) Balance praise and negative feedback
- c) Pay attention to supervisees' level of competence
- d) Help identify their supervisees needs

9- *In your opinion, how would the characteristics you selected affect the supervision process?*

.....
.....
.....

10- *From your experience, what are the traits your students would not appreciate in a dissertation supervisor?*

.....
.....
.....

Thank you very much for your cooperation. 😊

Appendix C: Consent Form

Description and purpose of the consent form

This consent form seeks to extend an invitation to Master 2 didactics supervisors and supervisees in the Department of English at Tiaret University to take part in a study investigating supervisors' characteristics valued by supervisees. This study is significant because it will increase awareness among students and supervisors regarding the traits of supervisors that supervisees look for.

We anticipate that this exploratory research will enable us to make recommendations that can lead to more effective supervision, better supervisory relationship and improve supervision outcomes for both supervisees and supervisors.

The purpose of this permission form is to ensure that the participants understand the purpose of their involvement in the research and that they are in agreement with the terms of their participation. We sincerely hope that you would agree to willingly participate in this study, as the data you supply will be extremely beneficial to us.

Please note that your responses are to be kept confidential and anonymous because they will be accessed on by the researchers and used solely for research purposes. You will be referred to using pseudonyms when your responses are directly quoted.

You can ask the researchers any question you might have about this study

Thank you very much for your cooperation. 😊

Synchronous Virtual Learning in Ubiquitous Learning Paradigm and Effective Mathematics Teaching

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Synchronous Virtual Learning in Ubiquitous Learning Paradigm and Effective Mathematics Teaching

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Abstract

Keywords:

Synchronous Virtual Learning, didactic pedagogy, e-learning, u-learning, m-learning, mathematics

Learning generally has taken a new dimension in this present era. Virtual learning has become increasingly popular recently due to technological advancement. Learning has moved from didactic pedagogy characterized by a teacher-centered approach where knowledge is transmitted from the instructor to the learner to a virtual, mobile, blended/ hybrid, e-learning mode of instruction. Learning is now a form of a Transformative approach to teaching and learning that goes beyond acquiring knowledge and skills only to create profound changes in individuals' beliefs, attitudes, values, and behavior. To obtain the necessary skills required for learning, the learners should have access to learning, and learning should be flexible and occur anywhere anytime through virtual instruction. The study emphasizes the ubiquitous (u-learning) paradigm, synchronous virtual learning in particular, and teachers' role in mathematics teaching and learning. This research has contributed valuable insights into how synchronous virtual learning can improve mathematics teaching and learning, support diverse learners, and inform instructional practices in digital environments. The implication of using synchronous virtual learning is to promote active engagement, social interaction, and peer collaboration, enhancing student comprehension and problem-solving skills. Since learning cannot be limited to didactic instruction, virtual learning should be considered for effective mathematics learning.

Zusammenfassung

Schlüsselworte:

Virtuelles Lernen, E-Learning, U-Lernen, Ich lerne, Mathematik

Lernen hat in der heutigen Zeit allgemein eine neue Dimension angenommen. Virtuelles Lernen erfreut sich in letzter Zeit aufgrund des technologischen Fortschritts immer größerer Beliebtheit. Das Lernen hat sich von der didaktischen Pädagogik, die durch einen lehrerzentrierten Ansatz gekennzeichnet ist, bei dem Wissen vom Ausbilder an den Lernenden weitergegeben wird, zu einem virtuellen, mobilen, gemischten/hybriden E-Learning-Unterrichtsmodus entwickelt. Lernen ist heute eine Form eines transformativen Lehr- und Lernansatzes, der über den Erwerb von Wissen und Fähigkeiten hinausgeht und nur tiefgreifende Veränderungen in den Überzeugungen, Einstellungen, Werten und Verhaltensweisen des Einzelnen herbeiführt. Um die für das Lernen erforderlichen Fähigkeiten zu erwerben, sollten die Lernenden Zugang zum Lernen haben, und das Lernen sollte flexibel sein und überall und jederzeit durch virtuellen Unterricht erfolgen. Diese Studie betont das allgegenwärtige (U-Learning-)Paradigma, insbesondere das virtuelle Lernen und die Rolle der Lehrer beim Lehren und Lernen von Mathematik. Da sich das Lernen nicht auf didaktischen Unterricht beschränken kann, sollte für ein effektives Mathematiklernen virtuelles Lernen in Betracht gezogen werden.

1. Introduction

Mathematics plays a significant role in human lives and forms the basis of all human activities. This is the main reason why society cannot exist and function properly without mathematics. Mathematics teaching and learning should be handled in ways of making learning easy for every individual. This paper explores the various roles teachers play in the effective teaching and learning of mathematics. Due to the complexity of the whole world situation (Akinoso, 2015) which calls for immediate solutions for learning to continue coherently, this calls for immediate intervention. The study evaluates the role of teachers in promoting student engagement, knowledge acquisition, classroom management, and assessment

practices. An extensive literature review was conducted to examine current research on the role of teachers in effective mathematics instruction. Results from the literature review suggest that teachers' roles in effective teaching and learning of mathematics include providing students with relevant and structured learning experiences, creating a positive learning environment, utilizing appropriate assessment strategies, and engaging in meaningful collaboration with students and colleagues.

The teachers should take an active role in the teaching and learning process. It is clear that when teachers take an active role in the classroom, students are more engaged, knowledgeable, and successful in



mathematics learning. Teachers play a significant role in teaching and learning procedures either human or artificial teacher. The role of the teacher in learning cannot be ignored. The role of the teacher is to mold the learners' future. For teaching and learning to be effective, modern pedagogy involving active learning should be incorporated through ubiquitous learning (u-Learning) that encourages learning anywhere, anytime with digital technology. This active learning leads to active knowledge making which is made possible through a ubiquitous learning environment which might not be possible in didactic environment. Ubiquitous learning known as u-learning is the learning with mobile devices. This type of learning utilizes mobile and wireless technologies to support seamless and connected learning. In ubiquitous learning, the learning is extended beyond the four walls of the classroom and the cells of the timetable. The concept of u-learning is anytime, anywhere. This study is exploring the optimal integration of real-world contexts and digital tools to enhance student engagement and conceptual understanding in mathematics.

2. Ubiquitous Learning Environment

Ubiquitous learning is a learning approach that takes advantage of the pervasive presence of technology and access to information in various environments. It emphasizes the integration of learning into everyday activities, making learning accessible anytime and anywhere. U-learning leverages ubiquitous technology, such as smartphones, tablets, or wearable devices, to enable learners to engage in learning experiences beyond the confines of a traditional classroom. It aims to seamlessly integrate learning into the learner's daily life and surroundings, blurring the boundaries between formal and informal learning. The key features of U-learning include:

- **Contextual Learning:** U-learning focuses on learning experiences that are contextually relevant and applicable to real-life situations. It emphasizes the connection between learning and the learner's immediate environment.
- **Seamless Learning:** U-learning enables continuous learning experiences by seamlessly integrating learning opportunities into the learner's daily routines and activities. Learning can occur at various locations and times, facilitated by the ubiquity of technology.
- **Personalization:** U-learning supports personalized learning experiences, allowing learners to customize their learning pathways and pace. It

leverages technology to provide adaptive and tailored learning content based on individual needs and preferences.

Fekos (2013) averred that ubiquitous computing is a model of human and computer interaction in daily activities and integrated into objects humans interact with routinely. One of the objects people interact with regularly is a mobile phone. Instead of using it for calls, chats, and playing games only, mobile phones could also be used for learning. Invariably, u-learning makes personal and interpersonal computing with a degree of visibility and transparency. Ubiquitous learning concepts include mobile learning, cloud computing, virtual schools, learning management systems, blended learning, station rotation, and other mediums of learning with technology or mobile devices outside the four walls of the traditional classroom. The u-learning is an innovative pedagogy that makes learning easier and continuous.

Mobile learning in particular is the online learning facilities with the use of mobile devices that learners can learn from anytime anywhere. The mobile devices possessed by learners are not restricted to making calls, chats, shopping, or advertising products only, but allow learning outside the classroom setting.

Mobile learning or m-learning is the online facilities that the learners can learn from. The learners can enroll in a course, study the lessons assigned, watch the video lectures, attend live classes, and take examinations from their mobile devices. What makes mobile learning different from e-learning is the use of mobile devices to access content. The learners can access learning with mobile phones, tablets, iPads, and other portable mobile devices. The mobile device replaces the use of books, CDs, and DVDs, and replaces with portable devices learners can access easily for learning anywhere. Teachers should be able to use a variety of teaching methods to ensure effectiveness. A virtual learning environment is one of the ubiquitous learning environments that encourages online discussion, reading, have access to assignments, allows students to interact with colleagues, and offers input. Synchronous virtual learning is the major variable considered in this write-up which is one of the environments for teaching in ubiquitous learning and e-Learning ecology.

3. The Downside of Ubiquitous Learning

While u-learning (ubiquitous learning) and virtual learning offer numerous benefits, they also come with certain disadvantages, some of the disadvantages are considered. Whatever value affects ubiquitous

learning also affects virtual learning the subset of ubiquitous learning.

Technological Challenges: U-learning and virtual learning heavily rely on technology, which can present challenges for both students and teachers. Limited access to technology or unreliable internet connectivity can hinder the learning experience, particularly for students in underserved areas or with limited resources. Technical issues such as software glitches or compatibility problems may also arise, causing disruptions to the learning process.

Lack of Face-to-Face Interaction: U-learning and virtual learning often lack the face-to-face interaction found in traditional classroom settings. This reduced physical presence and absence of immediate feedback can lead to a sense of isolation for some students. The lack of direct interaction may also limit the ability to ask spontaneous questions, engage in meaningful discussions, or benefit from non-verbal cues that facilitate understanding.

Self-Motivation and Discipline: U-learning and virtual learning require students to take more responsibility for their own learning and time management. Without the physical presence of a teacher or peers, students may struggle with self-motivation and self-discipline. Some students may find it challenging to stay engaged and focused in a self-paced online environment, potentially leading to a decline in academic performance.

Limited Hands-On Experiences: Certain subjects, including mathematics, often involve hands-on activities, manipulatives, or group work. U-learning and virtual learning environments may have limitations in providing these tactile or collaborative experiences, which can impact students' understanding and engagement. Although virtual simulations and interactive tools can partially address this limitation, but may not fully replicate the benefits of hands-on learning.

Potential for Distractions: U-learning and virtual learning can expose students to various distractions, such as social media, unrelated websites, or personal electronic devices. These distractions can divert students' attention away from the intended learning activities and negatively impact students' focus, productivity, and overall academic performance.

Inequitable Access and the Digital Divide: U-learning and virtual learning rely on access to technology and internet connectivity, which may not be readily available to all students. This creates a

digital divide, where students from disadvantaged backgrounds or rural areas may face barriers to accessing virtual learning resources. The lack of equitable access to technology can exacerbate existing educational inequalities and widen the achievement gap.

Teacher-Student Interaction and Support: In virtual learning environments, the level of teacher-student interaction may be reduced compared to traditional classrooms. Students may have limited opportunities to directly interact with teachers, ask questions, or seek clarifications. This reduced interaction can hinder the personalized support and guidance that teachers provide, potentially affecting students' comprehension and progress.

Limited Social Development: U-learning and virtual learning may limit students' opportunities for social interaction and the development of social skills. Students miss out on the social dynamics of a physical classroom, such as collaborating with peers, engaging in group activities, or participating in extracurricular events. The absence of these social interactions can impact students' social-emotional development and ability to work effectively in teams.

To mitigate these disadvantages, it is important to address technological infrastructure issues, ensure equitable access to technology, provide clear guidelines for self-regulated learning, foster virtual communities for collaboration and support, incorporate strategies to promote student engagement and motivation in virtual learning environments. Additionally, a balanced approach that combines virtual learning with in-person interactions whenever possible can help mitigate some of the drawbacks associated with u-learning and virtual learning. Virtual learning is the aspect of u-learning considered in this paper since the learning environment contributes immensely to mathematics learning.

4. Virtual Learning and Mathematics Teaching

The learning environment for mathematics teaching determines how instruction is handled and the effect it has on students whether positive or negative. A ubiquitous learning environment will go a long way and yield positive effects on learning. It's important to note that u-learning and virtual learning can overlap to some extent, as virtual learning can be a component of u-learning. U-learning encompasses a broader concept that goes beyond virtual learning by emphasizing the integration of learning into everyday life and leveraging technology ubiquitously, whereas virtual

learning specifically refers to learning in digital environments.

Virtual learning refers to the use of digital technologies to create learning environments that simulate or replicate aspects of a traditional classroom. It typically involves online platforms, educational software, or virtual classrooms that enable learners and teachers to interact remotely. In short, the online learning environment is where students study in a digital-based forum taught by instructors through online lectures via video or audio. Virtual learning entails more interaction between the students and teachers, unlike online or e-learning which is more self-paced. Virtual learning is taught online through a learning management system or other educational platform. This type of learning is flexible and makes learning easy for learners who enjoy self-learning and those who want to learn without attending physical classes.

Virtual learning can take place in fully online settings, blended learning environments, or as a supplement to traditional classroom-based learning.

The key features of virtual learning include:

- **Online Learning Environments:** Virtual learning primarily occurs in digital environments, where learners access learning materials, complete assignments, engage in discussions, and interact with teachers and peers through online platforms or educational software.
- **Remote Instruction:** Virtual learning allows for remote instruction, with teachers delivering lessons and facilitating learning experiences through video conferencing, pre-recorded lectures, or online discussions. Students can participate in learning activities from their locations using their devices.
- **Synchronous and Asynchronous Learning:** Virtual learning can be both synchronous, where learners and teachers interact in real-time, and asynchronous, where learners engage with pre-recorded materials or complete tasks independently at their own pace.
- **Multimedia Resources:** Virtual learning often incorporates multimedia resources, such as videos, interactive simulations, or virtual labs, to enhance the learning experience and provide alternative modes of instruction.
- **Digital Assessments and Feedback:** Virtual learning platforms allow for digital assessments, quizzes, and assignments, often with automated

grading features. Teachers can provide feedback through digital means, offering timely guidance and support to students.

5. Types of Virtual Learning

Virtual learning can be categorized into different types, which include synchronous, asynchronous, blended, and massive Open Online Courses (MOOCs).

Synchronous Learning: This type of virtual learning occurs in real-time, where instructors and students interact simultaneously. It often involves live video conferences, webinars, or virtual classrooms. Synchronous learning allows for immediate feedback and active participation. For example, Zoom and Microsoft Teams are popular platforms for synchronous learning.

Asynchronous Learning: Asynchronous learning refers to self-paced learning, where students access pre-recorded lectures, videos, and online materials at their convenience. It provides flexibility in terms of time and location. Discussion boards and email communication are often used to facilitate interaction between students and instructors.

Blended Learning: Blended learning combines traditional face-to-face instruction with online learning components. It allows for a mix of in-person interactions and virtual activities. This approach provides the benefits of both traditional and online learning, promoting flexibility and engagement.

Massive Open Online Courses (MOOCs): MOOCs are free online courses available to a large number of participants. They often incorporate video lectures, interactive quizzes, and discussion forums. MOOC platforms like Coursera, edX, and Udemy offer a wide range of courses from top universities and institutions.

These recent literature references provide valuable insights into the types of virtual learning and their significance in educational contexts. The study presented below emphasizes different aspects of virtual learning, highlighting the importance of appropriate digital resources, game-based learning, scaffolding and autonomy support, and virtual mobility.

6. Synchronous Virtual Learning

Synchronous virtual learning allows the instructors and students to interact. This type of learning often includes live video conferences, webinars, or virtual classrooms. Synchronous learning

involves the active participation of the learners leading to immediate feedback. The platforms for synchronous virtual learning include Zoom and Microsoft Teams.

The study conducted by Chang et al. (2021) focuses on synchronous online learning and its impact on student's motivation. The researchers found that synchronous online classes have the potential to increase students' motivation. By analyzing students' experiences through experience sampling, they discovered that synchronous online classes provided immediate feedback, increased social interaction, and facilitated active participation. These factors contributed to higher levels of motivation among students. The real-time nature of synchronous online learning allows for more engaging and interactive experiences, creating a sense of presence and connectedness among students and instructors.

Synchronous virtual learning is highly effective in teaching and has a greater advantage over other types of virtual learning. This statement is in support of Means et al. (2010) research which suggests that synchronous virtual learning can be as effective as traditional face-to-face instruction when designed properly, particularly in terms of student outcomes and satisfaction. A study by Bernard et al. (2014) found that synchronous virtual learning environments can facilitate interaction and collaboration among students, leading to higher levels of engagement and learning. The best practices of synchronous virtual learning must involve active engagement. Picciano (2017) emphasizes the best practices for synchronous virtual learning, including clear communication, active engagement strategies, and leveraging technology effectively to enhance learning experiences. Meanwhile, the acquisition of the learning experience is the major target of any instruction. To acquire great outcomes in teaching, the students must be satisfied with the mode of instruction. Martin et al. (2021) examine student satisfaction and learning outcomes in synchronous virtual learning environments. It identifies factors such as instructor presence, course organization, and interactive activities as significant predictors of student satisfaction and success. The instructors must possess adequate knowledge of synchronous virtual instruction to carry out mathematics teaching successfully. Archambault et al. (2016) explore the role of teacher professional development in enhancing instructional practices for synchronous virtual learning and emphasize the importance of training and support for educators to effectively facilitate online synchronous sessions. As effective as the synchronous

virtual learning mode of instruction, there are some challenges in reducing the use of this mode of instruction. These include digital equity, technology access, and engagement in synchronous virtual learning (Hodges et al., 2020). These challenges can be addressed through inclusive teaching practices and providing support for both students and instructors.

7. Virtual Learning and Mathematics Achievement

Virtual learning can have a significant impact on mathematics achievement when implemented effectively. It can contribute to students' mathematics achievement in the following ways:

Flexibility and Individualization: Virtual learning allows for flexible scheduling and self-paced learning, which can benefit students with different learning styles and paces. Students can access mathematics lessons and resources at their convenience, review content as needed, and progress at a pace that suits their individual needs. This individualization promotes a deeper understanding of mathematical concepts and can lead to improved achievement.

Engaging Multimedia and Interactive Tools: Virtual learning platforms often incorporate multimedia elements, such as videos, animations, and interactive simulations, to make mathematics more engaging and accessible. These multimedia tools can provide visual representations, real-life examples, and interactive activities that enhance students' understanding and retention of mathematical concepts, ultimately leading to improved achievement.

Personalized Instruction and Feedback: Virtual learning platforms can provide personalized instruction and immediate feedback tailored to students' individual needs. Adaptive learning systems can adjust the level of difficulty based on students' performance, provide targeted practice exercises, and offer customized feedback. This personalized approach helps address students' specific areas of weakness, reinforce learning, and support their mathematical achievement.

Collaborative Learning Opportunities: Virtual learning environments can facilitate collaborative learning experiences in mathematics. Students can engage in online discussions, group projects, and problem-solving activities with peers. Collaborative learning promotes active engagement, critical thinking, and the exploration of multiple perspectives, leading to a deeper understanding of mathematical concepts and improved achievement.

Access to a Variety of Resources: Virtual learning provides access to a vast array of digital resources for mathematics, including interactive textbooks, online tutorials, educational apps, and virtual manipulatives. Students can explore diverse resources, access supplemental materials, and engage with interactive tools that support their learning. This access to a wide range of resources can enhance students' conceptual understanding, problem-solving skills, and overall mathematics achievement.

Data-Driven Instruction and Monitoring: Virtual learning platforms generate data on students' progress, performance, and engagement in mathematics. Teachers can analyze this data to gain insights into students' strengths, weaknesses, and learning patterns. By using data analytics, teachers can identify areas where students may be struggling, track their progress over time, and provide targeted interventions or additional support to improve their mathematics achievement.

Continuous Support and Remediation: Virtual learning platforms can provide ongoing support and remediation for students who are struggling in mathematics. Students can access additional practice exercises, tutorials, or interactive resources to reinforce their understanding of challenging concepts. Virtual learning offers opportunities for targeted interventions, differentiated instruction, and individualized support, which can help struggling students improve their achievement in mathematics.

The effectiveness of virtual learning in mathematics achievement depends on various factors, including the quality of instructional design (Means et al., 2009); Puentedura, (2011), teacher-student interaction (Bernard et al., 2009), technological infrastructure (Watson et al., 2013), and students' access to technology and internet connectivity (Becker et al., 2017). Effective implementation of virtual learning strategies, along with appropriate support and monitoring, can contribute to improved mathematics achievement for students in virtual learning environments.

8. Role of Teachers in Effective Teaching of Mathematics

Teachers play a crucial role in the effective mathematics teaching and learning which directly impacts students' academic performance. This implies that teachers' role in effective teaching and learning mathematics is instrumental in shaping students' academic performance. Walshaw (2008) and Doig et al. (2003) have checked research to seek evidence

about the kinds of pedagogical practices that contribute to desirable learning outcomes. The teachers must employ appropriate instructional strategies, providing clear explanations, offering scaffolding support, differentiating instruction, providing feedback, fostering a positive learning environment, and promoting collaboration and communication, teachers can enhance students' mathematical learning and help them achieve better academic outcomes. No matter how good the teacher's teaching intentions are, the teacher has to work out how best the students are helped to grasp core mathematical ideas (Hill et al., 2005). Some of the roles are considered below.

Instructional Strategies: Teachers have the responsibility of selecting appropriate instructional strategies that engage students and promote conceptual understanding. Teachers should employ a variety of techniques such as hands-on activities, problem-solving tasks, group work, and technology integration to cater to diverse learning styles and abilities. Using effective instructional strategies, teachers can help students grasp mathematical concepts more effectively and improve academic performance.

Clear Explanation and Demonstration: Mathematics can be challenging for many students, so teachers need to provide clear explanations and demonstrations of mathematical concepts and procedures. Teachers should break down complex ideas into smaller, more manageable parts and use visual aids, real-world examples, and concrete materials to make abstract concepts more accessible. Clear explanations help students develop a solid foundation of understanding, leading to improved performance.

Scaffolding and Differentiation: Effective teachers provide scaffolding support to students as the students learn new mathematical concepts and skills. Scaffolding involves breaking down tasks into manageable steps, providing prompts and guidance, and gradually reducing support as students gain confidence and proficiency. Teachers should also differentiate instruction to meet the diverse needs of students, providing additional support or enrichment based on students' abilities and learning styles.

Formative Assessment and Feedback: Regular formative assessment is vital for teachers to gauge students' understanding of mathematical concepts and identify areas that require further attention. Through ongoing assessments, teachers can provide timely and

specific feedback to students, helping them understand their strengths and areas for improvement. Feedback should be constructive, encouraging, and actionable, guiding students toward academic growth and enhancing their performance in mathematics.

Creating a Positive Learning Environment: A positive classroom environment is essential for effective teaching and learning of mathematics. Teachers should foster a safe and supportive atmosphere where students feel comfortable asking questions, making mistakes, and taking risks. Encouraging a growth mindset, emphasizing the importance of effort and perseverance, and celebrating students' achievements can boost their confidence and motivation in learning mathematics.

Collaboration and Communication: Teachers should encourage collaborative learning experiences, such as group work and peer discussions, where students can engage in mathematical discourse and share their ideas. Collaborative activities promote critical thinking, problem-solving, and communication skills, which are crucial for success in mathematics. Teachers should also maintain open lines of communication with students, parents, and colleagues to address any concerns, provide support, and foster a collaborative learning community that contributes to improved academic performance.

9. Role of Teachers in Effective Use of Synchronous Virtual Learning

In the context of a ubiquitous learning environment, where virtual learning is prevalent, teachers play a crucial role in facilitating the effective use of virtual learning tools and technologies for mathematics education. Some of the teachers' roles are given below.

Technological Proficiency: Teachers need to be proficient in the use of virtual learning tools and technologies specific to mathematics education. This includes being familiar with online platforms, educational software, virtual manipulatives, interactive simulations, and digital resources relevant to teaching mathematics. Having a sound understanding of these tools, teachers can effectively integrate them into their instructional practices and help students navigate the virtual learning environment.

Curriculum Design and Adaptation: Teachers should design or adapt the mathematics curriculum to align with the virtual learning environment. Teachers need to identify appropriate online resources,

interactive activities, and multimedia materials that support the learning objectives and engage students effectively. Adapting traditional instructional materials for online delivery requires careful consideration of sequencing, pacing, and scaffolding to ensure a smooth transition to the virtual setting while maintaining the integrity of the mathematics content.

Facilitating Online Discussions and Collaboration: Teachers play a critical role in facilitating online discussions and collaborative activities among students. Teachers can create virtual spaces where students can engage in mathematical discourse, share their ideas, and collaborate on problem-solving tasks. Through effective moderation and guidance, teachers can encourage active participation, critical thinking, and constructive interactions among students, thereby enhancing students' understanding and performance in mathematics.

Providing Timely Feedback and Assessment: Teachers should establish mechanisms for providing timely feedback and assessment in the virtual learning environment. This can include using online quizzes, assignments, and interactive assessments to gauge students' understanding of mathematical concepts. Teachers can also leverage technology to provide immediate feedback on students' responses and offer personalized guidance for improvement. Timely feedback helps students identify areas of strength and weakness, enabling them to make necessary adjustments and improve their academic performance.

Monitoring and Supporting Individual Progress: In a virtual learning environment, teachers need to closely monitor students' progress and provide the necessary support. Teachers can track students' engagement, participation, and performance in online activities and assignments. By identifying students who may be struggling or falling behind, teachers can offer personalized interventions, additional resources, or one-on-one support to address their specific needs. Regular communication with students through virtual platforms is also essential to maintain a supportive learning environment.

Digital Citizenship and Online Etiquette: Teachers should educate students about digital citizenship, online etiquette, and responsible use of virtual learning tools. Teachers can promote responsible behavior, ethical use of information, and respectful online interactions among students. By fostering a positive online culture, teachers create a

conducive environment that enhances learning and collaboration while minimizing distractions and inappropriate behaviors, ultimately supporting students' academic performance.

Professional Development and Learning Communities: Teachers need continuous professional development to enhance their knowledge and skills in utilizing virtual learning for mathematics education. Teachers should actively participate in professional learning communities, attend webinars, explore online courses, and collaborate with peers to stay updated on emerging technologies and effective practices. Ongoing professional development empowers teachers to leverage the full potential of virtual learning tools and improve students' academic performance in mathematics.

Customizing Instruction: Teachers can use virtual learning platforms to customize instruction based on student's individual needs and learning styles. Teachers can provide differentiated assignments, activities, and resources to cater to diverse abilities, interests, and paces of learning. By leveraging the flexibility of virtual learning, teachers can offer personalized instruction that addresses students' specific strengths and challenges, leading to improved academic performance.

Engaging Multimedia and Interactive Content: Virtual learning offers opportunities to incorporate multimedia elements such as videos, animations, and interactive simulations into mathematics lessons. Teachers can curate or create engaging multimedia content that illustrates abstract concepts, provides real-life applications, and enhances students' understanding. By using interactive tools and visualizations, teachers can make mathematics more accessible and engaging, which can positively impact students' learning and academic performance.

Promoting Self-Regulated Learning: In a virtual learning environment, teachers can foster self-regulated learning skills in students. The teachers can guide students in setting goals, planning their learning, monitoring their progress, and reflecting on their performance. Teachers can encourage students to take ownership of their learning, make use of self-assessment tools, and seek resources independently. By promoting self-regulated learning, teachers empower students to become independent learners.

Building Online Communities and Collaboration: Teachers can create online communities where students can collaborate, share ideas, and learn from one another. Virtual learning platforms offer

opportunities for students to work in groups, engage in peer-to-peer discussions, and provide feedback to their peers. Teachers can facilitate online collaborations, assign group projects, and encourage students to solve problems collectively. By fostering collaborative learning experiences, teachers promote deeper understanding, critical thinking, and improved performance in mathematics.

Addressing Technical Challenges and Providing Support: In a ubiquitous learning environment, technical issues may arise that can hinder students' learning experiences. Teachers play a vital role in troubleshooting technical challenges and providing support to students. The teachers should be available to address students' questions, assist with technical difficulties, and ensure smooth access to virtual learning resources. By promptly addressing technical issues, teachers create a supportive learning environment that minimizes disruptions and supports students' academic performance.

Continuous Monitoring and Evaluation: Teachers need to continuously monitor students' progress and evaluate the effectiveness of virtual learning strategies. Teachers can use data analytics tools and learning management systems to track students' engagement, performance, and growth in mathematics. By analyzing data, teachers can identify areas where students may need additional support, adapt instructional strategies, and make data-informed decisions to improve students' academic performance.

Collaboration with Parents and Guardians: Teachers should maintain regular communication and collaboration with parents or guardians in the virtual learning environment. The updates on students' progress are shared, provide guidance on supporting mathematics learning at home, and address any concerns or questions parents may have. Collaborating with parents creates a strong home-school partnership that supports students' learning and contributes to academic success in mathematics.

Flexibility and Adaptability: In a ubiquitous learning environment, teachers need to be flexible and adaptable to changes and challenges that arise. Teachers should be open to exploring new virtual learning tools, adapting instructional strategies based on feedback and student needs, and making adjustments to accommodate different learning situations. By embracing flexibility and adaptability, teachers can ensure that virtual learning environments are dynamic, effective, and conducive to student's academic performance in mathematics.

The learning environment contributes either positively or otherwise to student learning outcomes. This is the reason the environment should be considered and made rich enough to promote students' learning outcomes. Teaching mathematics in the abstract contributes to the student's mathematics learning difficulties. Teaching mathematics should be done by applying different strategies to meet the needs of individuals especially. The opportunity to enrich the teaching environment with this use of technology in this present era is germane. Mathematics learning with the advantage of virtual learning in ubiquitous learning environments is of great benefit and the teacher's concern must play a significant role in making learning possible and smooth. For teachers to teach in the virtual learning environment, teachers must possess certain characteristics to demonstrate adequate knowledge of expertise in the area of virtual learning. This will go a long way to enhance learning and improve learning outcomes. Synchronous virtual learning one of the virtual learning types enhances effective mathematics teaching by promoting interactive engagement, leveraging digital resources, and integrating real-world contexts, thus facilitating deeper conceptual understanding and problem-solving skills.

10. Conclusion

Teachers play a pivotal role in the effective use of virtual learning for mathematics in a ubiquitous learning paradigm. By being technologically proficient, designing and adapting the curriculum, facilitating online discussions, providing timely feedback, monitoring individual progress, promoting digital citizenship, and engaging in professional development, teachers can create engaging and meaningful virtual learning experiences that support students' mathematical learning and contribute to their academic performance. Other roles played by the teacher in leveraging virtual learning for mathematics in a ubiquitous learning environment are customizing instruction, incorporating multimedia content, promoting self-regulated learning, fostering collaboration, addressing technical challenges, monitoring progress, collaborating with parents, and being flexible and adaptable. This study considered how synchronous virtual learning, within the ubiquitous learning paradigm, can foster effective mathematics teaching by seamlessly integrating digital resources, real-world contexts, and interactive engagement strategies to promote deeper conceptual understanding and problem-solving skills among students. Therefore, it was concluded that,

synchronous virtual learning enhances effective mathematics teaching by promoting interactive engagement, leveraging digital resources, and integrating real-world contexts, thus facilitating deeper conceptual understanding and problem-solving skills among students.

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Learning in the Online Environment - Student Perceptions and Predictions

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Learning in the Online Environment - Student Perceptions and Predictions

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Abstract

Keywords:

online learning, interrelatedness, digitization

The solution provided by information and communication technology to the educational challenges that the education system has faced as a result of the pandemic situation due to the COVID-19 virus has been generally agreed upon and accepted on a planetary scale by the entire academic community. For an important period of time (approximately 1.5 years), the didactic activity took place mainly asynchronously. The implications of this fact on academic performances, the quality of the didactic act, and the well-being of students are addressed in many studies in order to find out answers considered as predictions of future instructive-educational actions. The present study is also included in the same dimension. The results recorded or highlighted the fact that learning in the online system presents both advantages (maximizing the use of time due to the elimination of losses due to travel, domestic comfort, and the exclusive decision to interact) and disadvantages (deficient feedback, investment of intellectual effort to obtain a positive relational agreement); motivation was slightly higher, assessment anxiety and learning efficiency were lower, while comfort and satisfaction with learning did not register significant changes. The preference that students emphasized for the way the didactic activity should be carried out aims at an alternation of synchronous and asynchronous activities in the mixed system, doubled by learning in the online system.

Zusammenfassung

Schlüsselworte:

Online-Lernen, Vernetzung, Digitalisierung

Die Lösung, die die Informations- und Kommunikationstechnologie für die Bildungsherausforderungen bietet, mit denen das Bildungssystem infolge der Pandemiesituation aufgrund des COVID-19-Virus konfrontiert war, wurde von der gesamten akademischen Gemeinschaft allgemein anerkannt und auf globaler Ebene akzeptiert. Über einen wichtigen Zeitraum (ca. 1,5 Jahre) verlief die didaktische Tätigkeit überwiegend asynchron. Die Auswirkungen dieser Tatsache auf die Studienleistungen, die Qualität der didaktischen Handlung und das Wohlbefinden der Studierenden werden in vielen Studien untersucht, um Antworten zu finden, die als Vorhersagen für zukünftiges lehrreich-pädagogisches Handeln gelten. Auch die vorliegende Studie ist in die gleiche Dimension einbezogen. Die Ergebnisse dokumentierten bzw. verdeutlichten die Tatsache, dass das Lernen im Online-System sowohl Vorteile (Maximierung der Zeitnutzung aufgrund der Eliminierung von Verlusten durch Reisen, häuslichen Komfort und die ausschließliche Entscheidung zur Interaktion) als auch Nachteile (defizitäres Feedback, Investition von intellektuelle Anstrengung, eine positive Beziehungsvereinbarung zu erreichen); Die Motivation war etwas höher, die Prüfungsangst und die Lerneffizienz waren geringer, während Komfort und Zufriedenheit mit dem Lernen keine signifikanten Veränderungen verzeichneten. Die von den Studierenden hervorgehobene Präferenz für die Art und Weise, wie die didaktische Aktivität durchgeführt werden sollte, zielt auf einen Wechsel von synchronen und asynchronen Aktivitäten im gemischten System, verdoppelt durch das Lernen im Online-System.

1. Introduction

Quality learning requires involvement and responsibility, significant intellectual and physical effort investment, high projections of finalities and pragmatic orientation. At the same time, the facilitating factors of learning belong to the educational environment (Albulescu et al., 2021), education having the primary role in perfecting modern civilization (Bahasoan et al., 2020).

The technological revolution/ 4th industrial revolution has generated the premises of learning in virtual space, by exploiting the technological conquests transferred to the educational context, when, within the didactic activity, students and

teachers establish positive interactions, also supported by the mutual enthusiasm achieved through the game-action, the statutory repositioning of the teacher-student horizontally in a linearity based on equality and elements of surprise (Mudure-Iacob, 2019). The interaction relationship between the trainer and the trainee is essential to ensure learning efficiency (transmission, reception of knowledge and self-regulation) through the transfer of knowledge, on the one hand, and the transmission/reception of the answer, respectively the feedback, on the other hand (Baber, 2020). Active-participatory learning action is supported by dislocated motivation, interest and desire to know, as well as by intellectual curiosity



(Yamamoto, 2010). The more the student becomes the teacher and the teacher becomes the student, the more effective the results (Hattie, 2014).

2. Theoretical foundation

E-learning developed both before and after the pandemic caused by the COVID-19 virus, thus becoming an increasingly popular way of working. There are several independent factors which contribute to the recording of academic performances and implicitly influence the students' learning satisfaction, such as the curricular content and the manner in which it is presented, the trainer's skills, the students' expectations and the feedback received. In order to support the instructional-educational process, and to achieve managerial success assimilated to professional satisfaction and the recording of academic performances, the four factors stated above are indispensable (Gopal et al., 2021, Manea & Stan 2016). An analysis of student involvement in online learning from a behavioral, cognitive, and affective perspective highlights the need for intervention, providing support on the emotional dimension (Salas-Pilco et al., 2022). Moreover, students expressed a higher preference for learning in the traditional system than for virtual environment-supported learning, and they agree that in face-to-face instruction there are elements/aspects favoring the achievement of academic performance such as self-motivation, commitment and cognitive self-regulation, the use of technological means (Aguilera-Hermida, 2020).

Regarding the mediating role of self-efficacy in the relationship between the attitude towards virtual environment-enhanced learning, studies and satisfaction one can indicate there are gender differences, in the sense that the mediating effect of self-efficacy is more emphasized in female subjects (Koca et al., 2023). Studies that have explored the manner in which students confide in their ability to use online learning platforms, to use self-regulation strategies indicate that training programs that conferred satisfaction/usefulness to students were found to be the main predictor in securing trainees' confidence (Landrum, 2020).

Students in the online learning system face several challenges due to poor adaptation to online courses and to lack of interaction (Adnan & Anwa, 2020; Almahasees et al. 2021). The non-verbal and paraverbal language, which might be more difficult to decode in the online learning system, accentuates the communication deficit grafted on emotions, and therefore the need to support a positive interaction is

emphasized, which is significant in the context of studies indicating that the teacher-student interaction is a predictor of effective learning (Alqurashi, 2019; Moore, 2014). Thus, interaction based on group activities is difficult to be assessed according to quality standards. Differentiation in learning based on individualization/customization does not have a sufficiently nuanced objective character due to delayed feedback which supports the recording of desirable academic performance only to a small extent (Botnariuc et al., 2020). Assessment carried out with computerized means can generate an additional stressful situation given the need to focus on the correct use of technological means (Pillai et al., 2021). Therefore, effectively supporting learning in virtual environments requires the identification of solutions to problems related to both students (hearing impairments, perceptive and understanding/learning difficulties, lack of interaction and motivation) and infrastructure (functionality of communication networks, safety and data protection) (Almahasees et al., 2021; Botnariuc et al., 2020). Results of research undertaken during the pandemic marked a high degree of student ownership, their contribution to the evaluation of course design and the customization of the learning process. At the same time, online learning has favored the diminishing of communication, time and space barriers (free and unfettered expression of ideas, clear expression of divergent opinions, sending/receiving messages at the same time regardless of where you are on the globe) (Hamdan, 2022). Some studies point out that a student's acceptance of/involvement in online learning, seeing teachers as facilitators of learning, and learning online from various internet sources can lead to higher academic performance than those elements and factors specific for the traditional learning system in school spaces within educational institutions (Hamdan, 2022; Roy & Al-Absy, 2022; Zheng et al., 2021). Although some advantages/benefits of online learning are identified in aspects such as self-learning, low cost, convenience and flexibility, some studies indicate that online education is less effective than face-to-face courses and student success in K-12 online education much lower compared to traditional school environments (Price-Banks & Vergez, 2022; Yan et al., 2021). Teachers report several dysfunctions in terms of authentic communication and human relationship. The teaching staff/trainers express concern regarding the perceived dysfunctions in the communication carried out in the virtual space due to both the partial feedback provided and received, and the authentic interrelation supported (Botnariuc et al.,

2020). Another shortcoming of online learning reported by students is the lower degree of attention and attention retention due to multiple distractions in the domestic space (Selvaraj et al., 2021).

The advantages of learning achieved by exploiting the virtual environment can be maximized through the responsible use of technologies (Dhawan, 2020; Fonariuk et al., 2023) that must be made accessible and flexible. Flexible, transparent, intentional/responsible use of educational resources, including e-learning platforms, will lead to the reduction of stress generally associated with learning in a traumatized context. Thus, the use of work rooms available in video conferences, the open addressability of discussion questions, and the exchange of e-mails in communication can support the needs of social interaction and make learning more efficient (Maican & Cocorad, 2021). The "digital support" model, as a distinct element used in the learning task can generate increased well-being, lead to an active-participative attitude, desirable cognitive behavioral involvement and even independent learning (Chiu, 2022). On the same level is the model offered by some organizations such as the International Society for Educational Technology, which can be adopted by those schools that want to promote/implement online learning (Morgan, 2020). In online learning, several factors compete for performance: IT infrastructure, the type and quality of learning platforms, students' personality and skills, the quality of teachers and their skills in selecting curriculum contents and designing learning tasks, institutional support (Roy & Al-Absy, 2022).

As a result of the benefits of the technological revolution, the transversal objectives that are so important in the process of training/development of the young person's personality and obtaining independence/intellectual and socio-emotional autonomy (intellectual curiosity, joy, pleasure and satisfaction in learning, the feeling of being in control of things and using in the context of different knowledge and skills, identifying and selecting relevant information sources, using information in relation to a specific problem to identify the most appropriate solution) can be successfully achieved (Manea, 2019). At the same time, due to the multiple connections supported in the act of learning through augmented reality, the chances of perception and acquisition of information by the students are maximized, which can materialize in a clearer and more correct identification of solutions to the

problems that arise in the natural course of authentic, deep learning (Steven, 2021).

3. Methodology

This study adopted a mixed-methods approach to assess and compare the effectiveness of traditional and digital learning systems among university students. The research design incorporated both quantitative and qualitative instruments to gather comprehensive data on student perceptions and experiences.

3.1. Instruments

3.1.1. Quantitative survey

The primary instrument was a questionnaire with 16 items, designed to measure student attitudes towards traditional and digital learning. The items, excluding the introductory and demographic questions, utilized a Likert scale to facilitate quantitative analysis.

3.1.2. Qualitative group interviews

Complementing the questionnaire, focus group discussions were conducted to obtain in-depth qualitative insights. These discussions helped explore detailed student perceptions, experiences, and potential biases not captured through the survey.

3.2. Participants

The study involved 167 students from the Faculty of Psychology and Educational Sciences at Babeş-Bolyai University, Cluj-Napoca. Participants were selected based on their voluntary willingness to engage with the study and provided informed consent. The selection aimed to reflect a diverse mixture of students from various educational backgrounds and academic years.

3.3. Method

3.3.1. Quantitative Data Collection and Analysis

Data from the questionnaires were recorded and stored in tabular format, enabling systematic statistical analysis. This process helped identify significant patterns and preferences among the student responses regarding the two learning systems.

3.3.2. Qualitative Data Collection and Analysis

Focus group interviews were recorded and transcribed. Thematic analysis was employed to analyze the transcripts, allowing for the identification of recurring themes and detailed insights into student behaviors and perceptions related to online learning.

The combination of these methodologies provided a robust framework for understanding the comparative impacts of traditional and digital learning environments on student learning experiences.

4. Results

The results obtained from the administration of the questionnaire to the study participants are comprehensively detailed in Table 1, which presents aggregated responses for each questionnaire item. This table serves as a central point of reference for understanding student preferences and perceptions regarding the traditional and digital learning systems. The detailed item-wise analysis helps identify specific strengths and weaknesses within each learning system. By understanding these elements, educators and administrators can strategize more effectively to enhance learning experiences, ensuring that both systems are optimized to meet the evolving needs of students.

The first item allowed the recording of the students' opinion regarding the advantages and disadvantages generated by e-learning. The distribution of the options was very close, namely, 51% of the respondents appreciated that the disadvantages extended to a significantly wider level than the advantages generated by teaching and learning in the face-to-face system. The focus group allowed the identification/naming of the perceived disadvantages, which materialized in the sphere of cognitive and socio-emotional deficits (lack of non-verbal communication that endangers obtaining a correct and complete feed-back; lack of socialization that does not allow the building of functional and solid intercollegiate reactions; investment of intellectual and time effort for obtaining or selecting information and achieving a positive relational agreement). From the range of advantages that the online education system implies, the following were mentioned: maximizing the use of time due to the elimination of losses due to travel, domestic comfort, and the exclusive decision to interact with other people, to participate actively or passively in the didactic activities carried out, better management of time allocated for both learning and other activities, high involvement and self-responsibility in selecting learning activities and sources, and increased self-esteem. Although a greater number of advantages of learning in the online system have been identified, it is appreciated that the disadvantages are also worthy of consideration and imprint more personal development due to interrelational deficits, as well as obtaining high

academic performance due to the inability to use resources at high standards of technology by both teachers and students.

Table 1. Student perceptions of the online learning system

No. crt.	Item- Content of questions	Answer variants	N	%
1.	Perception of the online system's contribution to learning compared to the face-to-face system	Benefits	81	49%
		Disadvantage	86	51%
2.	The degree of participation/active involvement/intervention of students in the e-learning activity	Bigger	84	50%
		As	67	40%
		Smaller	16	10%
3.	Level of interpersonal relationships with teachers in online learning	Deeper	16	9%
		As	43	26%
		Less deep	108	65%
4.	The learning effort in the online teaching system	Bigger	54	32%
		As	99	59%
		Smaller	14	9%
5.	Time dedicated to individual study in the online system	Bigger	94	56%
		As	69	41%
		Smaller	4	3%
6.	Attendance at didactic activities in the online teaching system	Bigger	105	63%
		As	51	30%
		Smaller	11	7%
7.	Motivation for online learning	Bigger	67	40%
		As	87	52%
		Smaller	13	8%
8.	Level of interpersonal relationships with peers in online learning	Deeper	23	14%
		As	77	46%
		Superficial	67	40%
9.	Assessment anxiety in the online system	Bigger	20	12%
		As	72	43%
		Smaller	75	45%
10.	Objectivity in online assessment	Bigger	33	20%
		As	128	77%
		Smaller	6	3%
11.	Free time deployed/saved as a result of didactic activities carried out in the online system	Bigger	111	66%
		As	40	24%
		Smaller	16	10%
12.	The degree of discomfort with online versus face-to-face education	Bigger	11	6%
		As	123	74%
		Smaller	33	20%
13.	The volume of bibliographic resources consulted in the case of the online education system in relation to the offline	Bigger	77	46%
		As	84	51%
		Smaller	5	3%
14.	Learning performance (effort applied/results achieved) in the online system and academic performance	Bigger	9	5%
		As	103	62%
		Smaller	55	33%
15.	Satisfaction in online learning	Bigger	19	11%
		As	141	85%
		Smaller	7	4%
16.	Perception of the preferred form of organization/conduct of the educational process	Online system	73	44%
		Face to face system	15	9%
		Mixed system	79	47%

Although the appreciation of the degree of participation and active involvement of students in the didactic activities carried out in the digital environment is higher than in the traditional school system (50% of the students indicate a greater involvement). Combined with a much higher attendance at didactic activities in the online teaching system compared to attendance at face-to-face course activities according to the opinion of 63% of students, no added value was generated at the level of academic performance, which remained the same for 62% of students or was even lower for 33% of them.

Regarding the level of interpersonal relationships in the online learning system established between the educational actors (trainers and trainees on the one hand and peer learners on the other hand), they are not rated as more effective, or deeper, but on the contrary, especially at the level of interpersonal relationships with teachers, where there was a regression (65% of the respondents are of the opinion that interpersonal relationships are less deep than those in the established face-to-face education system). The level of interpersonal relationships with colleagues in online learning is valued as the same by 46% of students, while 40% of them are of the opinion that the relational level has deteriorated and is superficial. During the discussions in the group interview on the issue of the relational deficit, it emerged that the investment of effort (intellectual, physical, temporal) to have good communication meant to support positive interrelationships was far too high, and the deficient feedback led to a negative interrelationship.

The degree of motivation for learning in the online system has increased in the perception of 40% of students, while 52% of them appreciate that there have been no changes in terms of the motivation for learning achieved in the online environment compared to the traditional one, in the established school space. If we refer to the time dedicated to individual study in the online system valued as higher by 56% of students and the same, by 41% of them, the effort put into learning in the online teaching system (higher: 32%; the same: 59%), the degree of sincerity in giving the answers is highlighted, as a synchronization is observed between the degree of motivation and the time allocated to the study. At the same time, we corroborate these data with that regarding the volume of bibliographic resources consulted in the case of the traditional education system with the online system (higher-46%, the same-51%), and we can see that this fact was possible because it increased both the motivation for learning and the investment of time for

learning, which means that the online learning system is beneficial for the student's personal development and can lead to a higher degree of self-responsibility/self-involvement in learning.

Anxiety in the evaluation developed in the online system is appreciated by 45% of students as lower, and only 12% appreciate it as higher. At the same time, the degree of objectivity of teachers in online assessment is perceived as higher by 20% of students, although the assessment carried out with digital tools means generates stressful situations for those who are assessed (Pillai et al., 2021), while 77% of them appreciate the degree of objectivity in the evaluation of the teacher as a constant, regardless of the system in which it is produced, whether online or face-to-face. From the focus group discussions, it was indicated that digital skills and the use of technological resources are highly developed at the level of the surveyed students, a fact for which the evaluation in the online system did not create a problem for them nor did it generate stressful situations.

Although the well-being felt by students in the online learning system is generally not perceived as different from the face-to-face learning system (85% of students have the same degree of satisfaction regardless of the learning system approached), the degree of satisfaction in online learning is nonetheless higher for 11% of them. Satisfaction in learning can be associated with a decrease in assessment anxiety, a perception of increased objectivity in assessment, and a greater availability of free time generated by supporting learning in synchronous didactic activities compared to perceived asynchronous didactic activities by 66% of students.

Considering the ratio between the beneficial and undesirable elements of learning in e-learning contexts, students' perception of the preferred form of organizing and conducting the educational process is that of a mixed system in a proportion of 47%, an online system in a proportion of 44%, and only 9% of respondents would like to keep an exclusive face-to-face system. From the discussions held, it emerged that the good direction for effective and sustainable academic learning is that of digital transformations and the valorization of technological resources, which also explains the preference of students for online or mixed-system learning.

5. Discussions

In agreement with other results (Hamdan, 2022; Roy & Al-Absy, 2022; Zheng et al., 2021), our study confirms the benefits of online learning. The

preference for the approach of a mixed system, doubled by the online one, in student learning, based on the study carried out, results from the following aspects: the well-being given by the comfort and satisfaction in learning, the reduction of anxiety in the evaluation, and the greater availability of free time generated by the support learning in synchronous didactic activities compared to asynchronous didactic activities.

The act of learning, regardless of the environment in which it is carried out, must be customized/differentiated according to students' particularities/cognitive-intellectual experiences (Yan et al., 2021), the generation they belong to (example: the ALFA generation, whose technological skills are exceptional), and especially since for some students the value of information and internet addiction is directly proportional to satisfaction and academic performance (Maqableh & Jaradat, 2021). Given the benefits of online learning, educational institutions should consider the emerging opportunities and facilities of digital transformations and respond positively to the challenges (Agustini et al., 2020; Soto-Acosta, 2020), including by considering the digital societies of the not-so-distant future (Xiao et al., 2022) The 4th industrial revolution with its implications generated by the use of artificial intelligence on a global scale, both socially and economically, has created a series of ethical questions, but also solutions for a lot of problems faced by human society. (Nadoleanu et al., 2022). Therefore, an essential condition for carrying out online learning activities is the possession of digital skills and the realization of transformations at the level of learning spaces consistent with technological requirements. For a quality education, the teacher needs substantial training, not only in terms of digital skills, but also in the didactic, methodological dimension necessary to create new sources and curricular resources aimed at facilitating learning, motivating and supporting the student's cause/interest in learning.

6. Conclusions

The experiences accumulated during the pandemic underscored the critical need to sustain and refine educational practices. This study reveals that the persistent challenges and emerging opportunities of the pandemic have catalyzed the evolution of pedagogical strategies, demonstrating the imperative to continuously adapt and improve educational frameworks. Our findings strongly advocate for the ongoing development of best practices that were

initiated during this period, emphasizing their long-term integration into educational systems.

Our analysis indicates that the advantages and disadvantages of online learning systems are becoming increasingly balanced. While the transition to digital platforms initially presented significant challenges, including accessibility issues and the need for digital literacy, these have been substantially mitigated over time through targeted interventions and enhanced support systems. The study suggests a trend towards a more harmonious integration of online learning, with its benefits—such as flexibility and accessibility—being more fully realized and its drawbacks being systematically addressed.

The research underscores a significant inclination towards leveraging digital technologies to enhance educational outcomes. It highlights the effectiveness of e-learning environments in fostering more engaged and personalized learning experiences. By capitalizing on the inherent capabilities of digital tools—such as interactive simulations, collaborative platforms, and AI-driven tutorials—educators can maximize the educational benefits, thus enriching the learning journey for students.

One of the critical insights from this study is the necessity to bridge the disparities between traditional and online learning modalities. The findings advocate for a participatory approach to education, where learners actively collaborate with educators to co-create the learning experience. This partnership is crucial for innovating and tailoring learning processes that cater to diverse student needs and preferences. Furthermore, the study calls for learners and educators alike to invest time and effort in cultivating a learning environment that is both inclusive and effective.

Lastly, our study highlights the critical role of innovation and personal responsibility in the educational process. It encourages both students and teachers to embrace innovative practices that enhance learning outcomes. Additionally, the importance of personal investment in the educational process is emphasized, suggesting that the success of both traditional and online learning is contingent upon the proactive engagement and dedication of all stakeholders involved.

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The Relationship Teachers have with Technology, Implications of the T.A.M. Model

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The Relationship Teachers have with Technology, Implications of the T.A.M. Model

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Abstract

Keywords:

teachers, technology, online platforms, TAM model

Mobile applications and the relationship with online platforms became more important for all of us with the pandemic. The way teachers managed to transition online during the pandemic led to the speed with which they could adapt to the new conditions of lockdown, and the teaching-learning processes. The relationship that teachers managed to develop with the use of technology resulted in its continued use (or not) in education after the pandemic, contributing to the narrowing (or, conversely, widening) of the disparities between digital natives - the students, and digital immigrants - their teachers. The study utilizes the TAM model to capture how teachers interacted with technology at different points in time (during the pandemic and two years after its start) and how they might continue or not to use it in the future. The obtained results emphasize which categories of teachers accepted more easily the modification of the teaching-learning process, thus ranking in the area of being an indicator of change in education. Compared to these first results, it is highlighted that age is an indicator in the acceptance of technology. The other results aim to identify the factors that could determine the change in attitude towards the use of devices.

Zusammenfassung

Schlüsselworte:

Lehrer, Technologie, Online-Plattformen, TAM-Modell

Mobile Anwendungen und die Beziehung zum Online sind mit der Pandemie für uns alle wichtiger geworden. Die Art und Weise, wie es den Lehrkräften gelang, während der Pandemie online zu gehen, führte dazu, dass sie sich schnell an die neuen Bedingungen, die des Lockdowns, die Lehr- und Lernprozesse anpassen konnten. Die Beziehung, die Lehrer mit dem Einsatz von Technologie aufbauen konnten, führte dazu, dass diese nach der Pandemie immer noch in der Bildung eingesetzt wurde (oder auch nicht), was zur Verringerung (oder umgekehrt) der Diskrepanzen zwischen Digital Natives – Schülern und Digital Immigrants – beitrug - ihre Lehrer. Die Studie verwendet das TAM-Modell, um zu erfassen, wie Lehrkräfte zu unterschiedlichen Zeitpunkten (während der Pandemie und zwei Jahre nach Beginn der Pandemie) mit Technologie umgingen und wie sie diese in Zukunft möglicherweise weiterhin nutzen oder nicht. Die erhaltenen Ergebnisse verdeutlichen, welche Kategorien von Lehrkräften die Veränderung des Lehr-Lern-Prozesses leichter akzeptierten und rangieren somit im Bereich eines Indikators für Veränderungen in der Bildung. Im Vergleich zu diesen ersten Ergebnissen wird hervorgehoben, dass das Alter ein Indikator für die Akzeptanz von Technologie ist. Die weiteren Ergebnisse zielen darauf ab, die Faktoren zu identifizieren, die die veränderte Einstellung zur Nutzung von Geräten bestimmen könnten.

1. Introduction

The world we live in has increasingly directed us towards the use of technology, and the pandemic has demonstrated more than ever that we need to turn towards online and technology. Since 1986, Davis has proposed a model called the Technology Acceptance Model (T.A.M.), drawing attention to the dimensions on which this process occurs. The dimensions Davis refers to are the perception of the ease of technology use, of the utility of technology, behavioral intention, the attitude towards technology, and how often it is used. It is not enough to look at the relationship between humans and technology only from the human perspective; it is necessary to add the one of the speed at which technology appears and develops in our lives.

Starting from these realities – the speed of the emergence and development of technology in our lives, as well as the impact of the pandemic on its use, the study focuses on the relationship between teachers and the use of technology in education. The questions that education worldwide was called upon to answer during the pandemic were – can we transition the teaching-learning process online? Do we have enough "tools" at our disposal for this (platforms, internet etc.)? Are people (teachers, parents, students) prepared to do this? In every educational system, the faster these questions were answered, the better it was for the smooth running of the process without interruptions or with only minor ones. The history of recent years proves that the Romanian educational system had



multiple difficulties in doing this in a linear manner, but it sought solutions for it throughout the years of the pandemic and post-pandemic. One of the crucial links in these changes was provided by teachers. Educators are the ones who influence generations through their work, as well as through the models they provide for those they teach various subjects to. Today, we are witnessing a paradigm shift in education, namely, digital natives are being educated by digital immigrants. The first studies to bring attention to this classification – digital immigrants, digital natives – are the studies of Prensky, and they refer to how these two categories understand the world (Prensky, 2001). The intersection between the ways digital natives and digital immigrants understand the world has led to this paradigm shift in education (and beyond). The perspective of changing education is given by how educators need to rethink the way they educate, considering that those they educate are immersed from the beginning in a technologized world that influences them and that they understand at a higher level compared to their educators. For this, educators should start from four phases of the process they have to go through, as follows:

- understanding digital natives (the different way they function in the world),
- reacting to them – to the differences stemming from their age, the fact that they belong to another generation (the differences in this case are more than generational disparities), and how they relate to the world and life differently,
- adapting to the new conditions – devices, technology are part of our lives, and this influences us daily, every moment of every day (devices can serve as a bridge between generations but can also create a gap).
- reconceptualizing the learning/educational process – for a new generation (or new generations) that is different compared to others but also for a new educational environment that is undergoing significant change.

Studies draw attention to the main modifications reported in the way of being within the world between digital natives and immigrants, which include: multitasking, issues associated with social media, educational benefits associated with social media, different ways of relating, and the development of new strategies that are more suitable for the digital natives' way of being (Evans & Robertson, 2020).

2. Theoretical foundation

Several statistics draw attention to the impact of technology and the internet in our lives. The initial results suggest that, concerning education, students use computers daily in a percentage ranging from 80-99.9%, and phones in a percentage ranging from 88-90% on a daily basis. The only impediment to using devices can be the lack of signal in certain areas or the inability to purchase a device (in areas where the standard of living does not allow for this). Of course, this data also highlights the category that most frequently uses devices among all categories present in education (preschoolers, students and college students). Studies also emphasize that devices are used from a very young age (even before kindergarten), and as children grow older, they use them more frequently. Technology has been used for a long time in all learning processes, and one of the well-known e-learning methods is the one offered by Moodle, a method known more by students than by other categories (Hsu & Chang, 2014). Acceptance of technology streamlines the use of study platforms and makes learning accessible not only for students but also for teachers (Alfadda & Mahdi, 2021; Ghani et al., 2019; Mailizar et al., 2021a; Mailizar et al., 2021b; Zhang et al., 2008).

Regarding accessing virtual libraries, currently, they are used in a percentage of about 2%, while other web sources are used to a much larger extent, approximately 80-90%. Of course, inappropriate use of information, failure to verify information sources, and inadequate processing of information lead to a superficially loaded education, the dispersion of information, or even the emergence of illiteracy (Courant, 2008). In recent years, for digital natives, studying at the library hasn't really been a pleasure because they predominantly use sources related to devices rather than printed books, so e-books would represent a more suitable option for them (Liao et al., 2018).

Technology influences all of us, but especially young people in who they are, what they do, choose, in who they become, how they think, and how they learn. There are both positive and negative aspects to this way of being, but young people are increasingly situated between two worlds – the real and the virtual – and often these are not very well connected. The greater the difference between these two worlds they inhabit, the more negative effects are found in their lives (Judd, 2018).

The main changes that should be made in education and their implications focus on the following aspects:

- Aligning technological offerings with pedagogical strategies to facilitate learning in new technological conditions, suitable for current generations and their typology.
- Digital literacy to supplement information literacy in all educational domains.
- Research in the field of education to provide relevant data for educators on how education can be adapted to digital natives (Smith et al., 2020).

Considering all these, after the pandemic period, digital literacy has become an obligation, not an option.

Some of the questions brought to attention by the pandemic and its aftermath include:

- Are teachers prepared to embrace technology?
- What are the factors that could determine this change (acceptance of technology in the teaching-learning process)?
- What is the attitude of teachers towards this change (acceptance of technology in the teaching-learning process)?

The model used to address these questions is that of Davis (TAM Model), supplemented by the studies of Pavlou (2003), Gelik, and Veysel (2011). The new model of Pavlou encompasses dimensions such as the quality of factors (referring to the quality of information, service quality, quality of accessed systems), experience (relating to ease of use, attitude towards devices and platforms, perception of their utility), behavioral intention, and the use of devices and technology.

3. Research methodology

3.1. General objective

The overall objective of the study aims to capture the differences existing among various categories of teachers (categories determined by age) regarding the acceptance and usage of technology.

3.2. Specific objectives

SO1. Specific Objective 1 – Highlighting differences in the acceptance of technology based on the teachers' age.

SO2. Specific Objective 2 – Capturing differences in the acceptance of technology at two different time

points – during the pandemic (2020) and two years later (2022).

SO3. Specific Objective 3 – Identifying the factors that could determine a change in attitude towards the use of devices.

3.3. Sample

Subjects were selected from multiple schools in the Western region of the country. They voluntarily participated in the study, were informed about the study procedures, and were assured of the confidentiality of the obtained data. The age categories of the subjects range from 20 to over 60 years and are grouped as follows: 20-30 years old - 15 subjects (18.75%), 30-40 years old - 17 subjects (21.25%), 40-50 years old - 17 subjects (21.25%), 50-60 years old - 16 subjects (20%), over 60 years old - 15 subjects (18.75%). Out of the total subjects, 65 are women (81.25%) and 15 are men (18.75%). This variable was not taken into account due to the large number of subjects in one category compared to the other category. All selected teachers have taught/are teaching high school classes, and the subjects taught cover all categories. The questionnaire that has been applied is Davis's questionnaire (TAM model questionnaire), in which the word "iPad" was replaced with the term "online platforms" (Skype, Zoom, Webex). This questionnaire addresses the following categories: perceived usefulness of platforms (PU), easy-to-use platforms (PEU), and user acceptance of platforms (UA).

4. Results

The results of the first objective - in line with the first set objective, the response methods of the subjects to Davis's questionnaire addressing the TAM model were studied.

Table 1. Results - objective 1

Age categories	PU	PEU	UA
20-30 years	6.13	6	6.4
30-40 years	5.17	5.58	5.41
40-50 years	5	3.82	4.47
50-60 years	4.	3.12	3.06
Over 60 years	4.46	2.86.	2.66

The results from Table 1 draw attention to the fact that regarding the perceived usefulness (PU) of platforms, the subjects have a positive perception (results place them in the above-average utility class). The results confirm that they consider the platforms

useful in their activities. They also rate their relationship with the platforms as moderately difficult (PEU), but this is only for the first two age categories – 20-30 years and 30-40 years. Regarding the other three age categories, it is evident that the score decreases drastically, indicating that they perceive the use of platforms as challenging. In terms of the last evaluated category (UA), the results confirm that individuals between 20-30 years old frequently use platforms, but then beyond that age range, the frequency of usage decreases significantly. All these results obtained during the pandemic underline the fact that devices, platforms, and online tools have rapidly come into our lives, and the teachers' category responded to this novelty by trying to adapt. Some age categories managed to do this better, while the older age categories adapted less successfully. It is relevant to emphasize that, in the school environment, institutions that managed to adapt quickly influenced both teachers and students to make this change. Therefore, to understand the issue of changes at the teacher level, it is not enough to look only at what teachers have done, but also at what the institution they worked for has done, as the organizational environment in which they operate has a significant influence on how they work.

Results for objective 2 – The second objective set out aims to capture the differences recorded regarding the use of platforms after two years, i.e., in 2022. The same Davis questionnaire was used, but this time partially, namely using only the items related to PU and UA.

Table 2. Results - objective 2

Age categories	PU (2020)	PU (2022)	UA (2020)	UA (2022)
20-30 years	6.13	5.26	6.4	5.26
30-40 years	5.17	4.58	5.41	4.41
40-50 years	5	3.94	4.47	3.29
50-60 years	4.	3.25	3.06	2.5
Over 60 years	4.46	2.66	2.66	2.33

Results from Table 2 emphasize that two years post pandemic, both the manner in which online work platforms were used and the frequency of their use have decreased. This has led to the perception that the need to use them is not as crucial. This is most evident for age categories over 50 years. The possibilities to use online platforms or devices during classes, in teaching activities, have increased significantly since

the pandemic. Additionally, students are very accustomed to using them and find it enjoyable, often linked to a game or recreational activity. This is precisely why teachers should maintain the use of devices and platforms in the teaching-learning process to capture the attention of students through this method. This way, students would learn that using devices or platforms can be interesting not only in entertainment and games, but also in learning. Likewise, it could be a common way for them to engage in an activity with their teachers, bringing the two categories - teachers and students - closer and, at least partially, reducing the differences between digital natives and digital immigrants.

Results for objective 3 – The third objective set out aims to identify the factors that could change the attitude towards devices and online platforms.

For this, we started with the fact that studies confirm the following: a high score in perceived usefulness and ease of use leads to the formation of a positive attitude towards the use of devices and platforms, directly related to the intention of use (Teo, Ursavaş & Bahcecapili, 2011). In addition, beliefs on the usefulness and accessibility of devices and platforms, beliefs formed in the "relationship" with them, are also added. All these beliefs refer to the credibility of utility, secure communication, the perception of risk in use, and the fact that if a person is satisfied with the interaction with the device, they will recommend it in turn (AlKailani, 2016; Harryato, Muchran & Ahmar, 2018, Rafique et al, 2019). The questions addressed to the participants for this objective were: Is your attitude (A) towards using devices and platforms better in the last two years compared to before? Do you consider the quality of information (C) transmitted through devices and platforms to be better? The response options were 1 to a small extent, 2 is the same, 3 to a large extent. The results of data processing are found in Table 3:

Table 3. Results - objective 3

Age categories	A	C
20-30 years	2.53	2.8
30-40 years	2.47	2.64
40-50 years	2.23	2.11
50-60 years	1.75	1.5
Over 60 years	1.73	1.46

The results confirm that even after a period following the pandemic (two years), age categories

between 20 and 30 years have a positive attitude towards devices and platforms. They consider that information transmitted/received in this way does not affect its quality. Age categories over 50 are less receptive to forming positive perceptions about the use of devices and platforms, and therefore, they may not consider activities conducted in this way as safe. These categories will have reservations about using and recommending devices and online platforms, often opting for traditional teaching methods in their relationship with their students. The results also emphasize that the friendlier we perceive the interaction with devices and platforms, the more eager we are to use them.

5. Discussions

The use of technology in education is not just something teachers can consider for the future but rather a natural option that becomes relevant in the present, through their adaptation to the many transformations occurring in this field. The study's objectives bring information about the possibility of adopting technology in Romanian education and about the possible dimensions that influence it. It is a well-known truth that the acceptance of technology is related to age and to the perception of its usefulness in our lives (Liao et al., 2018; Smith et al., 2020; Teo et al., 2011; Zhang et al., 2008).

The study's results highlight the fact that although teachers in the pandemic accept to use technology more frequently in their work (a level of usage above average), this usage decreases proportionally with advancing age. The age category of over 50 years old considers that although technology is useful (devices have penetrated their lives as well), it can be used in parallel with traditional teaching methods but not necessarily to complement or replace them. The changes regarding the use of technology are very important not only during the pandemic or post-pandemic period but also going forward. Adopting devices in education will primarily contribute to reducing the distance between digital natives (students) and digital immigrants (most teachers). Another argument for adopting the TAM model is the multitude of changes in the field of artificial intelligence and the fact that they will impact our entire lives and therefore education (both here and anywhere in the world). Individuals with fewer digital skills will suffer in the long term because they will not be able to adapt to all these major changes in the world, remaining somewhere outside or even in a marginal zone.

The pandemic had a major impact on the transition from the physical to the online environment, and this also changed the way teachers and students approached the educational process, but it is relevant to emphasize what happened after the pandemic. In the following two years, after the pandemic, the level of technology usage in education decreased, which also had an impact on the decrease in the perception level of their usage. This decrease was observed to exist even in older age groups (over 40 years old), compared to the 20-30 age group. In the long term, this decrease in the level of technology usage in the educational process could lead to the creation of a greater distance between the two categories involved - students and teachers. The impact of the changes brought by artificial intelligence (A.I.) could be used in education to increase students' engagement in subjects, to make them more participative or curious about learning using methods that are friendly to them. However, for this to happen, it is necessary for teachers, in their vast majority, to learn the ways of using A.I. in schools.

People adopt new technologies based on whether they perceive their usefulness in their lives or not, and this aspect has also been seen regarding the adoption of technology in education. The age groups of 20-30 years old wanted to continue using technology in their work even after the pandemic, while those over 50 years old chose to gradually give it up. Moreover, the perception of usefulness is one of the determining factors in the long-term use of devices (Chen et al., 2007, Gangwar, Date & Raoot, 2013). When teachers surpass the initial (unfavorable) impression about the use of technology, they become more concerned with the content mediated by technology, and this will increase students' adherence to this content. These conclusions could have a long-term impact on changing teaching and learning methods, through the involvement of devices and platforms in this process. The pandemic and post-pandemic period have highlighted conclusions that were clear even before them. Digital literacy is not an option but a necessity because currently, most things function this way, mediated by devices (Chen, 2011; Chiu & Wang, 2008; Lee, 2006).

6. Conclusions

The study highlights the differences between age categories in terms of technology use. The conclusions draw attention to the disparities between teachers over 50 years old and the other age groups included in the study regarding their use of online platforms and their attitude towards them. The fact that these age groups

use online platforms to a lesser extent in the long run increases the gap between them and their students. A small effort for these age groups would make them more willing to use online platforms to facilitate access to their materials for students who are more inclined to use the "online" for activities and interaction. The study also shows that those under 50 years old have a positive attitude towards the use of online platforms, perceive their utility, and use them much more frequently. This leads to greater accessibility and ease of navigation in platforms, providing multiple opportunities for teachers under 50 to interact with their students. The pandemic has drawn more attention than ever before, and suddenly, to these discrepancies between students and teachers regarding digitalization and its use. This is one of the many lessons that the pandemic has forced us to learn – to view digitalization as a valuable resource in many areas (which until then had been, at least with us, largely overlooked), to see devices and platforms as tools in the teaching-learning process. If teachers change their attitude towards everything related to digitalization, the results will lead to the streamlining of teaching-learning processes, greater access to information, resources, multiple possibilities for conducting classes (from various platforms used to interactive and user-friendly methods), ways to make learning collaborative (joint projects for groups of students in class, constant changes in workgroups for better communication and group dynamics, communication with students from anywhere in the world, etc.) (Al-Rahimi et al., 2013, Gangwar et al., 2013; Gangwar et al., 2015; Liao & Lu, 2008; Padilla-Meléndez, et al., 2008). Also, digitalization has an impact on environmental issues (lower paper consumption, involvement in sustainability, etc.).

While the study provides insights into the use of the TAM model in education, there are some limitations. These include a relatively small number of subjects, the inability to generalize the data to a larger population until the study is expanded with a larger number of subjects, and the fact that the study only includes high school teachers, neglecting other categories such as middle school teachers, primary school teachers and educators.

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Meanings of School Success for the Teenager Students in Vocational Schools, Sports Profile

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Meanings of School Success for the Teenager Students in Vocational Schools, Sports Profile

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Abstract

Keywords:

teenager, school success, sports success, vocational high school, sports profile

Success represents a general human value attribute that acquires meanings and forms depending on the field of knowledge to which we refer. In formative-educational activities, it takes the form of school success. The complexity of this concept is widely described in specialized literature, but our current interests are centered on the segment of vocational schools, sports profile, following the period of adolescence. "What meanings does school success have for student-athletes, teenagers?", is the question by which we try to outline the nuances of school success, particularly for this category of students. We start from the premise that the level of students' commitment, and their involvement in school activities largely determines success. Based on this commitment, the targeted students, from the vocational schools with a sports profile, enroll on the path of achieving school success in terms of completing their high school studies, obtaining the final exam diploma, and passing the professional skills certification exam.

Zusammenfassung

Schlüsselworte:

Jugendlicher, Schulerfolg, sportlicher Erfolg, berufliches Gymnasium, Sportprofil

Erfolg stellt ein allgemeines menschliches Wertmerkmal dar, das je nach Wissensgebiet, auf das wir uns beziehen, Bedeutungen und Formen annimmt. Im fortbildungs-pädagogischen Bereich zeigt es sich in Form von Schulerfolgen. Die Komplexität dieses Konzepts wird in der Fachliteratur ausführlich beschrieben, unser aktuelles Interesse konzentriert sich jedoch auf den Bereich der Berufungsschulen, mit sportlichem Profil, und studiert die Zeit der Adoleszenz. „Welche Bedeutung hat schulischer Erfolg für die Sportler, die noch Schüler sind?“ ist die Frage, mit der wir versuchen, die Nuancen des schulischen Erfolgs speziell für diese Schülerkategorie zu skizzieren. Wir gehen davon aus, dass der Grad des Engagements der Schüler und ihre Beteiligung an schulischen Aktivitäten maßgeblich den Erfolg bestimmen. Auf der Grundlage dieses Engagements beschreiben die gezielten Schüler, aus Berufungsschulen mit sportlichem Profil den Weg zum schulischen Erfolg, im Hinblick auf den Abschluss des Abiturstudiums, den Erwerb des Abiturzeugnisses und das Bestehen der Berufsqualifizierungsprüfung.

1. Introduction

Vocational high schools allow students access to an educational system that develop specific skills based on their vocation. Derived from the Latin word *vocare*, the term vocation denotes *the call* to a certain field of knowledge.

In vocational high schools, sports profile, students can manifest their calling towards the field of movement activities, offering them a favorable environment for the externalization of their interests and skills.

The specialized theoretical and practical sports training during the four years of vocational high school guides the students towards studying different sports branches practiced, according to the specialization. This specialized school training is completed by taking a certification exam of professional skills, at the end of high school studies,

teenagers, graduating students. We can appreciate the fact that based on the optimal functioning of two main elements, vocation and a favorable instructional-educational school environment, the students involved can acquire a professional qualification, that of sports instructor, level 4. We reflect on the value meanings that the target students attach to this fact as part of their school success.

2. Theoretical foundation

Adolescence is "the period of gradual maturation of the person from a biological, psychological, and social point of view" (Bocoş et al., 2021, p. 53). Characterized by deep morphological, functional, and psychological changes, this age stage is considered by specialists to be extremely difficult, challenging in the context of the educational path. At the same time, openness to change, acceptance of new challenges,



and courageous tendencies to experiment and overcome one's own limits become opportunities for the teenage student's development. To all this, we specifically add the motor experiences, sports, for sports students from vocational schools, sports profile.

Being characterized as a period of new attempts, many specialists in the field of psychology recall the so-called adaptive mechanisms developed by teenager students in this sense, well outlined both for their own transformations and for the challenges of social transformations. The level of functioning of these mechanisms has an impact on the commitment shown by them in school situations, conditioning the achievement of success on the educational path (Dincă, 2004). School success acquires particularities nuanced by the specifics of vocational high schools, sports profile, to which we refer. This complex concept harmonizes, in this sense, the theoretical school successes as well as the practical one, sports school successes.

If school success can be understood as "obtaining a favorable result and a superior performance in the instructive-educational activity" (Bocoș et al., 2021, p. 1893), then sports success can be understood from the perspective of the level of sports performance at which

the student is placed, the concrete results obtained in competitions, certain standards, and progress from one sports category of practitioners to another, from beginners to high-performance athletes. The level of commitment to school and sports activities is one of the many factors underlying school and sports success, and success in general.

The implications of the student's level of active commitment in situations specific to school learning or motor learning can be greatly influenced by external factors, such as family and teachers, even if the nature of this commitment has deep internal, motivational valences. Thus, the level of engagement of the adolescent student in his own process of becoming through school learning becomes an anticipatory element of success or failure in the instructive-educational context (Caranfil & Robu, 2017). Having described the vocational educational context, where the call to a certain field of knowledge determines optimally motivated involvement in school activities, we recall that most of the high school students who abandoned their studies come from the technological stream and a few from the theoretical and vocational streams (Report State of Pre-University Education, 2022-2023).

Table 1. Dropout rate in high school education. Source: Data calculated based on INS information, 2015-2023

Vocational high school	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022
%	1,6	1,4	1,5	1,2	0,8	0,8	0,4	0,9

Note: When calculating the indicator, students enrolled in the "Second Chance" Program were not taken into account (retrieved from Report State of Pre-University Education, 2022-2023, p. 35).

In the specialized sports literature, there are studies and research aimed at various aspects of the vocational school segment, most of them centered on the needs of sports students as the main pioneers in the concerns of school education.

Such a study was initiated by Ardelean et al., 2021, targeting the school population from the Suceava Sports Program High School, students from the 9th and 12th grades, in the period September 2015-August 2019. The aim was to highlight two significant aspects of the subjects included, the determination of the factors that influence the numerical values of the students during a four-year cycle of high school with a sports profile, and the identification of the professional orientation options of future graduates. The conclusions highlight the factors that lead to changes in the number of students during a school year, with an emphasis on overly permissive

legislation and the tendency expressed by these students to follow a higher education institution. Statistically expressed data, due to the research presented, highlights the considerable participation of students in the professional skills certification exam, which expresses the search for school success in this educational-school segment as well.

Table 2. Professional Qualification Exam, Sport Program High School Suceava (retrieved from Ardelean et. al., 2021, p. 8)

Professional qualification exam	2015 -2016	2016 -2017	2017 -2018	2018 -2019
Students enrolled/ students promoted	53/53	88/71	59/57	71/69

Academic success in schools with a sports profile is influenced by the factors of the specialized disciplines, in this case by the practical and theoretical sports disciplines. This success is determined by the quality of training, the passing rate of the final exam, sports performance, integration in the work field, or university academic structures (Ardelean et al., 2021).

Statistics at the national level show that at the 2023 baccalaureate exam, eight out of ten students from vocational high schools passed this exam (Report State of Pre-University Education, 2022–2023). However, in this context, we must consider the multiple challenges of such school units determined by external socio-economic factors and negative causal biases (Clipa & Honciuc, 2020), as for example, school academic results are negatively influenced by students' participation in training or competitive sports activities.

Thus, through our study undertaken and presented in this article, we want to highlight the meanings of school success from the perspective of sport students as favorable support for the efficiency and usefulness of the high school sports profile.

The complex particularities of school and sports commitment are widely presented in the specialized literature. Three dimensions of commitment are mentioned (Veiga, 2016), which we present below.

- Cognitive dimension: with reference to the strategies used by the adolescent student to make learning more efficient, with the aim of school success;
- The affective dimension: with references to emotional behavior, manifested in relation to school activities;
- Behavioral dimension: with references to positive behaviors centered on the path of school success.

Authors such as York et al. (2015) present explanations such as the fact that academic success is comprised of academic achievement, the acquisition of knowledge, skills, and competencies, persistence, and retention. School results refer to a result that includes the student's work quantified by grades, qualifications, or direct results in the form of learning products. Persistence and maintenance are considered measures of school progress (York et al., 2015), determination and perseverance to achieve the goals pursued, which implies a strong school commitment.

Even if the meanings presented to the concept of school success are generally accepted, it still acquires particular aspects due to the particularities of vocational schools, sports profile. Thus, in order to evoke such particular aspects, we started a study focused on highlighting the meanings of school success from the perspective of athletic students, teenagers, from the Sports Program High School Bistrița.

3. Purpose of the Study

The purpose of the study is to highlight the possible particular nuances of school success from the perspective of students from vocational high schools, sports profile, taking into account the specifics of these schools and the students' sports specialization.

4. Research methodology

We included subjects, 160 students, from the 9th, 10th, 11th, and 12th grades, during the school years 2020–2021, 2021–2022, 2022–2023, from Sport Program High School Bistrița. Participation was random. Participating students were informed in advance about how to select the answers, they were informed about the data protection rules and they were asked to give their consent to participate as subjects in the study. In order to extract qualitative data, we designed a form composed of 10 items faithful to the specific theme of the study, "School success in the view of sports students from vocational high schools, sports profile". We harmoniously included short-answer and multiple-choice items.

- Data collection methods;
 - ✓ Questionnaire-based survey method.
- Statistical-mathematical methods of organization, processing, and graphic presentation;
 - ✓ Tools used: EXCEL, Word.

5. Results and discussion

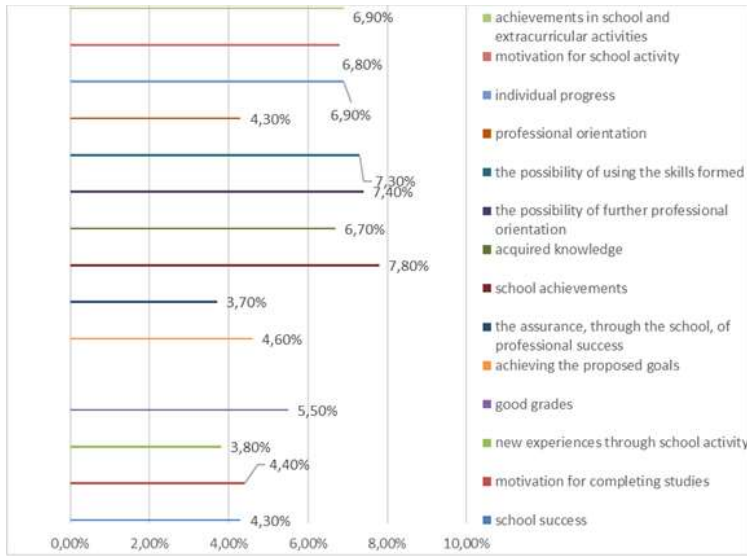
We present below the recorded results for each item of the questionnaire.

- Item 1 of the questionnaire: What do you mean by school success?

The answers given by the subjects are varied, registering individual nuances according to personal meanings. Assimilation of knowledge, individual progress, acquired competencies, and new experiences gained through school activity are just a few examples of responses with high frequency recorded according

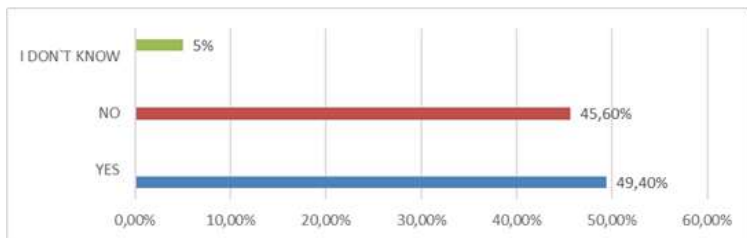
to the preferences of the surveyed subjects to highlight the meanings of school success.

Figure 1. The opinion of students from Sports Program High School Bistrița on Item 1 of the questionnaire



Item 2 of the questionnaire: Do you attribute academic success to the student who gets high grades?

Figure 2. The opinion of students from Sports Program High School Bistrița on item 2 of the questionnaire

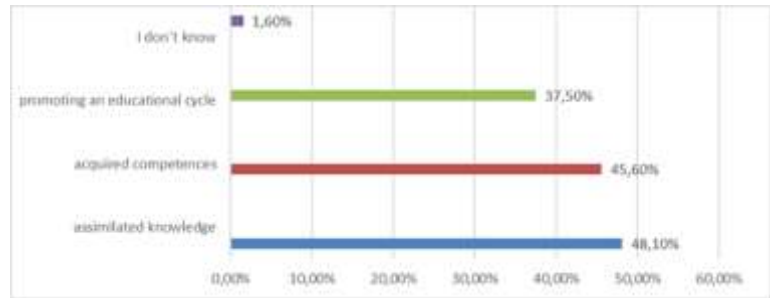


Following the analysis of the data obtained and presented in the figure above, approximately equal values can be observed between the two categories of answers. In this context, we can highlight the importance that the surveyed students gave to grades, qualifications, as elements of recognition of school performance. The grades, the qualifications, and the points obtained still represent, for the surveyed students, a form of value recognition, a level of the work done, of the intellectual and/or physical effort. The percentage value recorded according to the obtained data, 49.40%, reinforces the above statements.

Item 3 of the questionnaire: You associate school success with:

- ✓ Promotion of an educational cycle;
- ✓ Competences obtained;
- ✓ The assimilated knowledge;
- ✓ I don't know.

Figure 3. The opinion of students from Sports Program High School Bistrița on item 3 of the questionnaire

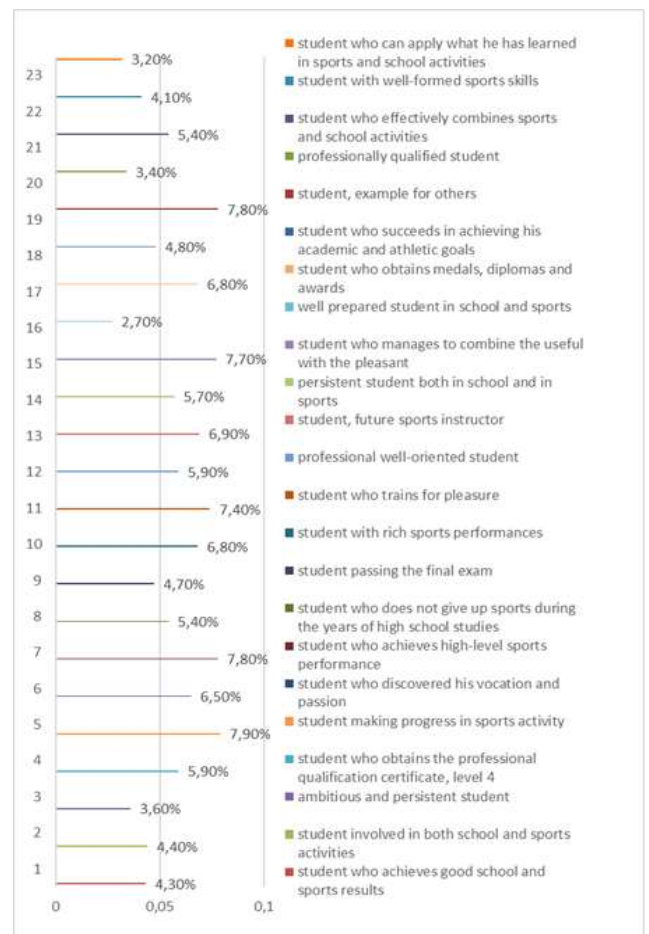


As can be seen from the figure above, a significant percentage of students from the Bistrița Sports Program High School (48.10 %) appreciate the knowledge assimilated in school activities as elements of personal school success. The skills obtained are percentage-wise on the second value scale, 45.60. Thus, we can conclude that the concept of competence and its implications are still confusing for some students, who focus on assimilated knowledge.

We specify that, for this item, the student respondents also had the opportunity to choose several answer options.

Item 4 of the questionnaire: What does a successful sports student mean?

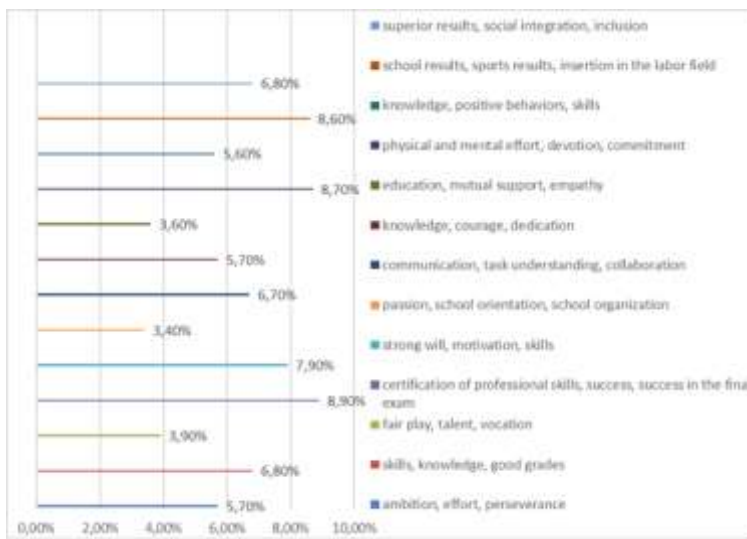
Figure 4. The opinion of the students from Sports Program High School Bistrița on item 4 of the questionnaire



The successful sports student acquires different, multiple nuances, as observed through the diversity of the answers provided by the participating students. The wide range of opinions of the teenager sports students from Sports Program High School Bistrița indicates a harmonious combination between sports and school activities, emphasizing the level of success in the two segments of activity.

▪ Item 5 of the questionnaire: What are the defining elements of school success, from the perspective of student-athletes in vocational high schools? (3 items)

Figure 5. The opinion of the students from the Sports Program High School Bistrița on item 5 of the questionnaire

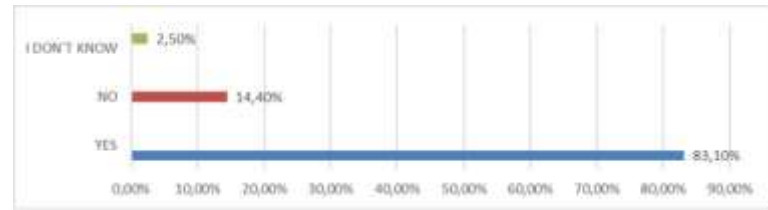


As can be seen from the answers recorded to item 5 of the questionnaire, the teenager students, athletes, enrolled in vocational high schools, define school success according to the physical and mental effort, the will, the dedication to involvement and the achievement of the proposed goal, the theoretical and practical sports knowledge acquired, the certification of the professional qualification, ambition, and general and specific skills. School and sports success is also interpreted by the surveyed students from the perspective of motivational persistence and orientation towards clearly defined tasks.

▪ Item 6 of the questionnaire: Is sports success part of general school success?

As we present in the figure above, the athletic students, teenagers, from Sports Program High School Bistrița consider, in a predominant percentage of 83.10%, the fact that sports success complements general school success. Thus, we can highlight the value meanings attributed to sports success in the context of general school activities.

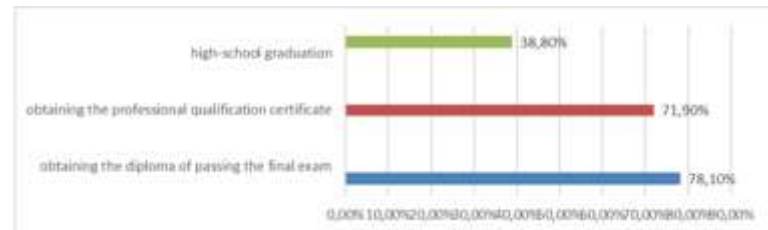
Figure No. 6: The opinion of students from Sports Program High School Bistrița on item 6 of the questionnaire



▪ Item 7 of the questionnaire: From the perspective of sports students from vocational high schools, sports profile, school success can be associated with:

- ✓ Obtaining the final exam diploma;
- ✓ Obtaining the professional qualification certificate;
- ✓ High school graduation.

Figure 7. The opinion of students from High School with Sports Program Bistrița on item 7 of the questionnaire

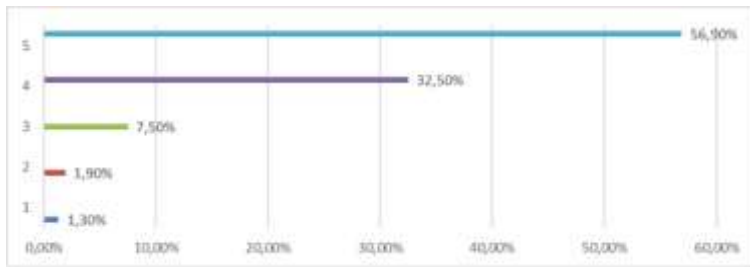


In this item, we propose to the subjects a combination of three types of answers that can be chosen to express their opinion regarding the significance of school success from the perspective of the student athlete. Thus, through the quantitative analysis of the recorded data, we observe that the first option, obtaining the final exam diploma, registers the highest percentage, 78.10. However, the second option, obtaining the professional qualification certificate, is close in percentage to the first option, 71.90%. We conclude that, for the students participating in the questionnaires, the subjects of this study, these two options offered as answers are important elements of school success.

We specify, in the context described by the interpretation of the data obtained through the answers to item 7, that students graduating from vocational high schools, sports profile, have the opportunity to register and participate in the professional skills certification exam. After passing this exam, students will obtain a qualification as a sports instructor, level 4, according to their specialization. Thus, the fact that the surveyed subjects opted for answer option 2 in such a large number suggests their desire to complete their high school studies, in a successful manner and from this perspective.

- Item 8 of the questionnaire: To what extent do you value the professional qualification, sports instructor, level 4, part of school success?

Figure No. 8: The opinion of students from Sports Program High School Bistrița on item 8 of the questionnaire

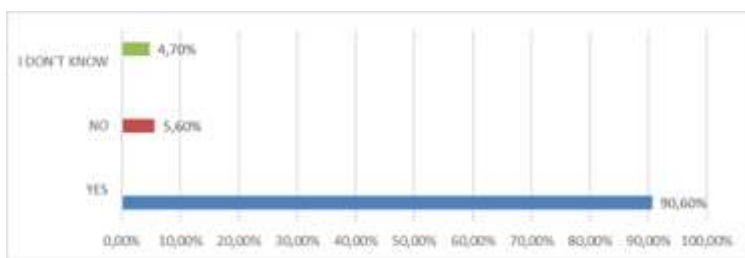


In the sense of continuing the ongoing investigation, and obtaining as eloquent data as possible, we included in the content of the questionnaire the question regarding the meanings of professional qualifications, as an element of school success.

The percentage of 56.90 indicates that most students opted for the highest value, 5, according to the proposed scale. Thus, the responsibility of a quality instructional-educational process is all the greater, as the students recognize this professional qualification, sports instructor, as personal school success.

- Item 9 of the questionnaire: Do you consider that all the sports, theoretical, and practical skills acquired during high school studies complete your academic success?

Figure 9. The opinion of students from Sports Program High School Bistrița on item 9 of the questionnaire



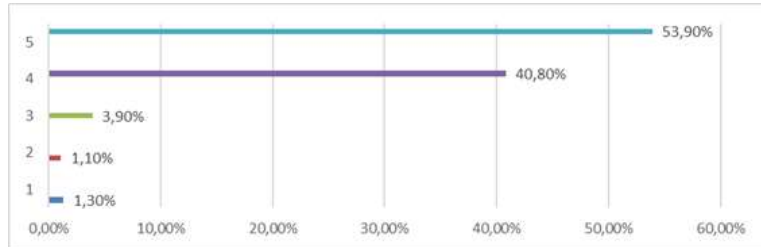
Of the surveyed students, the majority, 90.60%, affirm, by selecting the answer YES, that all skills, theoretical and practical, are part of general school success.

- Item 10 of the questionnaires: Is sports success (sports results alongside passing the qualification certification exam) a personal fulfillment?

According to the figure presented above, we notice that 53.90% of the surveyed subjects chose the numerical value 5, which represents the variant *To a very large extent*. Others, in the percent of 40.80,

considered satisfactory for their personal opinion, the numerical value 4 from the proposed scale. We conclude that students value sports success as an important factor in personal fulfillment.

Figure No. 10: The opinion of students from Sports Program High School Bistrița on item 10 of the questionnaire



6. Conclusions

School success is a common concern of the pawns directly involved in the instructive-educational process, student-teacher. Even if this concept of school success is described with clarity and precision in the specialized literature, nuanced meanings may appear from the perspective of some particularities specific to the school context. Through the qualitative and quantitative analysis of the results recorded through this extensive survey process, we highlighted those particular nuances of school success, as highlighted by the opinions expressed by the students from Sports Program High School Bistrița. Thus, they appreciate sports success as part of school success, including as content elements the completion of high school studies with a final exam diploma and with a professional qualification certificate, according to the specialization. In this context, the value of the student's involvement in the preparation of the certification exam for the graduates, sports profile, increases. Passing this exam represents a strong element of personal fulfillment for students. Sports success, completed by the success of obtaining the qualification, is, along with the success of passing the final exam, an important factor in the success of teenage students in vocational high schools, sports profile.

We emphasize that this study addresses exclusively pre-university education units, sports profile. Among the limits of the study, we mention the relatively small sample of subjects, including only students from Bistrița Sports Program High School. At the same time, we take into account the possible subjectivity or superficiality of some students in giving answers, without awareness of objective involvement. Although at the beginning of the questionnaire process we provided concrete explanations on how to choose the answers, for each

item separately, we explained terms introduced in the questionnaire items that were considered unknown or complex, we highlight all these possible limits of the presented study.

However, we specify that the data obtained and the conclusions drawn can represent solid support for its extension to other school units with a sports profile, in a joint attempt to generalize at the national level the meanings of school success for sport students. In this way, we would clearly highlight the place and role of vocational high schools, sports profile, in the Romanian education system.

Authors note:

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Metacognitive Awareness and Group Membership as Predictors of Academic Performance

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Metacognitive Awareness and Group Membership as Predictors of Academic Performance

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Abstract

Keywords:

metacognitive awareness, extracurricular activities, co-curricular activities, scientific group membership, academic achievement, moderation analysis

Numerous studies highlighted the role of higher-order cognitive processes and metacognitive awareness in academic performance and later careers. Similarly, extracurricular activities, such as various group memberships, have a positive impact on university success, enhancing cognitive abilities alongside social and emotional factors. The aim of this research is not only to uncover simple linear relationships but to examine the impact of group membership, as an extracurricular activity, on the relationship between metacognitive awareness and academic performance. We surveyed students from the Babeş-Bolyai University Faculty of Psychology and Educational Sciences, using the convenience sampling method and applying a correlational cross-sectional design. Positive, moderate-strength relationships were found between academic performance, metacognitive awareness, and group membership. According to the moderation model, group membership is not a significant moderator; however, based on the overall model, it can be concluded that group membership has a positive effect on academic performance. The study draws attention to the organization and support of extracurricular and co-curricular programs as activities that enhance metacognitive awareness and academic performance.

Zusammenfassung

Schlüsselworte:

Metakognitive Bewusstheit, außerschulische Aktivitäten, zusätzliche außerschulische Aktivitäten, wissenschaftliche Gruppenmitgliedschaft, akademischer Erfolg, Moderationsanalyse

Eine Vielzahl von Studien hat die Rolle höherer kognitiver Prozesse und metakognitiver Bewusstheit für die akademische Leistung und spätere Karrieren hervorgehoben. Ebenso haben außerschulische Aktivitäten wie verschiedene Gruppenmitgliedschaften einen positiven Einfluss auf den Studienerfolg an Universitäten, indem sie kognitive Fähigkeiten neben sozialen und emotionalen Faktoren stärken. Ziel dieser Forschung ist es nicht nur, einfache lineare Beziehungen aufzudecken, sondern den Einfluss von Gruppenmitgliedschaft als außerschulische Aktivität auf die Beziehung zwischen metakognitiver Bewusstheit und akademischer Leistung zu untersuchen. Wir haben Studenten der Fakultät für Psychologie und Erziehungswissenschaften der Babeş-Bolyai-Universität befragt, wobei wir eine Bequemlichkeitsstichprobe verwendeten und ein korrelatives Querschnittsdesign anwandten. Es wurden positive, mäßig starke Beziehungen zwischen akademischer Leistung, metakognitiver Bewusstheit und Gruppenmitgliedschaft festgestellt. Gemäß dem Moderationsmodell ist die Gruppenmitgliedschaft kein signifikanter Moderator; basierend auf dem Gesamtmodell kann jedoch geschlossen werden, dass die Gruppenmitgliedschaft einen positiven Einfluss auf die akademische Leistung hat. Die Studie lenkt die Aufmerksamkeit auf die Organisation und Unterstützung außerschulischer und außercurricularer Programme als Aktivitäten, die metakognitive Bewusstheit und akademische Leistung fördern.

1. Introduction

The students' academic performance is influenced not only by social, emotional, and motivational factors but also by higher-order cognitive processes. Determining factors include not only attention and memory capabilities but also the degree to which students are aware of the learning process, requirements, and their own abilities. Metacognitive skills contribute to effective self-regulated learning, planning the learning process, selecting applied strategies, controlling their effectiveness, evaluating results, and identifying applied declarative, procedural, and conditioned knowledge.

Participation in extracurricular and co-curricular activities, such as after-school preparatory programs, scientific, artistic, and sports groups, and participation in conferences and competitions, also affects students' academic performance as they develop cognitive, motivational, emotional, and social skills that contribute to successful school and university adaptation and learning.

Extracurricular and co-curricular activities not only directly lead to increased academic performance but also indirectly develop cognitive abilities that contribute to effective learning. The main purpose of extracurricular activities is to deepen students' interest



in a particular field of science or activity, develop explicit and implicit knowledge, and continue the learning process in an informal environment, such as groups, laboratories, and conferences. Extracurricular activities require students to engage in individual planning, time management, and develop time management strategies, i.e., metacognitive skills.

2. Theoretical foundation

2.1. *The role of metacognition in academic performance*

Numerous previous studies have highlighted the positive relationship between metacognition and academic performance. In their study, Amrin et al. (2020) examined the relationship between metacognition and academic performance in 11th-grade students, operationalizing academic performance with English grades. The results of the study revealed a positive moderate-strength relationship between metacognition and English grades, with higher metacognition associated with higher English grades. The study emphasizes the importance of metacognition in academic performance and language learning.

In their study, Khan et al. (2020) examined the impact of self-regulated learning, based on metacognition, on university students' academic performance. The research highlighted the contribution of self-regulated learning to academic performance and called attention to the creation of programs aimed at developing students' self-regulation. The effects of self-regulated learning and metacognition on academic performance in university students with test anxiety were also examined (Onwunyili & Onwunyili, 2020). During the intervention, members of the experimental group participated in a program aimed at developing self-regulation and metacognition. After the program, there was a significant difference in academic performance between the experimental and control groups, leading to the conclusion that the training aimed at developing self-regulation and metacognition can be effectively applied to increase academic performance.

In their study, Cherrier et al. (2020) tested the effect of the NeuroStratE program's metacognitive approach on increasing students' academic performance. They found no significant difference between the academic performance of students participating in the program and students in the control group. However, the research highlighted the relevance of the program and the importance of acquiring metacognitive knowledge about brain

function, which increases students' self-efficacy, a well-known determinant of academic success (Cherrier et al., 2020).

2.2. *The role of extracurricular and co-curricular activities in academic performance*

In a study examining the relationship between co-curricular activities and academic performance (Sami et al., 2020), it was found that the more students engage in such activities, the better their academic performance. Additionally, the study highlighted the role of the government and educational institutions in creating and organizing programs that include such activities and motivating students to participate. In their research, Batool and Ahmad (2020) found that students who participate in more co-curricular activities have higher academic performance compared to those who do not engage in such activities. The relationship between participation in extracurricular activities and academic performance was also examined among medical university students (Utomo et al., 2019). For healthcare professionals, the transfer of knowledge to everyday situations is highly important, and participation in extracurricular activities enhances knowledge transfer, social skills, and time management among students. Medical students who were active participants in extracurricular activities had higher average grades than their passive peers.

Sabirov (2019) investigated the impact of extracurricular activities on students' academic performance and the development of their communication skills. Activities requiring sports and organization develop leadership skills, while participation in lectures, conferences, and competitions enhances communication skills. Students' creativity can be developed through reading fiction books, scientific magazines, and technology-related literature. Participation in various programs requires planning, which enhances students' strategic thinking.

Morris (2019) conducted a systematic review of studies examining the impact of various types of extracurricular activities on academic performance. Participation in extracurricular activities is associated with positive academic outcomes, such as higher average grades, better performance on standardized tests, increased likelihood of completing school, and pursuing higher education. Furthermore, these positive correlations appeared regardless of the type of activity, indicating that not only the type of activity matters, but

also the experience gained from participating in various types of activities.

2.3. The relationship between extracurricular activities and metacognitive awareness

Belonging to groups contributes to achieving common goals and engaging in activities that require teamwork. Group activities not only develop social skills but also contribute to the awareness of individual cognitive abilities by allowing group members to take on roles that contribute most to the group's functioning and success, thereby identifying their outstanding abilities. Through gaining experience, their declarative knowledge develops, as well as their procedural metacognitive knowledge, as they can apply their consciously acquired knowledge of their cognitive abilities in practice, and their conditional knowledge increases as they learn which strategies to employ in different situations.

The effects of participation in extracurricular activities on the cognitive, linguistic, and socio-emotional development of children in large groups have been examined. After controlling demographic variables and children's prior performance, participation in extracurricular activities positively correlated with cognitive and linguistic abilities. The diversity, intensity, and number of activities also influence the development of cognitive abilities. The long-term effects of extracurricular activities on children's later academic performance are evident. Long-term participation in extracurricular activities enhances cognitive and linguistic abilities to a greater extent, as children are exposed to more learning activities and social interactions with teachers and peers (Ren et al., 2020). The effects of past and present participation in extracurricular activities on adaptive self-regulation goals were also examined, as well as how the adaptive self-regulation goals associated with extracurricular activities are related to academic performance and emotional well-being (Guilmette et al., 2019). Positive correlations were found between past and present participation in extracurricular activities and the use of self-regulation strategies. University students who apply self-regulation strategies have better academic outcomes and higher emotional well-being.

Multiple group memberships have a positive impact on cognitive performance (both verbal and mathematical abilities). For boys, there is a stronger relationship between physical group activities (participation in sports groups) and cognitive abilities compared to girls, who can gain the same benefits

from participating in other types of groups (e.g., art groups, music groups) (Beadleston et al., 2019). Participation in scientific research groups was also examined regarding personal and cognitive development, professional experience, and job placement (Hunter et al., 2007). Participants were provided with a learning environment where they could try themselves as researchers, see step-by-step how to conduct scientific research, and gain research experience. The authentic research environment allowed them to acquire professional intellectual and practical skills. Situated learning was facilitated by research advisors and mentors who provided instructions, advice, and professional experience to students, acting as direct role models. The main goal of the project was to develop students' skills, considering their personal development level, targeting the zone of proximal development. Such programs develop students' metacognitive abilities, as research work requires highly developed regulatory skills, planning, effective strategy selection, continuous monitoring, tracking, precision, error detection, correction, critical thinking, evaluation, and analysis of results.

Robotics is a prevalent extracurricular activity today. In some cases, it is not related to the school or university curriculum; however, many robotics programs and groups aim to develop skills related to the curriculum, which students can use after school or university, such as metacognition, critical thinking, creativity, problem-solving, and technological thinking. In their research, Komis et al. (2017) developed a robotics program for students based on cooperative, creative problem-solving strategies to solve poorly defined problems. This approach greatly enhanced students' cognitive abilities, which can be useful in both learning and everyday life. These activities also have a positive impact on students' metacognitive abilities, as applying creative problem-solving skills to robotics tasks requires control of cognitive processes. Students' mathematical and metacognitive abilities were developed within extracurricular activities based on robotics activities (La Paglia et al., 2017). The conclusion of the research is that robotics activities can be applied as tools that allow monitoring of learning, application of higher-level control processes such as planning, evaluation of exercises, and testing of everyday problem-solving strategies. Students in the experimental group were able to correctly identify problems, modify designs and programming, and make changes to perform activities with robots.

3. Research objectives and hypotheses

One of the main objectives of our research is to explore the relationships between metacognitive awareness, academic performance, and group membership as an extracurricular activity, as the information available in the literature is contradictory. Additionally, our aim is to supplement the literature with findings that highlight the moderating effect of extracurricular activities on the relationship between metacognitive awareness and academic performance. Our results can serve as the basis for further research, and practical studies and interventions can be implemented based on them. Methodologically, we aim to examine the internal consistency of the applied tools.

Based on the research results presented above, which highlighted that both metacognitive abilities and extracurricular activities are significant predictors of academic performance, we formulated the following hypotheses:

1. We hypothesize that a positive relationship can be identified between metacognition, academic performance, and group membership as an extracurricular activity.

2. We hypothesize that group membership is a significant moderator of the relationship between metacognition and academic performance, with a stronger correlation between metacognition and academic performance observed among students belonging to groups.

4. Research methodology

4.1. Participants

Using the G*Power program, we determined that 92 participants are needed to conduct the moderation analysis (actual power: .80). In our study, 103 Psychology and Special Education students from Babeş-Bolyai University participated, comprising 74 females and 29 males, with 36% residing in rural areas and 64% in urban areas. The average age of the participants was 20 years, with the youngest being 18 and the oldest 28 years old.

4.2. Instruments

Demographic questionnaire

In our demographic questionnaire, we recorded the participants' age, gender, and place of residence. Additionally, we asked whether they were involved in any scientific or volunteer groups. Participants could answer yes/no to the question regarding group

membership. In this questionnaire, we also recorded the participants' average grades from the previous semester.

Metacognitive Awareness Inventory

To measure metacognitive awareness, knowledge, and regulation, we used the Metacognitive Awareness Inventory developed by Schraw and Dennison (1994), which consists of a total of 52 items. Metacognitive knowledge is assessed by 3 subscales: declarative, procedural, and conditional knowledge, while metacognitive regulation is measured by 5 subscales: planning, comprehension monitoring, information management strategies, debugging strategies, and evaluation. Metacognitive knowledge is represented by a total score of 17 items, while metacognitive regulation is represented by a total score of 35 items. Participants could respond with yes/no to each statement. The questionnaire was considered reliable in the examined sample based on the Cronbach's alpha coefficient ($\alpha = .752$), with acceptable dimensions for both metacognitive knowledge ($\alpha = .612$) and metacognitive regulation ($\alpha = .683$).

4.3. Design and data analysis

We employed a cross-sectional correlational design in our research as we aimed to uncover the relationships between metacognitive awareness, group membership, and academic performance. We conducted moderator analysis in which metacognitive awareness served as the predictor variable, group membership as the moderator variable, and academic performance as the outcome variable. We performed moderator analysis using the bootstrapping method.

4.4. Procedure

After obtaining informed consent, participants completed the demographic questionnaire, followed by the questionnaire assessing metacognitive awareness. The questionnaires were completed in a paper-and-pencil format, taking an average of 20 minutes, and no time limit was applied.

5. Results

The average academic performance of the participating students is 8.69 (SD = .968), with the lowest average grade being 6 and the highest 10. The student with the lowest metacognition scored 11, while the highest scored 50 points. The mean score for metacognitive awareness among students is 36.96 (SD = 6.751). Based on the Skewness and Kurtosis indices, the distribution of continuous variables conforms to the normal distribution (see Table 1). 68% of the

participants are members of some scientific or volunteer groups.

Table 1. Descriptive statistics and normality

	Min	Max	M	SD	Skewness	Kurtosis
GPA	6.00	10.00	8.69	.968	-.284	-.572
Metacognitive awareness	11	50	36.96	6.751	-.903	1.981

To determine the relationships between metacognitive awareness, academic performance, and group membership, we employed Pearson correlation. A positive moderate strength correlation was found between academic performance and metacognitive awareness [$r(101) = .357, p < .001$]. Similarly, we identified a positive moderate strength correlation between average grade and group membership [$r(101) = .347, p < .001$], as well as between metacognitive awareness and group membership [$r(101) = .448, p < .001$] (see Table 2).

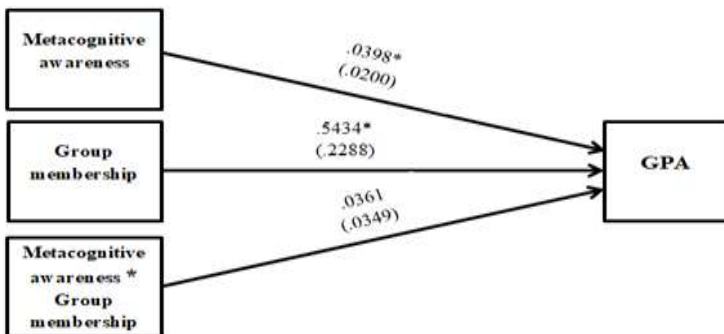
Table 2. Correlations between metacognitive awareness, GPA and group membership

	GPA	Metacognitive awareness	Group membership
GPA	--		
Metacognitive awareness	.357***	--	
Group membership	.347***	.448***	--

Note. *** $p < 0.001$

A bootstrapping test with 10000 re-samples was used for the moderation analysis. In our moderation model we tested the moderating effect of group membership on the relationship between metacognitive awareness and academic achievement (see Figure 1).

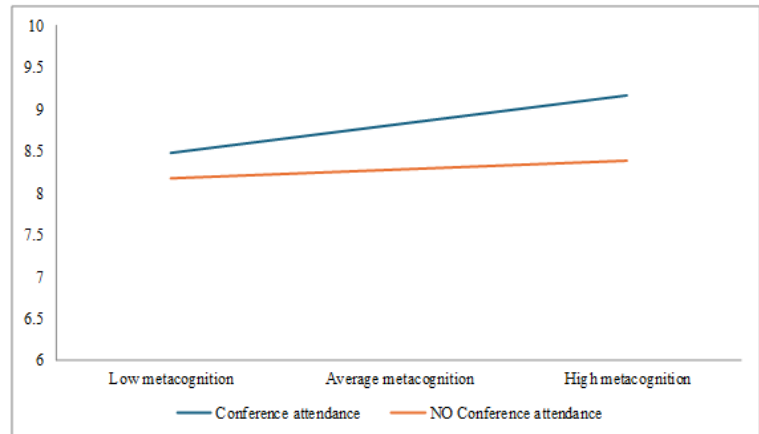
Figure 1. Group membership as the moderator between metacognitive awareness and GPA



Notes. * $p < .05$; All presented coefficients and standard errors (in parenthesis) are unstandardized.

Our moderation model is significant, predicting academic performance by 18.33% [$F(3, 99) = 7.34, p < .001, R^2 = .1833$]. In our model, metacognitive awareness emerged as a significant predictor of academic performance [$b_1 = .04, t(99) = 1.98, p < .05$]. Group membership also proved to be a significant predictor [$b_2 = .54, t(99) = 2.37, p < .05$]. The interaction effect between metacognitive awareness and group membership is not significant [$b_3 = .03, t(99) = 1.03, p = .30$], indicating that group membership is not a significant moderator of the relationship between metacognitive awareness and academic performance. For group membership, as metacognition increases, academic performance also increases. A similar trend is observed among students who were not members of scientific or voluntary groups, although the increase is higher among group members (see Figure 2).

Figure 2. The effect of students' metacognition level on academic achievement depending on group membership



6. Discussions

Based on the results of our study, we can conclude that a positive, moderate strength relationship exists between metacognitive awareness and academic performance. This finding aligns with previous research (Farnam & Anjomshoaa, 2020; Hayat et al., 2020; Khan et al., 2020). Students with high levels of metacognitive awareness possess more knowledge about their cognitive abilities and applied learning strategies. They can more effectively identify the most useful strategies for task-solving, exert greater control over and regulate their cognitive processes and applied learning strategies, meticulously plan the steps of learning, employ efficient strategies for organizing information, searching for errors, modifying strategies as needed, correcting errors, monitoring the entire learning process, and evaluating their outcomes. These regulatory strategies all contribute to more effective learning and higher grades (Amrin et al., 2020; Cherrier et al., 2020; Onwunyili & Onwunyili, 2020).

Similar to previous research (Balaguer et al., 2020; Meadows, 2019; Myers, 2019; Ren & Zhang, 2020; Salmeen et al., 2019), a positive relationship can be observed between academic performance and group membership as an extracurricular activity. Engaging in co-curricular and extracurricular activities after mandatory schooling contributes to a deeper, more detailed processing of the curriculum, exploration of connections between curriculum and real-life situations, problems. The practical application of what is learned in groups enables students to internalize acquired lexical knowledge, transforming declarative knowledge into procedural, and then into conditional knowledge. In group activities, students can learn new learning strategies that can be effectively applied to university learning as well. Thus, belonging to groups is positively associated not only with academic performance but also with metacognitive awareness, as previous research has indicated (Díaz-Iso et al., 2019; Guilmette et al., 2019; Ren et al., 2020).

In our study, we aimed not only to uncover simple linear relationships but also to examine the extent to which group membership, as an extracurricular or co-curricular activity, strengthens or weakens the relationship between metacognitive awareness and academic performance. The model proved to be significant, with both metacognitive awareness and group membership significantly predicting academic performance (Utomo et al., 2019). However, the interaction effect between metacognitive awareness and group membership was not significant, indicating that group membership is not a significant moderator of the relationship between metacognitive awareness and academic performance. Combined, metacognitive awareness and group membership do not have a significantly greater impact on academic performance than metacognitive awareness alone. The results indicate that activities in extracurricular or co-curricular groups enhance students' academic performance (Beadleston et al., 2019; Bowman et al., 2016), and there is a tendency that as metacognitive awareness of group members increases, academic performance also increases, although this trend appears to be less pronounced among non-group members.

Limitations and future directions

Among the limitations of the study are factors that reduce the external validity of the research, such as convenience sampling. Psychology and special education students may participate in different types of groups than students in other fields. There are also

shortcomings in the measurement of the moderator variable, as group membership as an extracurricular activity was examined with only one question. More precise conclusions could be drawn by specifying the exact type of group. Additionally, it would be worth investigating how participation in different types of groups (Behtoui, 2019; Morris, 2019) influences the relationship between metacognitive awareness and academic performance. Co-curricular group membership, scientific group memberships may have a greater impact on academic performance than voluntary or other non-scientific group memberships. Clarifying these data would enhance the interpretation of the results and the internal validity of the research. Additionally, it would be worthwhile to examine how the number of groups (Batool & Ahmad, 2020; Sami et al., 2020), their diversity (different types), and the duration of group memberships influence the relationship between metacognitive awareness and academic performance.

7. Conclusions

The results of the study draw attention to the beneficial effects of various extracurricular and co-curricular groups on the development of higher-order cognitive processes and metacognitive awareness. Establishing, organizing, and supporting post-schooling learner or other types of groups are opportunities for developing metacognition, which contributes to both increased academic performance and success in later life. Group memberships enhance the understanding of lexical knowledge, facilitate the transformation of declarative knowledge into procedural and then into conditional knowledge. The practical application of knowledge learned in groups for solving real-life situations draws students' attention to the practical applicability of what they have learned, providing a fertile ground for the development of metacognitive regulatory skills.

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The Implications of Assessment Based on Contextual Learning on Students' Results

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The Implications of Assessment Based on Contextual Learning on Students' Results

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Abstract

Keywords:

learning context, assessment for learning, assessment based on contextual learning

Creating contexts in teaching, learning, and assessing the student involves a complex activity whose purpose is the student's progress. The connection between the three processes can be assured by choosing the best educational context for the university teacher. In the student-centered university educational process, having the students as partners in the teaching process and assessing them based on contextual learning is essential. This study analyses the influence of assessment based on contextual learning on students' learning results and used descriptive and comparative quantitative research with a non-experimental design to achieve this goal. The sample was 114 students from the Teacher Training Department, West University of Timisoara, Romania, second year of study, Level 1 of the Postgraduate Program, for the academic year 2021–2022 (20 males and 94 females). Using two formative context-based assessment tasks and one summative content-based assessment task, the study revealed that assessments based on practical contextual learning tasks positively impact students' results more than content-based assessments. Also, the contextual assessment task type influences students' results, with the practical context determining better results than a cognitive-theoretical context. The study's limitations suggested that many factors could be involved in studying the impact of different types of contextual assessment on students' results. Future experimental research could be done on considering experimentally confirmed variables and criteria for construing and choosing the appropriate type of task for formative and summative contextual assessment that confirms students' progress, including new technologies support in contextual assessment.

Zusammenfassung

Schlüsselworte:

Lernkontext, Beurteilung des Lernens, Beurteilung basierend auf kontextuellem Lernen

Das Erstellen von Kontexten beim Lehren, Lernen und Beurteilen des Schülers ist eine komplexe Aktivität, deren Zweck der Fortschritt des Schülers ist. Die Verbindung zwischen den drei Prozessen kann durch die Wahl des besten Bildungskontexts für den Hochschullehrer sichergestellt werden. Im studierendenzentrierten universitären Bildungsprozess ist es unerlässlich, die Studierenden als Partner im Lehrprozess zu haben und sie auf der Grundlage kontextuellen Lernens zu bewerten. Diese Studie analysiert den Einfluss einer auf kontextuellem Lernen basierenden Bewertung auf die Lernergebnisse der Schüler und nutzte deskriptive und vergleichende quantitative Forschung mit einem nicht-experimentellen Design, um dieses Ziel zu erreichen. Die Stichprobe bestand aus 114 Studierenden der Lehrerbildungsabteilung der West-Universität Timisoara, Rumänien, zweites Studienjahr, Stufe 1 des Postgraduiertenprogramms, für das akademische Jahr 2021–2022 (20 Männer und 94 Frauen). Anhand von zwei formativen kontextbasierten Bewertungsaufgaben und einer summativen inhaltsbasierten Bewertungsaufgabe zeigte die Studie, dass Bewertungen, die auf praktischen kontextbezogenen Lernaufgaben basieren, die Ergebnisse der Schüler stärker positiv beeinflussen als inhaltsbasierte Bewertungen. Auch der Aufgabentyp der kontextuellen Bewertung beeinflusst die Ergebnisse der Studierenden, wobei der praktische Kontext bessere Ergebnisse bestimmt als ein kognitiv-theoretischer Kontext. Die Einschränkungen der Studie ließen darauf schließen, dass viele Faktoren bei der Untersuchung der Auswirkungen verschiedener Arten der kontextuellen Bewertung auf die Ergebnisse der Studierenden eine Rolle spielen könnten. Zukünftige experimentelle Forschung könnte durchgeführt werden, um experimentell bestätigte Variablen und Kriterien für die Konstruktion und Auswahl des geeigneten Aufgabentyps für die formative und summative Kontextbewertung zu berücksichtigen, die den Fortschritt der Schüler bestätigt, einschließlich der Unterstützung neuer Technologien bei der Kontextbewertung.

1. Introduction

Students are active partners who stand to gain or lose from how the training process is organized and implemented (Attard et al., 2010). So, the student becomes a co-participant in the didactic process and one of the poles of its success. Stensaker (2008) argued that to achieve quality teaching and learning, the didactic process must be placed beyond technical

definitions and procedures, with attention paid to good teaching and learning practices. These characteristics have given rise to learning approaches that use learning strategies suggested by experiential learning theories (Crosling et al., 2009). Teaching strategies such as problem-based, project-based, case studies, and discovery learning are at least equal but generally



much more effective than traditional deductive methods (Prince & Felder, 2006). These teaching strategies promote collaboration among students to solve problems by using real-life problems or specific learning situations, ensuring a deeper understanding of the relationship between theory and practice (Tight, 2002). It is about context-based learning or learning in a classroom context for learning. Teaching and learning based on such experiences automatically also requires assessment for learning. According to the constructivist curriculum alignment, assessment at the academic level involves assessing students' skills (Biggs & Tang, 2011). In this respect, assessment should focus predominantly on authenticity and complexity, not replicating or measuring outcomes.

2. Theoretical foundation

2.1. Contextual teaching and learning in the university educational process.

The educational process must be oriented toward the constructivist approach to involve the students in the didactic process actively. This approach starts from the design, continues with the implementation of teaching and learning, and ends with the assessment processes. Hirumi (2002) presents the characteristics of this approach that teachers can use in educational practice: offers experiences, together with the transmission of knowledge; presents several perspectives; experiences learning in authentic contexts; encourages points of personal view; introduces learning into a social experience; and uses multiple modes of representation, reflection, and self-awareness in the process of knowledge accumulation.

In the traditional curriculum approach, the student is not invited to use the experiences acquired in different contexts in which he was engaged, and the teacher needs to build educational contexts, even in collaboration with the students. A possible model for ensuring the theory-practice link in the university didactic process is context-based learning. The context makes sense of an experience, distinguishing between what is relevant and irrelevant (Open University, 2015). The success lies not only in the theoretical contribution of knowledge but also in the possibility of using the assimilated knowledge in professional educational contexts and other contexts. This type of learning emphasizes context's role in ensuring effective learning. Thus, students develop their skills using different concepts and activities depending on their contexts and situations (Parchmann et al., 2007). The contextual teaching and learning (CTL) approach makes it possible for teachers to create educational

contexts that connect their students with real or professional life, cultural, and social environments and invite them to make connections between knowledge of learning and the contexts in which the content will be used (Hudson & Whisler, 2001; Lotulung et al., 2018; Putnam & Leach, 2005).

Unlike traditional approaches, which start with scientific ideas that lead to applications, the practice is the starting point for developing the student's scientific ideas in contextual teaching and learning. Contextual learning ensures that students learn and understand new knowledge through their experiences. Action-based instructional strategies need to be self-sufficient in pushing students toward higher-order thinking. Contextual Teaching and Learning (CTL) has effects on students' specific skills at the university level and improves students' recount writing skills (Madjid et al., 2017; Satriani et al., 2012), students' speaking skills (Suadiyatno et al., 2020), students' learning achievement in Civics (Rahayu, 2015), understanding of knowledge of learning modules (Dewi & Primayana, 2019), communication and critical thinking (Sung et al., 2015). While Yeni et al. (2019) concluded that no significant interaction exists between the CTL approach and students' motivation for learning, Suparman et al. (2013) pointed out that it can increase university students' motivation for learning. Using the CTL strategy can also increase the achievement of learning outcomes for university students (Rahayu, 2015; Sung et al., 2015).

2.2. Assessment based on contextual learning - an assessment for learning

In university educational contexts with many students, the existence of shared assessment practices with high reliability is required in such a way as to ensure fairness, avoid tensions between students, and avoid imbalances in terms of the difficulty of the tasks studied and those examined (Broadbent et al., 2018). These aim to facilitate the teacher's understanding and monitoring of the student's capabilities (Alahmadi et al., 2019). It is an assessment for learning (AfL) and not for a hierarchy of students' results.

In AfL, it is essential to ensure ways to influence the improvement of a student's academic achievements, interest in learning, responsiveness, and responsibility (Panikarova et al., 2021). The teaching and learning contexts are essential in determining whether students gain such characteristics but need improvement. Also, an authentic assessment process, such as an oriented assessment, sustains the students' attendance of the proposed competencies. It is an

assessment that creates authentic assessment tasks, balancing summative and formative assessment (Baird et al., 2017) and assuring practice opportunities (Sambell et al., 2013). It is essential to prepare assessment tasks that stimulate learning and involve students actively in the assessment process using specific assessment criteria to analyze their personal and peers' performance and to give and receive feedback to support current and future learning processes to ensure such an assessment (Carless, 2007).

In higher education, rather than simply reproducing facts, students are encouraged to apply, evaluate, and create knowledge and practices that lead to higher-order cognitive skills (Meir et al., 2019). Thus, thinking and implementing the best assessment methods that measure complex skills is necessary, ensuring added value to the educational process. In such assessment contexts, the students can practice and develop new scientific knowledge and skills and learn collaboratively (Knight & Yorke, 2003).

Only a few authors studied the impact of AfL on university students' achievements. It was demonstrated a medium to large effect sizes of increased achievement after using AfL (Glasson, 2008; Stiggins, 2006). Meanwhile, some authors mentioned the difficulty of establishing improvement in students' achievement because of a lack of a specific definition of AfL (Baird et al., 2017) and challenges in the fidelity of its implementation and measurement (Shute et al., 2008; Umar & Majeed, 2018). In this respect, a definitive statement on AfL strategies should be made (Carless, 2017) and used more frequently in academic assessment practices.

Assessment based on contextual learning is an assessment for learning. A lot of studies, especially in the exact disciplines, at high school level and college have analyzed concrete ways of implementing contextual assessment and their impact on student acquisitions (Avargil & Herscovitz, 2012; Taasoobshirazi & Carr, 2008). Very few researchers investigated the impact of an assessment based on contextual learning on students' university-level results, especially in the field of exact sciences. For example, Sevan et al. (2023) analyzed how different contexts used in courses influence student outcomes in chemistry classes. Bortnik et al. (2021) used context-based testing in chemistry learning at the university level. Williams (2008) proposed technology-supported tools and techniques to assess context-based learning. In this context, this research is opportune to

complete this lack of investigating the effect of assessment based on contextual learning on students' learning.

3. Research methodology

This study analyses the influence of assessment based on contextual learning on students' learning results. Descriptive and correlational quantitative research with a non-experimental design was conducted to achieve the intended goal. This type of design was necessary because of the specificity of research actions, which will be described in the following.

The research sample was 114 students (20 males and 94 females) from the Teacher Training Department, West University of Timișoara, Romania, in the second year of study, Pedagogy II discipline, Level 1 of the Postgraduate Program, for the academic year 2021–2022. It was not a statistically randomized sample, the author being the seminar activity responsible of the Pedagogy II discipline. According to the confidentiality ethic, the student's grades were protected, and this study presents only the obtained mean of the students' grades, for each task.

The rationale of this research was that in the seminary activities of Pedagogy II discipline were used Contextual Teaching and Learning principles and methods. More punctually, for each seminar, the teacher developed specific contexts for learning, using worksheets that describe each seminary task related to each Course activity and to the discipline competencies. Concerning Klassen's (2006) proposal, which mentioned different types of contextual assessment using cognitive and practical contexts, each worksheet used types of previously mentioned teaching and learning contexts. Also, using the formative assessment, two context-based assessment tasks were an integral part of the CTL activities (the formative assessment instruments- At1 and At2 described below). The assessment tools were proposed at the beginning of the semester and were context-based assessment tools, with a practical assessment context (At1) and one with a cognitive assessment context (At2), both being formative assessment tasks. It was used also as a content-based assessment task (At3) as a summative assessment.

At1—The application of a teaching method/assessment method is group work (3 students) of oral assessment task that used a practical assessment context.

At2- The design of the two lesson sequences- individual and written work assessment tasks- that used a theoretical cognitive assessment context.

At3-Summative written assessment using content-based assessment.

The research hypothesis was that using assessment task based on contextual learning determine significantly different assessment results from content-based assessments. The research questions were:

Q1. For which assessment task did students obtain the highest assessment score?

Q2. Are there significant differences between the scores obtained by context-based assessment tasks and content-based assessment task?

Q3. Are there significant differences between the scores obtained by different type of context-based assessment task scores?

Descriptive statistics were computed on each assessment task score. The three sample normality distributions Shapiro-Wilk Test results were the same .000, so $p < 0.01$. The samples' data were not normally distributed. The sample was higher than 50 respondents and the T-test for paired samples was assumed, with statistical limitations. The Cohen's effect size was calculated for the significant differences. The analyses were made in the IBM SPSS Statistics 21 program.

4. Results

Q1. For which assessment task did students obtain the highest score?

The highest score was obtained on At1 (the group oral presentation), meaning a 9.76 average score. On At2 (the lesson design), the average score was 8.15. The average score for At3 (the summative written assessment) was 7.93. These results revealed that students prefer the contextual assessment to the content-based assessment and the group assessment to the individual assessment. The obtained mean is very high for the first task, very closely from the maximum score. Also, the second and third assessment task had close in average, around 80% of the total score.

Q2. Are there significant differences between the scores obtained by context-based assessment tasks and content-based assessment task scores?

The T-test for paired samples and Cohen's effect size were used to calculate the relevant differences between context-based assessment (the two formative

assessment task) and content-based assessment (summative written assessment). Each student's evaluation grade for each task was used for calculating the means of the group for each task. It compared each formative assessment task's mean with the mean obtained on the summative assessment task.

The T-test for paired samples revealed significant differences between the At1 ($M=9.76$, $SD=.44$) score and the At3 score ($M=7.93$, $SD=1.42$); $t=14.01$ and $p=.000$, so $p < 0.01$. Also, Cohen's effect size is a very large positive effect ($d=1.74$). These findings sustain that using assessment task based on contextual practical learning is significant for the assessment practice, different from content-based assessment. Also, the very high significance between the two task and the higher value of context-based assessment task demonstrated the high impact of such assessment task on student's results (in grade).

The T-test for paired samples revealed no significant differences between the At2 ($M=8.15$, $SD=2.97$) score and the At3 score ($M=7.93$, $SD=1.42$); $t=.710$ and $p=.479$, so $p > 0.05$. This reveals that using assessment task based on contextual cognitive learning has no significance for assessment practice, different from content-based assessment (summative written assessment). The two compared task was individual and written tasks and used much theoretical than practical learning. although the first task is one that uses the contextual assessment, being a formative one, no significant differences were identified regarding the grades obtained here and the contextual assessment, which was a summative one.

Q3. Are there significant differences between the scores obtained by context-based assessment task scores?

Comparing the two different context-based task scores, the T-test for paired samples revealed significant differences between At1 ($M=9.76$, $SD=.44$) score and At2 score ($M=8.15$, $SD=2.97$); $t=5.886$ and $p=.000$, so $p < 0.01$. Although they differ in the type of assessment, the previously mentioned factors could still be decisive. The first task is still one of contextual learning - considering that it does not involve reproducing knowledge but putting it in a sequential design context of a lesson. However, Cohen's effect size demonstrated a more appropriate to high positive effect ($d=0.76$), which assures that the difference has statistically relevance in practice.

Table 1. Results in numbers

		Paired Sample Test			t	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean		
Pair 1	At1- At3	1,83421	1,39735	,13087	14,015	,000
Pair 2	At2- At3	,21667	3,25842	,30518	,710	,479
Pair 3	At1-At2	1,61754	2,93418	,27481	5,886	,000

5. Discussions

The study's goal was to analyze the influence of assessment based on contextual learning on students' learning results. The highest mean score obtained by students was on At1- which uses practical contexts in assessment (the oral group assessment), and the lowest was on At3 -which uses the context-based assessment (summative assessment). However, this study revealed significant differences between the scores obtained only by the first practical context-based assessment task and the content-based, summative assessment score. The second cognitive assessment task was also a written individual task but was different from the construction of the summative task because of the cognitive context created for it. There were no significant statistical differences between the second and third task results. The research hypothesis can be sustained partially, only for the first task and that using assessment tasks based on contextual practical learning determines significantly different assessment results from content-based assessments.

These findings sustained that the type of assessment task influences students' results, and their results are better in a practical context assessment task than in a cognitive theoretical contextual task and in an individual content-based task. It is essential to choose the appropriate type of task to sustain student progress and to create a context for assessing learning and not only knowledge (Ruel et al., 2003; Watkins, 2004). The assessment tasks influence the trustworthiness, relevance, and judgment of the critical approach to the information or events in the educational process (Shavelson et al., 2019).

Sustained by the twenty-first-century skills used in higher education assessment (Tremblay et al., 2012), Contextual assessment is a natural continuation of the university's Contextual Teaching and Learning approach. Its influence on university students' achievement or results previously presented in this

study confirmed the wide range of methods and instruments used in CTL. Students perceive traditional assessment as unfair and damaging to learning; meanwhile, they consider innovative assessments engaging for deep learning (Iannone & Simpson, 2017). However, the university assessment literature does not confirm the same results regarding some specific methods, instruments, or approaches that could be relevant to students' results using this assessment approach. Various terminologies have been used in forms and approaches to assessment during this concept evolution: contextualized assessment, context-based assessment, authentic assessment (Klassen, 2006), assessment for learning (Wiliam, 2011) or sustainable assessment (Bound, 2000). It needs a structured and clear delimitation regarding the types of methods, tools, and specific assessment tasks based on learning contexts, especially in the educational process at the university level.

Poikela (2004) accentuated the importance of criteria in assessing context-based assessment. The assessment criteria of the contextual learning tasks and content-based assessment tasks were different in this study. Students need to internalize the assessment standards better despite the formative assessment used by teachers (Wu & Jessop, 2018). In this study, for example, the second task had more rigorous assessment criteria than the first (oral presentation). It is a factor that could also influence the significantly different obtained assessment grades, and this aspect must also be considered in future research. The third (written task) evaluated a much more comprehensive curriculum content, being a summative one, than each of the two formative tasks and could also influence the student's results.

The discussions could also involve differences in student results between group and independent assessment tasks. As Davies (2009) suggested, group work assessment involves more factors than a simple task. Analyzing each student's contribution and performance in group presentations is more complex than in written individual assessments. Future research could analyze the factors mentioned (the rigorous construction of assessment criteria, the modality of presentation, group or individual work assessment) and their correlation to impacting students' results in a contextual assessment.

More than just the summative purposes, it is required that also the summative assessment determine and sustain students' learning and progress,

make students' judgments of their learning, and assume the assessment task's requirements (Broadbent et al., 2018). Another study limitation was that the summative task was more content-based than learning-oriented tasks.

Formative assessment must contribute to and lead to summative assessment; consequently, formative assessment must precede summative assessment (Taras, 2008). Future research issue is how to correlate the characteristics of the context (different context types) with the students' specific achievement in formative and summative assessment contextual learning.

6. Conclusions

The finding of the research sustains the necessity to move the assessment shift from "assessment of learning" through "assessment for learning" to "assessment as learning," using assessment modalities of teaching and learning experiences (Torrance, 2007). One of these ways is to develop different assessment tasks that value contextual learning and assess the students' learning with valid criteria that positively influence students' results. The study concludes that assessments based on practical contextual learning tasks have a more positive impact on students' results than content-based assessments. Also, this study sustained that the contextual assessment task type influences students' results, with the practical context determining better results than a cognitive-theoretical context. Assuring a set of assessment tasks that use contextual assessment in future research will ensure that assessment at the university level will meet the expectations of systematic evidence-gathering about learning (Brown, 2019) through contextual learning. The contextual assessment is learning-oriented and can be equally summative or formative (Wu & Jessop, 2018). However, using assessment tasks based on different contextual learning, not depending on the type of assessment, formative or summative, is a fact that could determine a student's learning progress. It is also an essential insight for future research of university teachers.

This study has some limitations. The fact that the scores of the samples were not normally distributed and we assumed the used correlation (because the

sample was >50 students) is a limit that disturbs the assumption of the hypothesis. More important is that it is nonexperimental, not a group control sample, to see how different contextual assessment tasks can influence students' acquisitions or results in a standardized experiment. As seen in the discussion section, future research should consider several variables when affirming the influence of contextual assessment on student results. Also, it is important to have some experimentally confirmed criteria for construing and choosing the appropriate type of task for formative and summative contextual assessment that confirms students' progress in the educational process for assessing learning and not only knowledge.

This research could offer an example for starting the process to create a clear structure regarding the types of methods, tools, and specific assessment tasks based on university learning contexts. Mobile devices can support a wide range of formative assessment types (Hwang & Chang, 2011) and competency-based assessments (Coulby et al., 2010). So, it is essential to use technology-supported tools and techniques to assess context-based learning (Williams, 2008). Also, aligning with the need to use new technologies in the university process, research can continue in the sphere of the impact of their use in context-based assessment on student results or ways to build a new technologies tool useful for contextual assessment.

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Appendixes

PEDAGOGY II DISCIPLINE'S ASSESSMENT

The seminar assessment tasks were:

At1. Application of a teaching/assessment method – assessment in a practical context

The task will be carried out in the team established by the teacher (3 students), according to the plan. The presentation will be made orally, on the settled date, and consist of exemplifications of the concrete way of applying the method on the chosen topic.

Assessment scale:

Definition of the teaching/assessment method 0.5 points

Teacher activity 1 point

Student activity 1 point

Advantages 1 point

Disadvantages 1 point

The topic of the lesson in which the application of the method will be carried out (from the Syllabus related to the student's specialization) - 0.5 points

Exemplifications of the concrete way of applying the method on the chosen topic (obligatory concrete means used will be presented - for example the constructed worksheets, how the class will be divided, what indications will be offered, etc.) - 3 points

Creativity – 1 point

Total 9 points + 1 ex officio point. Total score: 10 points.

At2. Design of the lesson sequences –assessment in a cognitive theoretical context

You can choose any subject from the Syllabus related to the specialization, grades V_VIII. The design will be carried out according to the project format proposed in the discipline. Please follow and be guided by the proposed scale.

Assessment scale:

Identification of the specific competence/s from the syllabus - 1 point

Formulation of lesson objectives – 2 points

Coherent explanation, with examples of the learning content - 2 points

Formulation of the lesson stages, according to the type of lesson - 0.5 points

Formulation of the didactic strategy (and the component elements) -1.5 points

Correlation of the objective/s with the learning content- 0,5 points

Correlation of the introductory part with the descriptive part of the lesson plan-0.5 points points

Creativity – 1 point


Total 9 points + 1 ex officio point. Total score: 10 points.

At3. The summative evaluation of the course as a written examination on the whole discipline' topics.

Benefits of the Duchenne Smile and Positive Emotions. A Systematic Review

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Benefits of the Duchenne Smile and Positive Emotions. A Systematic Review

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Abstract

Keywords:

Duchenne smile, genuine smile, positive emotion

The Duchenne smile is the genuine smile characterized by the activation of the muscles around the eyes and mouth. It has been associated, in the specialized literature, with the experience of positive emotions. Through the present work, using a qualitative approach, we aimed to identify and systematize the studies carried out in the period 2010-2023 that investigated the relationship between the Duchenne smile and positive emotions. Following the application of specific keywords, 611 studies were identified, from which, after applying the inclusion-exclusion criteria, 8 studies were included in the review. A conclusion could not be drawn regarding the idea that the Duchenne smile is indisputably an indicator of positive emotions, but the data provide us with important information such as the following: the Duchenne smile is associated with experiencing positive emotions (happiness, joy, hope, contentment) and manifests itself in the context of affiliation and cooperation. It has an important role in triggering extended cognitive states (attentional ones) and can be performed voluntarily (in the presence/absence of a positive emotion), having the same health benefits as spontaneous smiling. In addition, the Duchenne smile increases the acceptance rate of feedback given by teachers in class. The relationship between the Duchenne smile and positive emotions is context dependent.

Zusammenfassung

Schlüsselworte:

Duchenne-Lächeln, ehrliches Lächeln, positive Emotionen

Das Duchenne-Lächeln ist das echte Lächeln, das durch die Aktivierung der Muskeln um Augen und Mund gekennzeichnet ist. In der Fachliteratur wird es mit dem Erleben positiver Emotionen in Verbindung gebracht. Mit der vorliegenden Arbeit wollten wir mithilfe eines qualitativen Ansatzes die im Zeitraum 2010–2023 durchgeführten Studien identifizieren und systematisieren, die den Zusammenhang zwischen dem Duchenne-Lächeln und positiven Emotionen untersuchten. Nach Anwendung spezifischer Schlüsselwörter wurden 611 Studien identifiziert, von denen nach Anwendung der Einschluss-/Ausschlusskriterien 8 Studien in die Überprüfung einbezogen wurden. Es konnte keine Schlussfolgerung hinsichtlich der Vorstellung gezogen werden, dass das Duchenne-Lächeln unbestreitbar ein Indikator für positive Emotionen ist, aber die Daten liefern uns wichtige Informationen wie die folgende: Das Duchenne-Lächeln wird mit dem Erleben positiver Emotionen (Glück, Freude, Hoffnung, Zufriedenheit) und manifestiert sich im Kontext von Zugehörigkeit und Kooperation. Es spielt eine wichtige Rolle bei der Auslösung erweiterter kognitiver Zustände (Aufmerksamkeitszustände) und kann freiwillig durchgeführt werden (bei Vorhandensein/Fehlen einer positiven Emotion) und hat die gleichen gesundheitlichen Vorteile wie spontanes Lächeln. Darüber hinaus erhöht das Duchenne-Lächeln die Akzeptanz des Feedbacks der Lehrer im Unterricht. Der Zusammenhang zwischen dem Duchenne-Lächeln und positiven Emotionen ist kontextabhängig.

1. Introduction

The Duchenne smile has been the subject of much research, especially in recent years since positive psychology has seen considerable development. The diversity of research on the Duchenne smile and the domains in which it has been investigated (e.g., in the field of emotions and facial recognition, the field of social interactions, the neuro-physiological field, etc.) have contributed to understanding the depth of this concept and the importance that it can have in people's lives. The researchers' concerns focused on how people perceive the Duchenne smile and the differences in perception between them, its relationship with health, well-being in general, but also in establishing to what extent a Duchenne smile can or cannot be faked. One of the hypotheses most

used in research is the one that states that the Duchenne smile is an indicator of positive emotions. The Duchenne smile is the spontaneous smile, the smile with "mouth to ears", the smile that can hardly be faked, the smile that activates the muscles around the eyes and mouth, the smile that is associated with experiencing positive emotions (Ekman et al., 1990; Frank & Ekman, 1993). The belief that this hypothesis is true has led to the Duchenne smile being used in several studies to identify positive emotions (Abel & Kruger, 2010; Soussignan, 2002) in which various concepts in relation to experiencing positive emotions have been investigated. The most common emotion it has been associated with is that of joy or happiness. On the other hand, there are also studies that have



claimed that the Duchenne smile can be achieved voluntarily (Krumhuber & Manstead, 2009; Krumhuber et al., 2014), can be used as a cultural tool (Martin, et al., 2017) and that its appearance is also present in the case of experiencing negative emotions (Harris & Alvarado, 2005).

Smiling is associated with the idea of joy or happiness, but to the same extent, smiling can also be used to mask negative emotions such as fear, anger, distress, disgust (Ekman, 2009). It is thus considered to be "one of the most widely used signals used in human communication" (Kraut & Johnston, 1979, p. 1539). One of the reasons why smiling can easily be used to mask other than positive emotions is that it is the most easily voluntary facial expression (Ekman, 2009). Seen as an important tool of social communication, the smile has been classified, in the specialized literature, into several categories. Thus, from the point of view of association or not with a positive emotion, a distinction was made between the genuine, true smile and the fake smile that does not accompany positive emotions (Martin et al., 2017).

The smile typology was determined by calling on different methods. The best known and most used is the Facial Action Coding System (FACS) (Ekman, 2002), through which specialists can identify, based on facial action units, movements of the muscles involved in manifestation of facial expressions. Thus, in the expression of a smile, the action units AU 6 (raising the cheeks) and AU 12 (raising the corners of the mouth) are activated. Starting from this method, programs have been developed to accurately identify the intensity and duration of certain expressions basic facial recognition such as Noduls Face Reader which has only 85-86% accuracy in facial emotion recognition compared to FACS (Cross et al., 2022). Another method used is facial electromyography (EMG) which has the quality of capturing muscle movement at the level of micro-expression that is not visible to the naked eye (Wingenbach, 2022).

The importance of research on smiling is supported by the results of studies that have provided evidence that it has numerous benefits in various areas of people's lives.

People who intentionally smile for one minute a day improve their mood (Neuhoff & Schaefer, 2002). This is of particular importance, as there are studies that have shown that our emotional state has an important impact on the immune system (D'Acquisto et al., 2014). Smiling can therefore have a protective role when people face situations laden with negative

emotionality (Ansfield, 2007). It appears that in mildly depressed individuals, even a short-lived smile has the ability to improve their negative moods in the long term (Lin et al., 2015).

Today, the most widely used indicator that differentiates between genuine and fake smiles is the Duchenne marker, named after the well-known French neurologist, Guillaume Benjamin Amand Duchenne de Bologne (1862). He studied the movement of facial muscles and observed that during the experience of genuine joy, the zygomatic major muscle and the orbicularis oculi contracted, which did not occur during the display of fake joy and an inauthentic smile associated with it (Ekman et al., 1990). The one who coined this type of smile with the name of Duchenne was Paul Ekman (1989).

The Duchenne smile was therefore most associated with joy. Thus, in an experiment carried out by Ekman et al. (1990), this type of smile was displayed more often in the context of viewing pleasant movies than during unpleasant ones, when the comparison was made with other types of smiling. In these contexts, smiling was observed taking into account brain asymmetry measured by electroencephalogram (EEG) and subjects' self-report of their positive emotions. It was thus observed that during the Duchenne smile, the left side of the temporal and parietal region of the brain is mainly activated, the activation of the left temporal side occurring during the experience of positive emotions, but it was not possible to specify what exactly the activation of the parietal region of the brain reflects (Ekman et al., 1990).

On the other hand, it has been shown that the Duchenne smile can be produced deliberately even in the absence of positive emotion (Gosselin et al., 2010). Moreover, some research has found that the Duchenne smile can occur even when negative emotions such as stress, pain, or sadness are experienced (Harris & Alvarado, 2005).

The Duchenne smile is assumed to be an indicator of experiencing positive emotions (Messinger et al., 2001). Researchers have questioned whether positive emotions have the same adaptive purpose as negative ones, which present specific behavioral tendencies useful for survival (David & Szentágotai-Tătar, 2017). Thus Broaden-and-Build Theory (Fredrickson, 2001) emerged as a response to traditional psychology that has paid more attention to negative emotions and their evolutionary role. This emphasizes the effect that positive emotions have, in opposition to negative ones,

on cognitive structures related to attention and thinking, transformations that can further lead to behavioral changes (Ayers et.al, 2014).

Contemporary theories of emotions (Ellis, 1994, apud Dryden & Bond, 1994) claim that subjective experiences, whether positive or negative, are not generated by the life events we face, but by the way we evaluate them, either consciously or unconsciously, giving them a certain meaning, emotions being able, in turn, to be evaluated and give rise to other emotions (David & Szentágotai-Táatar, 2017).

2. Methodology

To carry out the systematic review, the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) methodology was used, which, although initially developed for research in the medical field, was also successfully used in the field of psychology (Bolier et al., 2013, apud. Tay et al., 2021).

An online literature search was conducted using two databases, Springer Link and Web of Science. These databases were chosen after analyzing their functions and content. They have been found to represent data collections that can be used appropriately for this type of approach and research field, compared to others (Gusenbauer & Haddaway, 2020; Walden, 2021).

To refine the research, we used the Boolean search type and created the following key word combinations: ("Duchenne smile" OR "genuine smile" OR "true smile" OR "authentic smile" OR "enjoyable smile") AND ("positive emotions" OR "happiness" OR "joy" OR "gratitude" OR "serenity" OR "interest" OR "hope" OR "pride" OR "amusement" OR "inspiration" OR "awe" OR "love").

To identify the articles, the lexicon corresponding to positive emotions exemplified in the Broaden-and-Build Theory of positive emotions (Fredrickson, 1998) was used. The intention was to review studies that looked at other positive emotions in relation to the Duchenne smile, apart from those that looked at the emotions of happiness and joy.

3. Inclusion-exclusion criteria

We applied three inclusion criteria to identify studies according to the objective of this review.

The first criterion followed the year of publication of the article. We wanted to review articles from the last ten years, to capture what was new on this topic,

but since approximately two years were affected by the Covid 19 pandemic, we included three more years in the research, the final period considered being 2010-2023.

The next criterion considered the inclusion of articles published only in scientific journals, not books, and having a detailed analysis of the results. The third criterion concerned the language in which the article was written and, in this sense, only articles written in English were chosen. Clinical trials, review studies and meta-analyses were excluded. We decided not to include reviews and meta-analyses, since these presuppose the identification of primary research specific to a topic (Pollock & Berge, 2018), or, by selecting them, it would mean using secondary sources of data, and the purpose of our research is not to carry out an umbrella type review (Choi & Kang, 2023). We also excluded studies that addressed the issue of smiling in general, without a clear distinction between Duchenne and non-Duchenne smiles or other types of smiles. In addition, the articles that fall within the scope of dental or aesthetic medicine, and the studies that investigated the perception of the Duchenne smile or the relationship of the Duchenne smile with other concepts, were removed.

The title and abstract of articles were screened to identify relevant articles meeting these criteria. When, after reading the abstract, the article could not be eliminated with certainty, the full text was analyzed.

There were no restrictions related to the number of participants, their age, the type of design.

4. Results

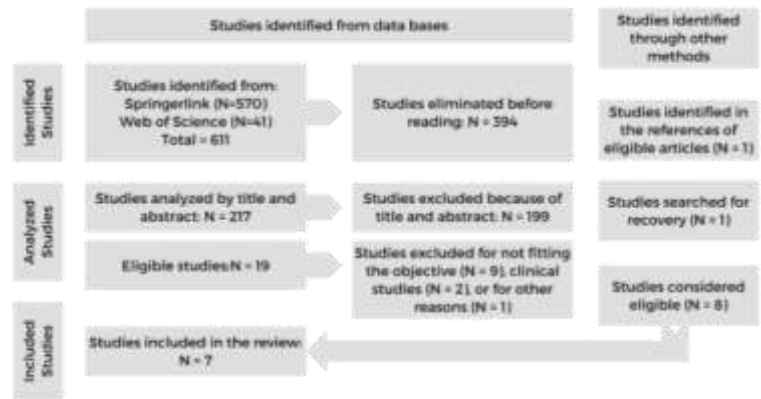
After entering the keywords mentioned above, we obtained a total of 611 studies. After removing duplicates (394), 217 studies remained. 210 studies were excluded because they were either unrelated to the topic or did not meet the eligibility criteria. Another study included in the bibliography of an eligible article was identified and entered for analysis.

In total, 8 studies were fully and carefully analyzed to extract the information necessary for our systematic review. Figure 1 illustrates our approach through the PRISMA diagram. The eight studies are illustrated in Table 1.

Table 1 Synthesis of the articles selected for the narrative review regarding the relationship of the Duchenne smile with positive emotions.

No	Article
1	Campos, B., Schoebi, D., Gonzaga, G. C., Gable, S. L., & Keltner, D. (2015). Attuned to the positive? Awareness and responsiveness to others' positive emotion experience and display. <i>Motivation and Emotion</i> , 39(5), 780–794. https://doi.org/10.1007/s11031-015-9494-x
2	Gunnery, S. D., Hall, J. A., & Ruben, M. A. (2013). The deliberate duchenne smile: Individual differences in expressive control. <i>Journal of Nonverbal Behavior</i> , 37(1), 29–41. https://doi.org/10.1007/s10919-012-0139-4
3	Girard, J. M., Cohn, J. F., Yin, L., & Morency, L.-P. (2021). Reconsidering the Duchenne smile: Formalizing and testing hypotheses about eye constriction and positive emotion. <i>Affective Science</i> , 2(1), 32–47. https://doi.org/10.1007/s42761-020-00030-w
4	Ergül, H. (2023). The case for smiling? Nonverbal behavior and oral Corrective Feedback. <i>Journal of Psycholinguistic Research</i> , 52(1), 17–32. https://doi.org/10.1007/s10936-021-09807-x
5	Tuck, N. L., Adams, K. S., Pressman, S. D., & Consedine, N. S. (2017). Greater ability to express positive emotion is associated with lower projected cardiovascular disease risk. <i>Journal of Behavioral Medicine</i> , 40(6), 855–863. https://doi.org/10.1007/s10865-017-9852-0
6	Johnson, K. J., Waugh, C. E., & Fredrickson, B. L. (2010). Smile to see the forest: Facially expressed positive emotions broaden cognition. <i>Cognition & Emotion</i> , 24(2), 299–321. https://doi.org/10.1080/02699930903384667
7	Mattson, W. I., Cohn, J. F., Mahoor, M. H., Gangi, D. N., & Messinger, D. S. (2013). Darwin's Duchenne: eye constriction during infant joy and distress. <i>PLoS One</i> , 8(11), e80161. https://doi.org/10.1371/journal.pone.0080161
8	Crivelli, C., Carrera, P., & Fernández-Dols, J.-M. (2015). Are smiles a sign of happiness? Spontaneous expressions of judo winners. <i>Evolution and Human Behavior: Official Journal of the Human Behavior and Evolution Society</i> , 36(1), 52–58. https://doi.org/10.1016/j.evolhumbehav.2014.08.009

Figure 1. PRISMA diagram of the search and selection process.



Note: From Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* 2021;372:n71. doi: 10.1136/bmj.n71. For more information, visit: <http://www.prisma-statement.org/>

5. Discussions

The Duchenne smile is the marker most used in research to identify the experience of positive emotions. However, the question has been raised whether this assumption is correctly used and whether when conducting such studies it is not necessary to take into account the complexity of the context in which a smile appears in general, and a Duchenne smile in particular.

In the review of the specialized literature, we took into account the way in which the Duchenne smile was used and to what extent the authors of the studies showed whether or not it is an indicator of positive emotions. As we have seen, the essential element that differentiates the Duchenne smile from other forms of smiling is the activation of the eye muscles (lat. *Orbicularis oculi*) which produces this expression of raising the cheeks, narrowing the eyes and wrinkling the skin around the eyes (Ekman et al., 1990). Most of the studies identified linked the Duchenne smile to the expression of an emotion of happiness and joy.

However, it appears that this smiling time is also associated with experiencing other positive emotions.

Thus, in the study by Johnson et al. (2010), the occurrence of Duchenne smile during inductions of positive, negative or neutral emotions was investigated. Moreover, the authors, carrying out two experimental studies, wanted to find out to what extent the expansion of the cognitive repertoire as formulated and supported by the Broaden-and-Build Theory (Fredrickson, 2001) can be produced by facial expressions specific to positive emotions. The study used facial electromyography (EMG) as a method to discriminate Duchenne from non-Duchenne smiles, as

an alternative measure that the authors claimed was more valid in capturing emotions not stated in subjects' self-reports (Johnson et al., 2010). It was found that the frequency of Duchenne smiles among subjects was higher during the induction of positive emotions than when they were induced with negative or neutral emotions, and this type of smile also correlated with self-reports of positive emotions, such as hope and contentment. In addition, the study showed that the frequency of the Duchenne smile was associated with attentional expansion, in a task of global processing of visual stimuli, self-reports of positive emotions expressed also at the facial level, being predictors in this regard.

Given these results, however, we ask whether the Duchenne smile can be deliberately produced and, when it is, to what extent does it still express positive emotion? In this sense, the study by Gunnery et al. (2013) investigated the extent to which people can voluntarily produce a Duchenne smile in different social situations and if there are individual differences in the ability to voluntarily produce this smile, the experimental procedure took care to minimize the effect of emotional and motivational factors. Subjects participated in two types of tasks: a role-play task, designed to measure the use of the deliberate Duchenne smile in simulated social situations, and an imitation task, designed to measure the ability to produce the Duchenne smile. The results showed that some of the participants were able to deliberately produce a Duchenne smile in both tasks, which indicated that such an expression of a positive emotion can be deliberately achieved without the positive emotion being experienced.

And in another study included in the review (Girard et al., 2021), the authors reconsidered the Duchenne smile hypothesis regarding the fact that it is a specific indicator of genuine positive emotion. The authors formulated and tested alternative hypotheses, the results being the following: the hypothesis that the Duchenne smile is triggered by positive emotions was supported, 90% of the smiles produced while experiencing a positive emotion involved narrowing the eyes.

Although eye constriction was the main indicator by which positive emotions were differentiated from negative ones, however, the presence of this marker explained only 27% of the variance of self-reported positive emotions and only 32% of smile intensity. It was thus shown that other dimensions such as smile intensity and duration were better predictors of the

presence of positive emotions when eye muscle movement was controlled for.

If the Duchenne smile can be produced voluntarily and can have a role in social interactions, it remains to be seen to what extent the same deliberate Duchenne smile can have the benefits that arise from the association of spontaneous smiling with positive emotions.

In this sense, in the study by Tuck et al. (2017) the Duchenne smile was used as an indicator of the ability to express positive emotions. More precisely, the subjects deliberately expressed ten basic emotions, including that of happiness, the Duchenne smile being identified by a special software that scores the expressiveness according to the contraction of the facial muscles, then calculating a positive expressiveness score. After applying statistical analyzes to test the associations between this score and other variables measured in this study (demographic data, atherosclerotic cardiovascular disease risk score, emotion scale score, depression scale score, loneliness and emotional intelligence) the authors found that positive emotionality and the ability to voluntarily express positive emotions were associated with reduced risk of cardiovascular disease (CVD), even after controlling for variables such as loneliness, depression, and trait positive emotionality. These results are consistent with those of an older study that showed that regardless of whether an emotion is experienced or not, the ability to deliberately express it reduces the risk of CVD (Kraft & Pressman, 2012).

The study by Campos et al. (2015), even if its main theme was to examine human emotional receptivity in different social situations, it was chosen for analysis because it aimed at the production of positive emotions in these contexts, their identification being achieved both by coding the manifested Duchenne smiles, by Facial Action Coding System (FACS), as well as in relation to the participants' self-reports of their experiences. The authors demonstrated that people are aware and responsive to others' emotions when there is an opportunity for commitment in a future relationship (Campos et al., 2015).

The results showed that the subjects were more receptive to the positive emotions accompanied by the Duchenne smile of others, compared to the positive emotions that were not accompanied by this type of smile. Only positive emotions (particularly amusement) that displayed a Duchenne smile were predictive of subsequent closeness between two strangers.

Based on the same argument as the one for which I chose the previous article in the review, I also included for analysis the studies of Crivelli et al. (2015) and Ergül (2021).

Thus, the study conducted by Crivelli et al. (2015) analyzed the controversy between Basic Emotion Theory (Ekman & Friesen, 1969; Izard, 1971; Tomkins, 1962) and Ecological Behavioral Theory (Fridlund, 1994) whose assumptions we discussed in the introductory part of this paper. The authors observed the facial expressions of judo players in two contexts: winning a match in a national junior championship and instant victory in an international competition. The second approach was carried out to verify the results of the first study, in a more diverse cultural context. Both situations had a high potential for generating positive emotions.

What was predictive for the appearance of the Duchenne smile was the moment of interaction of the athletes (inferred from the movements of the arms and hands in contact with the audience), this result coming in support of the Behavioral Ecology Theory that sees the smile as a tool of social interaction, and not an expression of basic emotions (Fridlund, 1994).

Last but not least, the study conducted by Ergül (2023) aimed to find out how often teachers smile while giving students corrective feedback during classes and whether the smile used is a genuine one. Moreover, it was investigated to what extent the genuine smile is a factor that can influence the effectiveness of the corrective oral feedback. The results showed that 64% of the smiles used by the teachers during the corrective feedback were genuine. Furthermore, when the genuineness of the smile was taken into account it was found that the acceptance rate of student feedback increased by 69.4%, with genuine smiles significantly correlating with corrective oral feedback compared to polite smiles (Ergül, 2023).

The last study selected for our analysis investigated whether the Duchenne marker represents the facial expression that signals both positive and negative emotions in infants during parent-child play using the face-to-face and still-face (Face-to-Face/Still-Face [FFSF]) (Mattson et al., 2013). The results of the study confirmed the hypothesis formulated by Darwin according to which the constriction of the eyes in babies is associated either with more positive smiles or with a more negative expressiveness of crying. Thus, the smile accompanied by the narrowing of the eyes is more intense and appears more often in situations that cause

positive emotions, than the simple smile, which does not involve the constriction of the eyes. The study also aimed at highlighting the role of eye constriction in the emotional expressiveness of crying, in the inert face condition of the mother and in a real distress situation, namely the vaccination of children. As the authors of the study also concluded, in infants, the Duchenne smile signals the presence of a strong positive emotion, but at the same time a Duchenne-type expression can also indicate a negative emotion in their case.

Is the Duchenne smile an indicator of positive emotions? In an attempt to answer this question, we selected and analyzed for the narrative systematic review the studies in which the production of Duchenne smiles either took place during the experience of spontaneous positive emotions caused by certain natural life situations, or appeared during the induction of positive emotions in laboratory or experimental situations. Articles that only investigated the idea of perception and interpretation of these smiles in different contexts without actually producing the Duchenne smile, whether deliberate or not, were removed. On the other hand, some of the present studies did not entirely lack the investigation of Duchenne smile perception, but since measuring the frequency of smile production was one of their themes, they were also taken into analysis.

Based on the results of these studies, we cannot yet draw a clear conclusion regarding the idea that the Duchenne smile is an indisputable indicator of positive emotions, but the data provide us with important information such as the following: Duchenne smile is associated with experiencing positive emotions in general, with those of happiness and joy, in particular. However, the present studies have shown that this time of smiling is also found when emotions such as hope and contentment are experienced.

In addition, the Duchenne smile also occurs during the experience of emotions that are manifested in the context of affiliation and cooperation. Also, this type of smile has an important role in triggering extended cognitive states, without knowing the exact mechanism in this regard.

On the other hand, emotions such as pride and awe were not associated with the Duchenne smile, but on the contrary, with the non-Duchenne smile. What has also been established in both the present and older studies is that the Duchenne smile can be produced voluntarily, either in the presence or in the absence of positive emotion, especially in tasks that do not

involve more complex cognitive processing (e.g. when participants are asked to imitate a smile, as opposed to having to do so in a role play). Voluntary Duchenne smiling may provide the same health benefits as genuine smiling, individuals who have a good ability to voluntarily express such smiles are likely to have emotional self-regulation skills.

Related to the elements that differentiate a Duchenne smile from a non-Duchenne smile and their relationship with positive emotions, it was found that although the constriction of the eyes through the activation of the Orbicularis oculi muscle corresponding to the facial action unit AU6 in the FACS coding system is considered a differentiating element between the two types of smiling, however this expression was also encountered in situations where no positive emotions were experienced. In addition, it appears that intensity is a better predictor of positive emotions.

Taking into account all these corroborated results and data from other older studies, we can say that research is still needed to discover the mechanisms underlying these relationships between the Duchenne smile and positive emotions.

The intensity of the smile must be taken into account in such studies when differentiating between Duchenne and non-Duchenne smiles. Some studies have found in addition to spatial patterns, as considered the Duchenne marker, and temporal properties of emotional expressions that also contribute to the differentiation between a spontaneous and a deliberate smile, being associated with the person's internal states, such as the duration of a smile (Schmidt et al., 2006).

There are authors who recommend that we focus our attention on what a Duchenne smile does rather than what it expresses, without the intention of detracting from the importance of its use for identifying positive emotions, but considering that it is insufficient to evaluate an emotion and label as such (Krumhuber & Kappas, 2022).

A limitation of the present work arises from the fact that the classification of positive emotions carried out by Fredrickson (2013) was used to identify the studies. In the specialized literature, no agreement was reached regarding a standard classification of positive emotions, its use in the search process being possible not to cover the whole spectrum of positive emotions that could have been used as keywords.

Being an individual paper, it was not possible to fulfill the requirement required by the methodology of systematic reviews, namely the use of a minimum of two people to select, preferably individually, the articles for analysis, which may have influenced the evaluation of their selection.

6. Conclusions

Is the Duchenne smile an indicator of positive emotions? In an attempt to answer this question, we selected and analyzed for the narrative systematic review the studies in which the production of Duchenne smiles either took place during the experience of spontaneous positive emotions caused by certain natural life situations, or appeared in during the induction of positive emotions in laboratory or experimental situations. Articles that only investigated the idea of perception and interpretation of these smiles in different contexts without actually producing the Duchenne smile, whether deliberate or not, were removed. On the other hand, some of the present studies did not entirely lack the investigation of Duchenne smile perception, but since measuring the frequency of smile production was one of their themes, they were also taken into analysis.

Based on the results of these studies, we cannot yet draw a clear conclusion regarding the idea that the Duchenne smile is an indisputable indicator of positive emotions, but the data provide us with important information such as the following: Duchenne smile is associated with experiencing positive emotions in general, with those of happiness and joy, in particular. However, the present studies have shown that this time of smiling is also found when emotions such as hope and contentment are experienced.

In addition to their relationship with positive emotions, it was found that although the constriction of the eyes through the activation of the Orbicularis oculi muscle corresponding to the facial action unit AU6 in the FACS coding system is considered a differentiating element between the two types of smiling, however this expression was also encountered in situations where no positive emotions were experienced. Also, it appears that intensity is a better predictor of positive emotions.

The Duchenne smile also appears in the interaction between teachers and students, during which the former provide corrective feedback, increasing the rate of its acceptance by students. On the other hand, the constriction of the eyes is a marker of distress found in both children and adults.

The intensity of the smile must be taken into account in such studies when differentiating between Duchenne and non-Duchenne smiles. Some studies have found in addition to spatial patterns, as considered the Duchenne marker, and temporal properties of emotional expressions that also contribute to the differentiation between a spontaneous and a deliberate smile, being associated with the person's internal states, such as the duration of a smile (Schmidt et al., 2006).

There are authors who recommend that we focus our attention on what a Duchenne smile does rather than what it expresses, without the intention of detracting from the importance of its use for identifying positive emotions, but considering that it is insufficient to evaluate an emotion and label as such (Krumhuber & Kappas, 2022).

To conclude, taking into account all these corroborated results and data from other older studies, we can say that research is still needed to discover the mechanisms underlying these relationships between the Duchenne smile and positive emotions.

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Pre-service Teachers Reflections on Their Ability to Conduct Authentic Dialogue in Preschool after Training Program Participation

Barbara Shapir

Pre-service Teachers Reflections on Their Ability to Conduct Authentic Dialogue in Preschool after Training Program Participation

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Abstract

Keywords:

pre-service teacher training program, authentic dialogue, reflection analysis

Educators that undergo training in diverse pedagogical approaches enhance their instructional abilities, enabling them to form quality interactions with children and foster an overall positive classroom atmosphere. Training programs should carefully consider, acknowledge and respect teacher's prior beliefs regarding their role, while addressing any apprehensions they may have during their student teaching experience. Pre-service teachers are at a unique juncture in their professional development. Simultaneously, they are students with limited abilities but yet must meet high levels of performance as teachers. The authentic dialogue training program's main goal was to enable students to be autonomous thinkers and doers while engaging in open dialogues with preschoolers. Deci and Ryan state in 2002 that a learning environment that is autonomous and supportive rather than controlling, motivates teachers to integrate and implement new knowledge into their professional practices. The knowledge they required in the authentic dialogue training program was taught through practical interactive seminars, this boosted their sense of self-confidence and enhanced their ability to implement the techniques learned into their dialogues with preschoolers. The assumption was that this approach would empower the pre-service teachers to enable the child to lead the dialogue based on their personal interests. This may be achieved through active listening and shifting away from a teacher-led dialogue.

Zusammenfassung

Schlüsselworte:

Ausbildung von pädagogischem Personal, lebenswirklicher Dialog, Reflektionsanalyse

Eine Ausbildung in unterschiedlichen didaktischen Ansätzen verhilft Pädagog:innen zu einer Verbesserung ihrer pädagogischen Fähigkeiten, was es ihnen ermöglicht, hochwertige Interaktionen mit Kindern zu etablieren und eine generell positive Lernumgebung zu schaffen. Während Lehrkräfte sich in Aus- und Fortbildung befinden, sollten die Programme sorgfältig die früheren Vorstellungen der Lehrkräfte über ihre Rolle berücksichtigen, anerkennen und respektieren, gleichzeitig aber auch etwaige Bedenken, die während des Vorbereitungsdienstes auftreten können, ansprechen. Die Ausbildung von Erzieher:innen befindet sich an einem entscheidenden Punkt in deren beruflichen Entwicklung. Obwohl sie noch Schüler:innen mit begrenzten Fähigkeiten sind, müssen sie gleichzeitig hohe Leistungen als Lehrer:innen erbringen. Das Hauptziel des Ausbildungsprogramms für lebenswirkliche Dialoge besteht darin, die Lernenden dazu zu befähigen, eigenständig zu denken und zu handeln, während sie sich an offenen Dialogen mit Vorschüler:innen beteiligen. Deci und Ryan (2002) stellen fest, dass ein autonomes und unterstützendes Lernumfeld, das nicht kontrollierend ist, Lehrkräfte dazu motiviert, neues Wissen in ihre berufliche Praxis zu integrieren und umzusetzen. Das Wissen, das die Lehrkräfte im Ausbildungsprogramm für lebenswirkliche Dialoge benötigten, wurde in praktischen interaktiven Seminaren vermittelt, was ihr Selbstvertrauen stärkte und ihre Fähigkeit verbesserte, die erlernten Techniken in ihren Gesprächen mit Vorschulkindern umzusetzen. Die Hypothese war, dass dieser Ansatz die angehenden Erzieher:innen in die Lage versetzen würde, das Kind zu befähigen, einen Dialog auf der Grundlage seiner persönlichen Interessen zu führen. Dies kann durch aktives Zuhören und die Abkehr von einem von der Lehrkraft geführten Dialog erreicht werden.

1. Introduction

Authentic Dialogue is defined by the creation of open spaces where personal experiences are shared and diverse perspectives are encouraged. Strickland and Marinak (2016) attain that this may be achieved through active engagement, attentive listening and responsiveness to each other's needs. Bakhtin's (1981) Theory of Dialogue discusses the need for multiple voices to be heard in order for children to honor other points of view while assessing their own.

In line with Vygotsky's Constructivist Theory (1980), children develop both thinking and linguistic abilities through interactions with others around them. When adults have a broad vocabulary and are knowledgeable in different fields, children will thrive and be able to share their thoughts, ideas, and experiences in a better way (Howe, 2010). For this reason, early childhood training programs in Israel have created high acceptance standards for pre-service teachers, enabling potential candidates to understand



the influence they have on children's development and that hard work is needed to meet those standards (Dror, 2016).

Educators that seek to promote open, unrestricted classroom dialogue and embrace the opportunity to create child-centered pedagogy understand the immense gain it has on the child's thinking processes. They will be better equipped to personalize their interactions in order to meet the social and emotional needs of the students (Trepanier-Street et al., 2007). Teachers that inspire students to delve into subjects of personal interest empower them to direct their learning by integrating new knowledge into their existing understanding, facilitating profound and meaningful learning experiences (Almeida, 2011). This approach creates opportunities for authentic dialogue.

According to Watt and Richardson (2008), many individuals opt for the teaching profession in order to make a positive impact on children's lives, perhaps in ways they did not personally experience. Consequently, the impact of teacher training programs becomes significant, as the newly acquired knowledge is not only applied within the program but after completing their training, it may extend into the classrooms.

This dynamic plays a vital part in shaping teachers' perceptions of their roles and influencing their classroom practices (Mercer, 2019). However, when entering training programs, pre-service teachers carry memories of their own student experiences and preconceived ideas about a teacher's role (Casey, 2016). Many of them, still adhere to the belief that classrooms should be teacher-centered, meaning that teachers select the topics to be taught and transmit their knowledge to the students, who are then expected to learn (Przybylska, 2011). These pre-existing beliefs can have a notable impact on their capacity to direct open classroom dialogue, as it necessitates a shift in their conceptual framework regarding the role of a teacher (Christoph & Nystrand, 2001).

Reflective thinking is instrumental in supporting teacher development by identifying two important areas of personal and professional growth; concern and confidence. The opportunities for teachers to engage in reflective thinking with regard to classroom dialogue, may lead to modifications in their pedagogy, fostering an improved, child-centered approach to teaching. This is due to the fact that they become more confident in their abilities to manage open dialogue. Their concern for losing control diminishes as they build their confidence. Reflective thinking is of

considerable importance in the domain of teacher development, as it enables educators to critically evaluate their teaching pedagogies and introduce changes that positively impact student learning (Mathew et al., 2017).

In researching teacher training programs, participants' reflections attained through interview analysis, prove to be an effective qualitative tool for data collection (Eggen & Kauchak, 2006). It facilitates a cognitive examination of personal experiences, thoughts and actions, empowering individuals to derive insights from them and improve future practices.

Through introspection of their practices, educators can recognize specific skills that need enhancement, in order for them to be aligned with their objectives (Shoffner, 2008). As highlighted by Kizel (2014), reflective thinking cultivates heightened self-awareness among teachers, leading them to analyze their perceptions, beliefs, biases, and assumptions. This increased self-awareness contributes to a better understanding of one's teaching style and its impact on student learning. Moreover, reflective thinking fosters a willingness among educators to explore new approaches and techniques in the classroom. It also catalyzes collaborative endeavors with fellow teachers, encouraging the exchange of ideas and teaching strategies to build a community of learners (Fox et al., 2011).

2. Theoretical foundation

Training programs at teachers' colleges are faced at times with resistance from pre-service teachers regarding certain topics being taught. They often think they have enough intuitive knowledge and therefore are less open to innovative research in the field they are studying. This is true with regard to dialogue, which seems to be somewhat natural and not something that needs to be learned. However, research has shown that pre-service teachers imitate classroom management as they observe the cooperating teacher, in the classroom they are assigned to student-teach in, without questioning what stands behind these approaches (Lortie, 2020). An example of this is readily found in classroom dialogue. Howe and Abedin (2013) claim that the IRF pattern of initiation-response-feedback is still the most used in classroom talk. A teacher initiates a topic by asking a closed question where the answer is usually known. The children, in turn, respond to the question by giving answers they think the teacher wants to hear. The teacher is navigating the dialogue as to *who* will speak

and *when* they will speak, leaving almost no opportunities for free talk (Mehan, 1979). The teacher then gives the children feedback on their answers. If the desired answer was given, the children are praised, however if a different answer was heard, they are either ignored or scolded.

Rasku-Puttonen et al. (2012) propose a different perspective on classroom dialogue which is based on child-centered learning. It allows the children to demonstrate their knowledge on topics that interest them, which in turn will lead to a strong sense of competence. The teacher then responds with positive feedback on their *willingness to participate* in the dialogue, rather than *judge the content* that is being discussed, as right or wrong. This provides open spaces for children to share their thoughts and ideas without fear of judgement on the part of the teacher.

Heath (1983) refers to the term, authentic dialogue, as the need for teachers to focus on the thinking processes that children go through rather than the actual knowledge they are obtaining, if at all. The way in which a teacher responds to children's answers, acknowledging *how* they came about their answers, and showing an interest in their explanations, creates open spaces for authentic dialogue. This is in tune with early childhood education training programs that have adopted similar ideas, known as constructivist pedagogy (Li et al., 2012). The child is at the center of their learning experience by initiating ideas and activities based on their interests (Porcaro, 2011).

Similar to professionals in other fields, teachers need to pursue further training after completing their initial qualifications through a process referred to as continuing professional development.

3. Research methodology

The present research aims to examine and analyze the reflections attained through interviews with pre-service teacher's that participated in an authentic dialogue training program and the impact it had on their perceptions of a teacher's role of conducting authentic dialogue with preschoolers.

3.1. Research participants

The participants were all female, average age of 26 years old and were all third-year students in the Early Childhood Educational Department at Kaye College of Education in Israel. They all lived in the southern part of Israel and were randomly chosen from the experimental group. They volunteered to be interviewed by the researcher for a one-on-one semi-structured interview in the teacher's lounge in the

college where they are students. This is an informal familiar environment, which made them feel comfortable, as the training program took place there as well. The researcher used many authentic dialogic characteristics taught in the training program such as open questions, delaying reactions, responsiveness, suspension of teacher's control and mutuality in dialogue. This was used in order for their responses to be as reflective as possible, displaying personal perspectives and not directed by the researcher.

3.2. Data collection

All of the interviews were tape recorded with written consent forms and analyzed. The analyzation process was important in order to categorize recurring themes amongst their responses. This enabled the researcher to reach conclusions regarding the effectiveness of the authentic dialogic training program on the pre-service teachers' perceptions of conducting authentic dialogue.

3.3. Instrument

The data from the interviews were analyzed in a qualitative fashion. Creswell (2021) states that when a researcher wants to understand what the participants are feeling and thinking with regard to questions asked in an interview, it is important to analyze their responses to problems that arose in the training program itself. This can help the researcher understand how the participant reacted and if they were able to use the tools being tested. In the training program, the participants were first asked to conduct a dialogue with a child, as they normally do without any prior instruction and transcribe it. The second dialogue was conducted after they participated in the training program and were taught authentic dialogue characteristics. A challenge they faced was they began to inhibit their responses, thinking of every word they uttered as to keep in line with authentic dialogue characteristics. They felt that the dialogue became unnatural, interrupted and not continuous, which led to a sense of frustration. These reflective thoughts were heard loud and clear in their interview responses and as Shkedi (2011) states, these uninhibited words help the researcher better analyze their emotions and reach conclusions.

4. Results

While analyzing the participants reflections, the research question that was posed was "Will the reflections of the pre-service teacher signify that the authentic dialogue training program had an effect on

the way they perceive their role of achieving authentic dialogue with preschoolers?"

Through content analysis of the in-depth semi structured interviews conducted, the main themes that were discovered are noted in the figure 1 below.

Figure 1. Themes from reflective interviews



As seen in Figure 1, there are six main themes that will be elaborated in the following paragraphs. Foremost, pre-service teachers felt that they had a better sense of social-emotional competencies after participating in the training program. They improved their personal skills; were more attentive, less judgmental and more accepting of children's stories. In addition, they trusted children's abilities to resolve conflicts on their own without their interventions. They explained this as the training program enabled them to recognize the importance of empowering children, listening to their unique perspectives. They themselves, felt empowered and were better able to put children's needs before their own, thus improving their social and emotional competencies.

In addition, teachers became aware as to the positive effects that authentic dialogue has on a child's emotional needs. They saw that when children choose the topics for the dialogue, they led the conversation rather than being led by the teacher. Furthermore, they became equal partners in the dialogue, no single voice was more important than the other, as was previously seen. Teachers understood better that their role in the dialogue is to be an attentive listener rather than a constant speaker.

Moreover, the fact that the pre-service teachers felt that authentic dialogue has on a child's well-being was very exciting. They stressed that children had a stronger sense of social capability once experiencing authentic dialogue. They felt more connected to their peers because open spaces were created for all

perspectives to be valued. Children were able to speak of anything they wanted, and the teacher in turn asked open questions related to the same topic. The children felt that what they said, mattered, hence a strong sense of capability was achieved.

As well as the contribution of authentic dialogue to the children, the pre-service teachers spoke of one of the authentic dialogue characteristics, often overlooked, that of discourse etiquette. They were surprised as to how children learned to be considerate of others words, waited until there was a gap in the conversation to say what was on their mind. They learned very fast, how to take turns while speaking. The teacher required this of all staff members and discourse etiquette became part of preschool culture.

Additionally, the participants spoke of the contribution the program had on their personal relationships with regard to dialogue. This bores insight as to the importance not only of the content matter but as to the pedagogy of the program as well. The participants described friends and family members intrigued as to their abilities to be more attentive in conversations, less judgmental, less dominating and more considerate to different perspectives. They reflected on the the way that conducting authentic dialogue with other teachers in the program, something that helped them better understand the characteristics and made it easier for them to converse with children in this manner. In addition, this type of dialogue, became a way of life. Thus, their friends and family noticed a difference in their dialogic capabilities.

Finally, all of the ten participants spoke of the need for more in-service training programs on the topic of authentic dialogue from their first year of academic schooling. This can help them early on conduct dialogue in a more authentic fashion and break perceptions they have of a teacher's role in dialogue. The more traditional role of "teaching" or "reprimanding". They found that they were better able to conduct open dialogue with staff members as well as parents of preschoolers.

5. Discussions

The results indicate a generally favorable attitude towards the topics taught in the authentic dialogue training program. Interview responses strongly suggest a shift in participants' perspectives on the role a teacher has of classroom dialogue. The consensus was that the pre-service teachers understand that they have a significant influence on the educational atmosphere in the preschool, primarily through their

dialogic interactions with children. They emphasized that fostering an authentic, child-centered dialogue that aligns with the children's interests, rather than solely adhering to predetermined teaching goals, cultivates a warm, caring, and empathetic environment. Consequently, this approach facilitates the emotional and social development of the children involved.

Traditionally, pre-service teachers formed their perceptions based on their own experiences as students, envisioning the teacher as the authority figure at the front of the classroom, imparting knowledge and expecting students to absorb it. Communication primarily involved conveying tasks and addressing misbehavior or incomplete tasks.

After participation in the training program, they recognized that dialogue is a crucial tool for fostering a child's sense of belonging, emotional well-being, and social self-worth, and it should be treated with high regard. The skills acquired during the program have swiftly influenced their perspective on a teacher's role in authentic dialogue. Additionally, the participants reflected on important skills acquired, such as; attentive listening, accepting, and incorporating diverse perspectives, fostering a more inclusive, equitable, and just environment for open dialogues.

One of the most profound revelations that came about in their reflections was their surprise of the effects the skills they learned with regard to improving dialogue with children, actually improved their dialogic interactions in their personal lives. They felt more comfortable and became more open to embracing moments of silence without worrying about losing interest in the conversation, showcasing an enhanced ability to be attentive listeners by delaying responses. They felt that they improved their social and emotional competencies as they incorporated authentic characteristics into their personal lives. This came about by expressing increased awareness for those around them, including their opinions and perspectives and improved their abilities to regulate their own emotions.

Roberts et al. (2021) claim that researchers can comprehend participants' thought processes and actions by analyzing the reflections they convey through interviews conducted. Conway (2001) emphasized the significance of the reflective process that teachers undergo for their professional development. This importance arises from the need to find common ground when old experiences intersect with new ones, making it essential for individuals to process and deem them meaningful. Reflection equips pre-service teachers to revisit their own perceptions of

their role a teacher has on conducting classroom dialogue and their own personal experiences, enable them to draw on past insights as they anticipate creating meaningful relationships with their future students.

Boyd et al. (2015) emphasizes that the reflective process serves as the foundation for comprehending teaching practices. It elucidates that despite receiving training in advanced educational theories and pedagogical skills, pre-service teachers often default to traditional teaching methods due to their personal experiences. Whether influenced by methods they appreciated or feared as students, revisiting these experiences becomes imperative. This stems from the idea that teachers aim to shield their students from negative experiences or strive to enhance them, as articulated by Hamman et al. (2010)

According to Miller and Shifflet (2016), this holds particularly true for teachers who shape their teaching perspectives based on their own experiences. When a teacher observes success in one context, they endeavor to apply it elsewhere (Holt-Reynolds, 1992). Following the realization that authentic dialogic skills personally benefited them, the participants were motivated and developed a sense of competence in their ability to engage in authentic dialogue with preschoolers.

With respect to the analyzation process undergone with recorded interviews, as outlined by Saldaña (2016), a crucial step involves cross-referencing data obtained from the various interviews. This facilitates the identification of recurring themes and establishes correlations with the research questions. Qualitative analysis stands out due to its capacity to gather extensive data through tools like interviews. The identification of common themes and categories serves the purpose of drawing conclusions regarding the participants' thoughts, feelings, and reflections throughout the research.

Creswell (2014) clarifies that in qualitative studies, creating an informal in-person setting when being interviewed, fosters participants comfort, reducing anxiety and promoting a more open dialogue. The interview initiation involved casual discussions about the participant's well-being and that of their families. Another rationale for conducting the interview face-to-face is to enable the researcher to gather information about both verbal and nonverbal communication, recognizing their equal significance. The spoken words and nonverbal cues captured by the researcher provide valuable insights into the participants' thoughts, especially when responding to

follow-up questions, a benefit unique to semi-structured interviews. Leedy and Ormrod (2013) assert that face-to-face interviews encourage participants to elaborate more, particularly in response to follow-up queries.

6. Conclusions

This paper attempted to describe the importance of pre-service teachers' reflections after participation in an authentic dialogue training program. The qualitative tool of a semi-structured interview, served as a valuable reflective instrument, fostering a thorough examination of one's experiences, thoughts, and actions to facilitate learning and enhance future practices. Reflective thinking holds particular significance in teacher development, empowering educators to critically assess their teaching methods and implement changes for improved student learning (Mathew et al., 2017).

Reflective thinking contributes to teacher development by pinpointing areas in which teachers feel confident and those they find challenging, prompting a recognition of necessary improvements (Shoffner, 2008). According to Kizel (2014), reflective thinking aids teachers in developing heightened self-awareness by prompting an exploration of their perceptions. This self-awareness, in turn, enables teachers to comprehend their teaching style and its impact on student learning. Additionally, reflective thinking fosters a willingness among teachers to experiment with new approaches and techniques in the classroom.

In conclusion, it is crucial to acknowledge that preschool teachers hold individual perspectives on the role of dialogue in teaching. These perspectives significantly shape the way their classroom functions with regard to dialogue. Through reflective thinking, the teachers came to the realization that opening spaces for a child-centered dialogue, while embracing diverse voices may enhance the creation of a positive, empathetic classroom environment for education. Dialogue serves as a valuable instrument in fostering children's social and emotional competence as well as bolster their self-assurance. This most definitely will have a positive effect on the classroom environment. Children will be more tolerant, solve problems through dialogue and not with force, respect each other's views and most important display the ability to be active listeners as their teachers are there to model this behavior. Children naturally adjust to the teaching methods they encounter, therefore, teachers that are aware of the importance of providing open spaces for

dialogue, where both positive and negative emotions are able to be expressed, are helping children with life-long dialogic abilities needed in society.

Authors note:

Barbara Shapir has successfully completed her PhD at the Doctoral School "Education, Reflection, Development", Babes -Bolyai University, Romania. She is working as the Head of First Year Studies at Kaye Academic College of Education in Israel, as well as a Lecturer, Pedagogical advisor and practical fieldwork coordinator in the Early Childhood Department. Her professional and research interests are: Pre-service Teachers Training Programs, Authentic Dialogue, Social Emotional Learning and Teacher's Role Perceptions. The following are relevant articles:

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The Impact of an Induction Mentoring Programme for Novice Teachers. Reflections, Feedback, and Directions for Future Research

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The Impact of an Induction Mentoring Programme for Novice Teachers. Reflections, Feedback, and Directions for Future Research

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Abstract

This paper examines the effects of an innovative induction programme that was provided to novice teachers during their first year of teaching. The opinions of the participants were gathered concerning the practicality and pertinence of the mentoring actions performed, the most significant outcomes of mentoring-style learning, and possible directions for the mentoring programme's continuing development. The participants explicitly mentioned the mentoring programme's formative value, placing particular emphasis on the importance of introspection and the establishment of communities for peer learning. The participants' feedback underscored the importance of maintaining an empirical approach to the matter of induction mentoring. Additionally, it emphasised the necessity of tailoring and individualising mentoring strategies to address the diverse requirements of the participants.

Keywords:

induction mentoring programme, novice teachers, learning communities, reflective learning

Zusammenfassung

Die vorliegende Arbeit stellt die Auswirkungen eines innovativen Einführungsprogramms dar, das Anfängern im ersten Jahr ihrer Lehrkarriere angeboten wird. Es wurden Meinungen der Teilnehmer gesammelt, hinsichtlich der Nützlichkeit und Relevanz der ergriffenen Mentoring-Maßnahmen, der wichtigsten Ergebnisse des Mentoring-artigen Lernens und der möglichen zukünftigen Entwicklungsrichtungen/Weiterführung des Mentoring-Programms. Die Teilnehmer verwiesen direkt auf den prägenden Wert des Mentoring-Programms und betonten die Bedeutung der Reflexion und der Schaffung von Peer-Learning-Gemeinschaften. Das Feedback der Teilnehmer verdeutlichte sowohl die Notwendigkeit, den empirischen Ansatz zum Thema Einführungsmentoring fortzusetzen, als auch die Notwendigkeit eines differenzierten und personalisierten Mentoring-Ansatzes, entsprechend der unterschiedlichen Bedürfnissen der Teilnehmer.

Schlüsselworte:

Einführungs-Mentoring-Programm, angehende Lehrer, Lerngemeinschaften, Reflektiertes Lernen

1. Introduction

In the current globalised world, education is a critical concern because nothing is possible without it or without its involvement. The vast majority rely on education, if they do not pursue it themselves. It should be an essential necessity to invest in teachers' preparation. As a result of globalisation, neoliberalism, digitalization, and neuroscience, education is in a constant state of flux on an international scale (Marga, 2019). Education and its challenges require conscientious and well-informed reflexive attitudes and approaches, given the field's exceptional dynamism. However, real-world challenges that arise from practice, particularly during the first years of teaching, frequently surpass traditional or more recent theoretical assumptions. Consequently, new inquiries, revisions, and conceptual re-significations are required not only to

provide epistemological clarifications, but also to enhance the practical efficacy of the teaching profession (Cucuș, 2024).

This study examines the contribution of a team of university-affiliated trainers who were motivated and interested in addressing the need to critically examine and modernise approaches to induction mentoring of novice teachers. As a natural, didactic gesture, they constructed and implemented an innovative induction programme in three counties of Romania in response to the requirements of recent graduates in their first year of teaching in a school. The programme has met the needs of recent graduates during their first year of teaching in a school, with the overarching goal of furnishing them with substantial and inspiring assistance, with the voluntary participation of



professional mentors. The Ministry of Education recently implemented the systemic project PROF – Professionalization of the teaching career at the national level (<https://www.edu.ro/PROF>). This experience is sustained through the increased and vigilant monitoring of universities that educate teachers, as well as an ongoing questionnaire regarding all practical aspects of teachers' preparation within schools, where the PROF operates.

Considering the numerous dynamics and unforeseen concrete situations that arise in this field, the first year of novice teachers' career can have a substantial effect, either positive or negative, on their professional development. Therefore, communication, recognition, and unity within the educators' community are essential. Assisting early-career education specialists in achieving successful socio-professional integration serves as the cornerstone of the professionalization process. The inconsistent theoretical and practical training of future employees in the labour market has frequently been criticised. Consequently, efforts have been made in recent years to identify new support strategies within schools in order to better prepare novice teachers for the challenges of a teaching career in a modern and complex society. Mentors facilitate the development of learning and training initiatives by organising induction programmes for newly recruited employees (Stan, 2020).

2. Theoretical foundation

The present study was enabled to conduct a comparative analysis of empirical evidence regarding the outcomes of alternative teacher induction programmes due to the theoretical frameworks that formed its foundation. The initial conceptual clarifications that are essential pertain to the intricacy of the teaching profession, as observed through the lens of its exceptionally unique vocational profile. Professional performance necessitates the development and application of particular competencies pertinent to the practice of this vocation. Although several dimensions become cognizant of during the initial training phase, further internalisation occurs over time and through the proficient execution of the teaching role (Cucoș, 2024).

The concept of professionalism in education is intricately structured within a framework of standards, references, and values that must be incorporated into the training process (Cucoș, 2022). Teaching necessitates the application of a range of professional competencies that are distinct, yet complementary:

relational, organisational, communication, and pedagogical. Additionally, it demands a collection of personal qualities that must be summoned in order to confront the practical demands of the profession in real-life scenarios. Therefore, acclimating to this intricate vocation can prove exceedingly challenging. The aforementioned factors necessitate the implementation of induction mentoring initiatives, which play a crucial role in fostering teachers' professionalism during the initiation phase of their vocation (Stan, 2020).

Numerous specialised studies pertaining to induction mentoring programmes provide scientific reasons and empirical evidence that substantiate the significant positive influence of mentoring in the teaching career. These studies also justify and demonstrate the efficacy of induction programmes, highlighting their enduring effects on the teaching profession. The implementation of induction programmes for novice teachers has yielded observable outcomes across three distinct domains: enhanced classroom performance, improved classroom management, enhanced student readiness, and increased retention of novice teachers within the teaching community (Ingersoll, 2011; Teacher Induction Programme, 2021).

In schools, located in economically disadvantaged communities, novice teachers face significant challenges, particularly when they lack adequate training from the start. According to numerous authors (Crașovan, 2016; Cucuș, 2024; Stan, 2020), the inadequate training of prospective teacher graduates can be attributed to the instability of the initial training system and the precariousness of the entry and career progression monitoring system.

Several studies have emphasised the importance of emphasising the essential continuity between initial training and the first year of a teaching career. This includes initiatives such as ERASMUS projects, which have shown that newly hired teachers require not only professional and didactic support, but also social and emotional support, particularly during their first year of career. Simultaneously, other scholars examine the influential effects of induction mentoring as a means of providing training, personal growth, and professional advancement for novice teachers still acquiring psychopedagogical abilities (Crașovan, 2016; Lazăr & Leahu, 2020).

Additional research has shown evidence of the favourable associations between mentoring relationships and the retention of novice teachers. This

can be attributed to the provision of a support system through induction programmes, which contributes to the cultivation of good attitudes towards the teaching profession (Torossian, 2021). According to Podolsky et al. (2016), the absence of mentoring support in the area of pedagogical training for novice teachers heightens the likelihood of attrition from the teaching profession, considering the increased emotional and professional counselling requirements they experience.

The mentors participating in these programmes assist novice teachers in enhancing their professional identity and provide guidance in the development of their professional competencies. Empirical findings from different educational systems worldwide emphasise the importance of implementing structured, well-structured, and cohesive induction mentoring programmes to fully leverage the numerous benefits and advantages of training in training (Stan, 2020). Organisational induction programmes have implemented valuable toolkits for mentors and novice teachers, which have been highly regarded by stakeholders for their significant contributions to the development of early career teachers. These toolkits address several areas, including bureaucratic, administrative, and didactic components (Teacher Induction Programme, 2021). According to a number of studies, novice teachers require a mentor due to the high levels of professional stress they frequently encounter at the start of their teaching careers. This stress arises from their struggle to adjust to the culture and realities of the profession after completing their education (Cucoș, 2024; Stan, 2020). Despite possessing robust professional knowledge and skills, novice teachers still require guidance and assistance in order to effectively address the diverse needs of their students. The task of managing these needs can become daunting in the absence of support and encouragement (Teacher Induction and Mentoring Brief, 2011).

Previous research has placed significant emphasis on the establishment of functional teams, whose mentors assume the role of collaborative partners for novice teachers, fostering their capacity for introspection, which is crucial for their professional growth (Korthagen & Vasalos, 2005). In order to effectively support novice teachers, it is important to go beyond the basic dissemination of material, instructional manuals, and the creation of professional development programmes. A genuine educator transforms into a reflective teacher, engaging in introspection both prior to and during instructional

activities, and consistently acquiring knowledge not just from firsthand encounters but also through introspection on those encounters (Cucoș, 2024). Within the field of education, mentors are progressively expressing a growing interest in fostering the introspection of new teachers, with the resulting advantages becoming evident in their professional growth. According to Stan (2020), effective mentoring encompasses the provision of constructive advice and suggestions in a manner that demonstrates empathy. The mentoring process may become stressful, unpleasant, and counterproductive if the mentor-novice teacher pair lacks common values, personal affinities, empathy, and emotive experiences. An additional recent study has illustrated the wide range of challenges faced by novice teachers. These challenges encompass emotional and psychological strain, the dynamic nature of the educational system, the intricate nature of teaching, the expectations of school managers and students' parents, and the necessity to manage professional and personal obligations (Ben-Amram & Davidovitch, 2024). The authors introduced a holistic mentoring model in which novice teachers and mentors interact during weekly meetings. Additionally, the model incorporates the participation of school managers and experts from various fields, capitalising on the benefits of social and professional support networks. Numerous studies have established that a considerable number of novice teachers encounter challenges in the classroom as a result of their insufficient training in teaching expertise and teaching techniques (Korthagen & Vasalos, 2005; Lazăr & Leahu, 2020). The relationship with students' parents, the design of study materials, the awareness of students' personal issues, class management, diversity, and evaluation issues are also recurring concerns. An additional challenging endeavour at the outset of one's teaching career is the pursuit of a professional identity. It is not uncommon for novice teachers to encounter exhaustion, personal dissatisfaction, and crises of professional identity. Whilst establishing strategies for support and collaboration with young teachers, an effective mentor will consider the level of effort exerted by these teachers. Induction mentoring is particularly beneficial when it demonstrates flexibility and adaptability to the unique challenges encountered at each stage of training. An element of equal significance is the implementation of a differentiated intervention and approach in these mentoring programmes, which considers the unique interests and requirements of novice teachers, teaching challenges, and individual learning preferences (Stan, 2020).

Additional recent research examines the disparity between the expectations formed during initial training and the actual experiences encountered, *i.e.* the reality discovered in school, upon employment, many novice teachers speaking of reality shock phenomenon (März, & Kelchtermans, 2019). Virginie März and Geert Kelchtermans demonstrate, through a qualitative analysis of the findings derived from numerous studies, that induction mentoring programmes establish a social support network between novice teachers and highly experienced teachers, which assists the former in surmounting challenges encountered during their early careers. Beyond the confines of a school, novice teachers can also collaborate advantageously with expert mentors from other institutions, and they believe that more in-depth analyses of novel, innovative models for the development of induction programmes that facilitate the formation of collaborative networks are necessary. An analysis of mentoring programmes in Scotland, Malta, and Denmark has revealed notable variations in the implementation of induction mentoring programmes for teachers, which are contingent upon the unique characteristics of each country's education system. The findings underscored the necessity of allocating ample time to cultivate the mentoring relationship and the significance of the dedication of all parties involved. The importance of an established and acknowledged national framework for the systematic execution of teacher induction programmes is acknowledged, particularly due to the diverse requirements that vary, based on the specific circumstances of each schools. The significance of offering support through induction programmes during the first years of teaching has been substantiated by various studies (Shanks et al., 2022).

Prior research has focused on novice teachers who have participated in induction programmes, as such programmes do not meet all their professional and personal needs (Kidd et al., 2015). Understanding novice teachers' support needs depends on their perception of mentors' help. Numerous novice teachers have reported receiving inadequate guidance, with significant differences between schools since each mentor works differently. Dissatisfaction with mentoring support affects professional goals, especially retention. In Australia, 25% of novice teachers resign within five years. The findings imply

that induction mentoring programmes, which meet novice teachers' personal and professional needs, significantly impact their retention in the field (Kidd et al., 2015). Similarly, the issue of tension and burnout among novice teachers is critical in the United States. The critical need for induction programme enhancements is supported by recent studies (Morris, 2023). There is an immediate demand for mentors and educational leaders who are enthusiastic about providing support to new teachers. These mentors should be present alongside the novice teachers and regularly require their feedback regarding their professional challenges and needs. Continuity in the teaching profession and enhanced efficacy of induction programmes are contingent upon the quality and consistency of specialised assistance, pragmatic interventions, and the conscientious participation of mentors and novice teachers.

3. Research methodology

The current investigation provides an analysis of the outcomes and consequences of a remote induction mentoring programme that aimed to assist novice teachers in their first year of teaching. Twenty-four novice teachers from three counties in Romania (Argeș, Sibiu, and Alba) participated in the programme for a period of six months (November 2022-April 2023). The objective of this study is to ascertain the viewpoints of the participants (including novice teachers, mentors, and tutors) concerning the effects of the mentoring training programme, which incorporated reflective practices and mutually beneficial learning. The study presents significant qualitative data regarding the effect of an induction mentoring programme that assists novice teachers in the teaching profession, on their professional development. Furthermore, the study examined the participants' perspectives on strategies for continuing the programme that has already been completed. These perspectives shed light on the extra training requirements and interests of the participants, and might serve as a foundation for the creation of innovative mentoring interactions. The induction programme aligns with the perspective of university professors regarding mentoring activities that are beneficial for novice teachers. It incorporates innovative mentoring strategies and tools that are specifically tailored to meet the unique needs of novice teachers (see Table 1).

Table 1. The design of the induction mentoring programme for novice teachers

No. crt.	Targeted activities	What do new teachers do?	What do mentors do?	Developed and implemented tools
1.	A survey of the professional requirements of novice teachers in their first year of teaching	Fill out the needs questionnaire.	Assesses the requirements of novice teachers and reflects on the selection of the most appropriate mentoring strategies.	needs questionnaire
2.	Mentor-tutor focus group based on novice teachers' observations of the video lessons they taught	They send mentor teachers a video recording of themselves whilst teaching for the purpose of receiving analysis and feedback.	They engage in the focus group and collaborate with the tutors to analyse the lessons taught and videos recorded by the novice teachers. They collaborate with the tutors to identify the most efficient approaches to optimise the teaching process for novice teachers and address their additional professional needs.	peer assessment sheet; mentor evaluation sheet;
3.	Job-Shadowing	The students watch the mentors' teaching demos as examples of good practice and assess the lessons by filling out the analysis sheet for mentor's lesson.	Provide examples of teaching lessons that they video record.	Analysis sheet for mentor's lessons
4.	Activities for peer learning	Discuss good practice learned from model lessons provided by mentors and share the conclusions with peers	Reflect on feedback provided by novice teachers in order to enhance forthcoming mentoring methodologies.	Sheet titled <i>I Know-I Want to Know-I Have Learned</i>
5.	Training for achieving success in the examination required for obtaining a Permanent Teaching Certification (Definitivat)	It provides pragmatic approaches to resolving specific examination subjects for the Permanent Teaching Certification (Definitivat) examination in the teaching profession.	They train students in solving step-by-step some models of subjects for the Permanent Teaching Certification (Definitivat) examination in the teaching profession; They explain some difficult topics/correct some mistakes in treating the topics for Permanent Teaching Certification	Sheet titled <i>I Know-I Want to Know-I Have Learned</i>
6.				

4. Results

The induction programme provided a variety of learning resources for novice teachers. The programme incorporated various strategies to facilitate peer learning and personal reflection, as well as job shadowing, focus group activities, and discussions with university coordinators and mentors/tutors. Furthermore, it provided methods for approaching the topics for the Permanent Teaching Certification (Definitivat) examination. Mentors' and novice teachers' video recordings were utilised, along with illustrations of good practice to anxiety-inducing subjects raised by novice teachers. Reflection and peer learning were the key elements incorporated into the design and implementation of the induction programme.

Peer learning serves as a structured approach that has the capacity to foster an inclusive and coherent learning community. Within this community, members are encouraged to openly share their professional experiences, anxieties, and concerns, whilst also receiving guidance, learning from others, and establishing trust. Moreover, mentors possess a high level of professional knowledge. Therefore, the

focus group was selected as the analytical approach for examining the recorded lessons of both the new teachers and the model lessons. In order to achieve the same objective, it was determined that the *I know/I want to know/I have learned* sheets would be utilised as a means of incorporating the input obtained and identifying new information and training interests that may be addressed through interaction with mentors. Additionally, the job shadowing activities were specifically designed to enhance the mentor's reflective and discursive approaches by demonstrating effective teaching behaviours. This practice is considered beneficial for novice teachers in effectively integrating teaching routines and establishing meaningful connections with the class.

The mentoring programme fostered an environment that encouraged individuals to engage in *self-reflection* regarding their teaching activities and professional models. This included reflecting on the practicality of theoretical knowledge and engaging in reflective practices for the purpose of learning, with the aim of effectively utilising feedback. Therefore, in

order to promote reflection on the model lessons, novice teachers were provided with an analysis sheet specifically created to capture nuanced elements of the concerns expressed by expert teachers. The sheet included ten distinct types of criteria that align with the primary didactic processes: teaching, learning assistance, assessment and lesson planning, classroom management, and regulation of didactic processes. The categories of criteria were outlined by explicitly mentioning specific behaviours to highlight certain aspects of finesse that novice teachers can follow. These include: ensuring constructive alignment in lesson design and delivery, utilising the formative and regulatory function of didactic evaluation, effectively utilising the blackboard/whiteboard, selecting and correctly utilising teaching resources, prioritising learning support for all students, utilising feedback, managing disruptive behaviour, maintaining quality communication, employing appropriate voice, dressing appropriately, and maintaining a positive general attitude. We believe that the presence of diverse criteria highlighted by the observers of the model lessons offers a diverse range of topics for the collective analysis of the lessons. This diversity facilitates the exploration of new themes or interests that can be taken into account in both the relationship and the mentoring programme.

The feedback obtained from the participants regarding the impact of the mentoring programme provided valuable insights into three key areas: the efficacy and pertinence of the mentoring initiatives implemented, the key outcomes of mentoring learning, and possible directions for future development and continuation of the mentoring programme. The participants' ideas were categorised into three distinct elements and subsequently synthesised into specific themes.

5. Discussions

The table 2 presented below provides an overview of the themes associated with each component that received comments, along with the participants' statements expressed in their own words.

Table 2. The relevance and utility of the mentoring programme

During your participation in the mentoring programme, which activity did you find most pertinent or beneficial?

Self-reflection	<i>All the exercises, in my opinion, were pertinent, but the self-reflection was the most helpful to me because it required me to analyse my weaknesses. I was able to see where I needed to grow, which was really helpful. Every task was crucial to the completion of this project.</i>
Learning through	<i>The most useful activity in the mentoring program was the analysis of the video lessons.</i>

hands-on experience and analysis of video lessons

The most relevant activity was that which was demonstrated practically. I was able to correct my mistakes by watching the video lessons, which were so well-structured and easily understood by everyone that I look back on them with great pleasure, easily accessing them from Google Drive! The mentors always brought valid reasons to sort out our doubts!

Interaction and collaboration with mentors, dialogues in face-to-face meetings

The most important aspect of the mentoring programme in which I participated was my interactions with the mentors, which were consistently excellent. The connection with mentors and dialogues during face-to-face meetings were the most beneficial aspects of the mentoring programme.

Active and empathetic listening

I really liked that I could interact without problems with others, without experiencing shame or embarrassment. I also identified with the concerns that the other colleagues mentioned, so open dialogue mattered a lot.

Professional and ethical and emotional support

In this project I learned that it's okay not to have everything perfect in class, that it's okay to be subjective in certain cases when grading, that it's okay if an inspection doesn't go as planned, and that it's okay to be a different teacher coming from a younger and less experienced generation. My opinion on training needs is that a novice teacher requires a lot of ethical and emotional support to get over all of the challenges. (...) about my tenure position examination/ Permanent Teaching Certification (Definitivat) examination, if someone could assist us with some courses, we are, of course, learning, but some extra assistance would be beneficial.

Embracing one's weaknesses

The video lessons made me realize that even an experienced mentor has difficulties managing a class of students and that no matter how different we are as individuals, when it comes to education, we will always have a point of view or experience. I realised that we must accept our imperfections.

Awareness of training opportunities

The times I most appreciated were when we told each other about our issues in class, which were pretty common even though many did not mention it, and we found understanding, a kind word, and friendly advice. The teaching experience of the teaching staff involved in this fantastic programme speaks for itself! These six months have gone by too quickly!

Expressing gratitude for the training opportunity

I want to thank you very much for this opportunity! I would love to continue with this programme because I have learned so much. If this programme was an experiment, even if it did not appear to be a personal success, many of us discovered peace, quiet, and validation within ourselves. Thank you very much for the opportunity to take part in these induction mentoring programme that have proven to be highly beneficial to my professional development!

The participants explicitly acknowledged the induction mentoring programme as a good opportunity for professional development and highlighted the formative nature of the reflection and self-reflection exercises. The specialised literature emphasises the importance of induction mentoring activities that are

more practical and tailored to individual needs. It highlights the necessity of creating opportunities for observation, reflection on educational acts, and reflection as a method of learning. Empirical research on this subject has identified many reflection contexts that have demonstrated their efficacy, including novice teacher reflection groups (Farrell, 2016) and activities that foster an interest to engage in reflective practices on practical experiences (Bloom, 2014). A distinct classification of responses was denoted by the concepts pertaining to the importance and value of circumstances in which novice teachers obtained the necessary emotional and ethical assistance, or in which they experienced a sense of value, concentration, and the ability to openly address their own shortcomings whilst engaging in supportive interactions with mentors. The quality of induction programmes in the first year of teaching is contingent upon the development of empathic and supportive interactions (Bloom, 2014). This criterion has consequences for implementing other effective features of the programme such as ‘help novice teachers develop a personal style that reflects their values, hopes, and aspirations in working with young children’ or ‘helps novice teachers develop a personal style that reflects their values, hopes, and aspirations in working with young children’ (Bloom, 2014, p. 21). A number of studies have examined the impact of induction mentoring on the effective management of professional stress, consistently demonstrated the importance of providing adequate emotional support within the mentoring relationship (Mosley et al., 2023).

Table 3. The key aspect acquired

Specify an element, message, or insight gained from the trial mentoring programme	
Acknowledging mentors' role	<i>After completing the activity in the school and kindergarten, I collected feedback and felt the pulse of all the teachers, experienced or not.</i>
Learning through hands-on experience	<i>I would like to thank to my mentor-teacher for his inspiration, impact, and consistent encouraging of novice teachers. The lesson we remembered was one that the mentor-teacher demonstrated for us.</i>
The role of feedback in comprehending the reality in schools and managing teaching conduct patterns	<i>No matter how hopeless things appear, there's always a way out; we just need to be patient and not be scared to ask for assistance when we need it; During this project I didn't interact much, I'm introverted and the kind of person who prefers to listen and less to talk.</i>
The importance of self-directed reflection	<i>I've learned a lot from the SWOT analysis of this pilot mentoring programme, including where I still need to develop and how to cope with the challenging path that lies ahead of me.</i>

Personal Development

*The fact that I'm not the only one going through such struggles and that I felt like I was in therapy was a crucial component.
Message: The key to success in the classroom is balance!*

Based on the accounts provided by the participants, it was seen that the activities that demonstrated a heightened formative significance were those involving self-reflection and those that facilitated the cultivation of new values, beliefs, and professional identities. The participants in the study recognised the importance of feedback and learning that is rooted in practical experiences, as well as the role of mentor mediation, as crucial means of acquiring knowledge. Induction mentoring prioritises practical learning and the real-world context of the school, making it particularly relevant for mentoring during the first training phase. Other recent studies have also highlighted the key impact of mentoring that is grounded in genuine professional contexts. Lowell and Yong (2023) presented empirical findings on the influential effects of an online programme in enhancing the professional self-efficacy of novice teachers.

Table 4. The ongoing development and extension of the mentoring programme

What are viable possibilities for the future development of the professional induction mentoring programme? What specific vocational training requirements should this programme address?

Exchanges of experience and collaboration

In addition, open lessons might be organised in which we pay visits to colleagues to acquire new instructional strategies that we can use in the classroom.

Mentoring programme diversification: provision of emotional support to aid in the management of stress and strain encountered in the teaching profession; facilitation of workplace learning and the practical application of acquired knowledge.

*The majority of the time, teaching staff is not supported emotionally or mentally.
However, a primary factor contributing to the decline of teachers over time or their resignation from their employment is the psychological and emotional pressure they experience as a result of the significant level of responsibility they bear.
A potential alternative training programme might involve stress and anxiety management mentoring, aimed at enhancing the quality of on-the-job learning for these teachers.*

Ensuring the regularity of meetings

*I believe the programme might continue through various monthly meetings in which everyone describes their classroom experiences and shares their own.
Through a periodic meeting in which a professional self-analysis sheet is created in order to encourage improvement of teaching practices.*

Developing a favourable framework for the dissemination of current experiences and the setting up of support groups.

I believe the professional induction mentoring programme may be extended through support groups, short online meetings, and, why not, open lessons where we can attend and improve our professional skills.

Expanding the range of collaborative methods: virtual meetings, open-lessons.

I'd like to do more practical lessons so that we can see what we don't know how to apply.

Specific training requirements for novice teachers that were considered relevant by the respondents, also for the extension of the programme

The professional training needs of a novice teacher, that you have already answered are, in my opinion, the following: how a lesson with children should be carried out properly; how everyone should participate in the lesson; how to interact with special needs children so they can be integrated into mainstream education; what strategies to use to be a balanced teacher in my relationship with preschoolers; what to do with students who are overly energetic and disrupt others; what strategies to use to get preschoolers' attention; examples of good practice recorded so we can look over when necessary.

Peer learning

Meetings organised at regular intervals to exchange the gained experience could be an option for continuing the programme.

The recurring theme in the observations on the development of the mentoring programme was the diversification of the themes addressed, with the aim of delving into more nuanced aspects. This included adapting teaching approaches to cater to the unique needs of children with special educational requirements. During the initial year of the teaching profession, novice teachers gain an understanding that the profession encompasses various levels and dimensions. This includes encountering challenges related to didactic interaction with students, as well as integrating into a community of colleagues and organisational culture. Additionally, they face the difficulties of managing interactions with students' families, among other challenges. Consequently, the inclination to broaden the scope of the mentoring subject is inherent, and the recommendations put forth by the participants in this context hold increased value, as they accurately depict the reality of the school and the vocation, as perceived by novice teachers. The descriptions pertaining to the diversification of mentoring interaction modalities are of equal significance.

Accordingly, various forms of online mentoring exchanges, the establishment of peer communities, and regular online meetings were suggested. In addition to the mentioned previously specific

characteristics, it encompasses the crucial importance of establishing a connection between novice teachers and the professional community of educational experts. Specialised literature suggests practical solutions for organising professional communities that cater to novice teachers. These solutions include peer learning (Pennanen, 2023) and the establishment of professional *incubators* as collaborative spaces that foster the growth of both novice teachers and mentors (Arviv Elyashiv & Levi-Keren, 2023). According to Wang and Shibayama (2022), the mentor's active engagement in creative activities serves as a mechanism for fostering the mentee's independence and openness towards exploration.

6. Conclusions

Several conclusions can be drawn from the study:

- A well-organized induction programme that incorporates a well-defined structure, explicit objectives, well-defined roles and duties, and a strong emphasis on reflective professional development, job-shadowing, and the exchange of good practices can provide favourable outcomes for novice teachers.

- A collaborative learning-based induction programme that facilitates the transfer of didactic experience among novice teachers-mentors and tutors from the university has the potential to produce favourable outcomes in terms of professional practices within the classroom, enhancing teaching methodology, and boosting the overall standard of education.

- An induction programme that also seeks to equip novice teachers for entry into the initial phase of the teaching career development establishes advantageous conditions for achieving success in the final assessment within the profession.

- A coherent and comprehensive induction programme serves as the key link between the initial training of prospective university teachers, ongoing professional development, and practical engagement within school. This programme fosters a professional network that encompasses novice teachers, mentor teachers, and teaching staff from the academic environment.

- An induction programme has the potential to offer the necessary ethical and emotional support to novice teachers and foster a collaborative attitude among teachers within schools. This programme should aim to diversify mentoring collaboration methods and facilitate opportunities for professional development and educational research. It should ensure that both novice teachers and university

mentors and tutors are equally involved in these endeavours.

The feedback received from the participants facilitates the identification of forthcoming mentoring issues and research topics aimed at enhancing induction mentoring activities. The previously mentioned concepts can be effectively expressed within a cohesive and innovative mentoring framework that can be implemented on a national level.

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Investigating the Reading Preferences of Second-grade Pupils through Creation Lessons

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Investigating the Reading Preferences of Second-grade Pupils through Creation Lessons

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Abstract

Keywords:

reading preferences, reading activities, story writing, primary education, interactive learning, creative lessons

It is unanimously accepted that reading activities have positive effects on children's development. Recent research has shown that pupils' interest in reading activities could be enhanced by providing interesting and age-appropriate books. The purpose of the research is to determine whether it is beneficial to organize didactic activities in which pupils use their creativity to establish titles of attractive books for them. At the same time, we were interested in finding out whether pupils want to frequently participate in creative lessons based on story writing. All 54 second-grade pupils who have participated in our research mentioned that they enjoyed participating in the creation lessons, and would like to cooperate with other older peers in the process of writing the stories. The research revealed that could be beneficial to organize lessons based on stimulating students' creativity with the purpose of understanding the reading preferences of the primary school pupils.

Zusammenfassung

Schlüsselworte:

Lesevorlieben, Leseaktivitäten, Geschichten schreiben, Grundschulunterricht, interaktives Lernen, kreativer Unterricht

Es ist ferner anerkannt, dass Leseaktivitäten positive Auswirkungen auf die Entwicklung von Kindern haben. Jüngste Untersuchungen haben gezeigt, dass das Interesse der Schüler an Leseaktivitäten durch die Bereitstellung interessanter und altersgerechter Bücher gesteigert werden kann. Ziel der Untersuchung ist es, festzustellen, ob es vorteilhaft ist, Unterrichtsaktivitäten zu organisieren, bei denen die Schüler ihre Kreativität einsetzen, um attraktive Buchtitel festzulegen. Gleichzeitig wollten wir herausfinden, ob die Schüler häufig an kreativen Unterrichtsstunden teilnehmen, die auf dem Schreiben von Geschichten basieren. Die 54 Schülerinnen und Schüler, die an der Untersuchung teilnahmen, gaben an, dass sie gerne an kreativen Unterrichtsstunden teilnehmen und mit älteren Mitschülern am Prozess des Geschichtenschreibens arbeiten würden. Die Untersuchung ergab, dass es von Vorteil sein könnte, Unterrichtseinheiten zu organisieren, die die Kreativität der Schüler anregen, um die Lesepräferenzen von Grundschulern zu verstehen.

1. Introduction

Reading is a formed and developed skill during primary school level which stays at the base of efficient learning processes. Reading activities are necessary to improve the fluent and conscious reading skills of primary school pupils. These abilities are associated with positive school results (Celik, 2019; Davidovitch & Gerkerova, 2023). Teachers should understand factors that influence the reading behaviours of their pupils and should apply effective strategies to increase pupils' interest in reading activities (Divya, 2023; Marin & Bocoş, 2021b).

Recent studies revealed that some of the pupils are not involved frequently in reading activities because they do not have age-appropriate or attractive books for them (Marin & Bocoş, 2021a). During second grade, pupils should include reading activities in their daily program. Discussion with pupils about books that they read is also a beneficial practice (Merga, 2018). Researchers revealed the benefits of organizing

tutoring activities during which pupils of different ages read together. For example, gymnasium and high school pupils could play the role of mentors for elementary school pupils (Monteiro, 2013). The research question that guided our research was related to establishing the utility of organizing creation lessons during which pupils use their creative potential to establish titles of the stories that they would like to read and also to write the content of some of the stories mentioned by them. It is difficult to establish which are the topics of the books preferred by all primary school pupils, but we consider that each teacher should organize didactic activities during which they can observe the preferences of each pupil. The results of the research could be used by primary school teachers and could increase the quality of the didactic activities that they organize. Also, these didactic approaches based on writing new stories are an age-appropriate way to stimulate pupils' creativity and to develop their reading and writing competencies. The activities



facilitate the creation of a positive learning environment.

2. Theoretical foundation

The family and the school play an important role in forming and developing pupils' interest in reading activities. Reading habits have an important impact on the intellectual development of pupils and their future academic performances (Bano et al., 2018; Chettri, 2013; Lonigan et al., 2000). Reading activities can be associated with the well-being of children, with progress in school, with high abilities of conscious and fluent reading, with a high horizon of knowledge, and with a higher degree of development of emotional skills (Compton-Lilly, 2020; Ortlieb & Schatz, 2020). Some of the researchers were interested in finding the main obstacles that can affect the frequency of the reading activities initiated by the pupils. According to Tella and Akande (2007), possible factors that influence the reading interest of pupils are related to spending time for making other preferred activities (e.g. watching TV) or the inadequate quantity or quality of books that are available for them. Other studies outline the negative influences of inadequate family involvement in the pupil's education (Davidovitch & Gerkerova, 2023; Marin & Bocoș, 2021b).

A recent research conducted in Romania revealed that most of the primary school pupils like to read story books. Other types of books mentioned by primary school pupils are comic books, books with riddles or proverbs, or books with funny content (Marin & Bocoș, 2021a). Also, most of the primary school pupils prefer to read books in print format. The reasons for which children read are various. Most of them mentioned reasons highly related to their intrinsic motivation (e. g. to obtain better school results, to improve their reading skills, or to spend their free time in a constructive and amusing way). It is the responsibility of both educators and the family to make available for children a lot of books in various fields, which are adequate to their age and interests (Marin & Bocoș, 2021b; Marin & Bocoș, 2021a). Book promotion activities should be carried out as frequently as possible (Marin & Bocoș, 2021b).

Lectureships with parents can be organized frequently to highlight the important role of reading activities. During parent-teacher meetings important to outline the positive effects and the importance of systematic organization of these activities (Davidovitch & Gerkerova, 2023; Marin & Bocoș, 2021a).

Library visits have a positive impact on stimulating pupils' interest in reading activities. Nowadays readers are using also new technology tools to read digital books. In this context, the digital competencies of librarians are very important (Wijonarko, 2020).

Technological developments influence pupils' choices regarding the activities they include in their daily program. Although technological developments influence our daily living habits, books continue to be present in our lives. E-books are considered valuable resources, which can be used to determine pupils to read frequently and devote more time to reading activities. (Mahendra, 2020).

The reading abilities should be formed in a positive climate, by encouraging pupils to invest time in reading, presenting the benefits of this type of activity. The reading activities should not be presented to pupils as compulsory (Celik, 2019). Girls and boys may have different reading preferences, and the time allocated by them for reading activities may be different. These aspects should be taken into account by teachers during the didactic activities (Uusen & Mürsepp, 2012).

3. Research methodology

Through this study, we aimed to investigate the reading preferences of second graders. A survey was conducted with 54 second graders, aged 8-9 years old to investigate the pupils' opinions regarding the creation lessons that were organized during the didactic experiment (see Appendix 1) The ethical standard of educational research was respected. The consent of parents or other legal representatives of the pupils was obtained. The parents were informed about aspects regarding the objectives of the research. Also, aspects related to the confidentiality of data collected were taken into account. The climate of the educational activities was positive and the researcher was preoccupied with pupils' well-being during the didactic experiment.

Results of the previous studies revealed that providing pupils with attractive books could increase their interest in reading (Bano et al., 2018; Kuşdemir, & Bulut, 2018; Marin & Bocoș, 2021a). Our research starts with the following hypothesis: The organization of creation lessons at the primary school level facilitates the process of investigation of the reading preferences of the pupils. We have used a didactic experiment in order to establish if the didactic approaches proposed by us are efficient and appreciated by the pupils. The didactic experiment

consisted of two educational activities. The first activity was a creation lesson during which pupils were asked to establish the title of new books that could be published and could be attractive to them. Also, during this creation lesson, pupils participated in group activities during which they analyzed the reasons for which pupils do not read and the possible solutions that could be found to make pupils more frequently involved in reading activities. The second activity consisted of a creation lesson where each of the second-grade pupils wrote a story in cooperation with another pupil from the class. At the final of the lessons, the stories were included in a book, that was distributed to all the pupils from the classroom. The main research questions were related to establish the main advantages or disadvantages of organizing creation lessons in order to investigate the reading preferences of primary school pupils. Also, we were interested to establish the answers to the following questions:

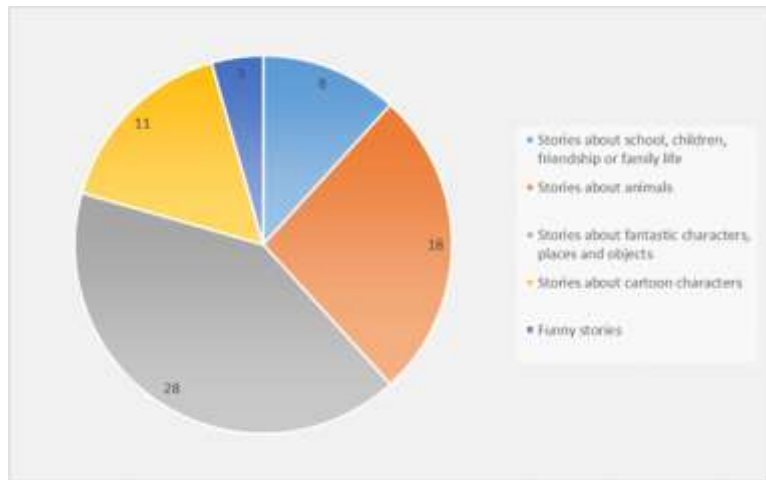
- What is the topic of the books preferred by most of the primary school pupils?
- What are the main reasons for which some of the primary school pupils are not involved frequently in reading activities?
- Could creation lessons be considered an appropriate manner to investigate second-grade pupils' reading preferences? The research was organized during the 2023-2024 school year, in Cluj County, Romania.

4. Results

The two creation lessons organized during the didactic experiment were considered by the teachers as an advantageous way to understand pupils' preferences for reading. During the lessons, pupils have mentioned that the main reasons for which they are not involved in reading activities are: the lack of attractive books that they have access to and the fact that they enjoy doing other activities such as: using mobile phones, playing with their friends or watching TV. Also, they mentioned the following solutions to increase their interest in reading activities: parents should buy more books or borrow books from the library, especially story books (e. g. as presents offered during their birthdays), pupils should devote less time to watching TV or using mobile phones and include reading activities during their reading program). Also, the pupils mentioned that reading with other persons (e.g. pupils or parents) is considered an attractive activity for them. The pupils agreed that reading activities should be organized daily and that is

beneficial for teachers and parents to present the positive effects of daily reading activities on the academic success of the pupils. All the pupils mentioned that they were interested in reading stories in printed format. During the didactic experiment, pupils were also asked to mention the possible titles of books that they will enjoy to read. Second-graders were happy to establish the title of the stories that they would read with pleasure. Most of the titles proposed by pupils are stories about fantastic characters, places, and objects, about animals, and about cartoon characters (see Figure 1).

Figure 1. The topic of the stories that are considered attractive by second-grade pupils involved in the research



The results obtained are similar to those obtained in previous studies (Marin & Bocoș, 2021a), which revealed that storybooks are preferred by most of the primary school pupils and could be often used during teaching activities to increase their interest in reading. All the pupils mentioned that enjoyed the creation lessons that they participated in and would like to be involved as often as possible in this type of educational activities. Most of the pupils mentioned that they would like to receive help in the writing process from other peers, enrolled in higher classes. All the pupils mentioned that consider very attractive the books written by pupils of the same age as they and would like to read these types of books.

Considering the results obtained we consider that is beneficial to:

- involve children in didactic activities meant to develop their creativity by identifying the title of the stories they want to read;
- organizing writing stories ateliers during which children work with their peers or older pupils (e.g. students enrolled in gymnasium or high school) or creation lessons with the purpose of investigating pupils' interest in reading could be beneficial;
- include the activities presented in larger educational projects meant to stimulate the pupils'

interest for reading activities (e.g. eTwinning projects).

5. Discussions

This investigation outlines the possible ways to investigate the reading preferences of the pupils through creation lessons. We have tested the efficiency of two creative lessons that could be organized to stimulate the reading activities of second graders. The final product of the activities consists of creating attractive reading materials for pupils. The results obtained are similar to the ones obtained in previous studies which established that providing interesting reading material to each pupil is beneficial (Marin & Bocoş, 2021a; Tella & Akande, 2007). The main limitation of the study is related to the fact that the results cannot be generalized. The margin of error obtained for a sample size of 54 pupils, at the level of population of second-grade pupils from Cluj County is $\pm 13.32\%$ at 95% confidence level, and 17.51% at 99% confidence level. The other limitations of the study are related to the geographical provenience of the respondents, who live in a single county in Romania. Even if the results cannot be generalized and the national representativeness is not assured, the results of the study have revealed that could be beneficial to organize didactic activities during which pupils establish titles of possible stories that are age-appropriate for them and also didactic activities during which pupils create new stories in cooperation with other peers. These activities are a way to stimulate pupils' creativity and also to understand their reading preferences. They contribute to a better understanding of each pupil's preferences and also are an important mean to stimulate their creativity. The results of this study are useful for primary school teachers and librarians, who could initiate educational projects or didactic activities based on the results obtained.

6. Conclusions

Based on the results of this study, we can affirm that the hypothesis of our research was confirmed on a sample of 54 pupils, aged 8 to 9 years old. The present study can stay at the base of future research that can establish with accuracy on a larger sample of participants the advantages or disadvantages of frequently involving pupils in creation lessons, organized to understand the reading preferences of each pupil. Our research revealed that organizing lessons during which pupils establish the topic and titles of the books that they would like to read is a good modality for the teacher to initiate discussions about the reading preferences of each of their pupils. Also,

involving second-grade pupils in the creation lessons contributes to creating a positive and attractive learning environment. This approach could be beneficial and could allow teachers to better understand the reading preferences of their pupils. Pupils were also interested in discovering the content of the stories written by their peers.

The main advantages of organizing these types of activities are related to understanding the reading interests of second-grade pupils. Future research can analyze the benefits of organizing creative lessons through national or international school partnerships that consist of similar didactic approaches. For example, all the pupils who participate in an eTwinning project could simultaneously be involved in this type of lesson in order to create new and attractive reading materials for pupils.

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

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Appendixes

Appendix 1. Questionnaire for pupils

Dear pupils,

Please answer a few questions about the activities that were carried out.

1. How did you feel during the creation lessons that were organized in this period?

2. How often you would like to be involved in creation lessons, similar to the ones you have participated in?

3. Are you interested in reading books written by pupils who are the same age as you?

4. Are you interested in reading books written by pupils who are the same age as you?

Degree of Manifestation of Emotional Style Dimensions in Primary School Teachers

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Degree of Manifestation of Emotional Style Dimensions in Primary School Teachers

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Abstract

Adopting an Emotional Style by the classroom teacher implies the emotional maturity of the personality expressed in emotional skills: awareness of emotional states, emotional balance and discipline, expression of feelings reflected in a style of conduct. The difference between other teaching styles and the emotional one comes from the focus on individual roles. The education of students is directly dependent on teachers, mentors, tutors or coaches, who have a strong influence in their educational journey and a well-defined role in their lives.

Keywords:

resilience, emotional style, didactic style, teachers

Zusammenfassung

Die Annahme eines emotionalen Stils durch den Klassenlehrer impliziert die emotionale Reife der Persönlichkeit, die sich in emotionalen Fähigkeiten ausdrückt: Bewusstsein für emotionale Zustände, emotionales Gleichgewicht und Disziplin, Ausdruck von Gefühlen, die sich in einem Verhaltensstil widerspiegeln. Der Unterschied zwischen anderen Unterrichtsstilen und dem emotionalen Stil liegt in der Konzentration auf die individuelle Rolle. Die Ausbildung der Schüler hängt direkt von den Lehrern, Mentoren, Tutoren oder Coaches ab, die einen starken Einfluss auf ihren Bildungsweg haben und eine klar definierte Rolle in ihrem Leben spielen.

Schlüsselworte:

resilienz, emotionaler Stil, didaktischer Stil, Lehrer

1. Introduction

The main purpose of this study is, by investigating the literature, to highlight the particularities of the development of emotional resilience in primary school teachers and the ways in which the school influences or contributes to the development of their emotional resilience in different areas of human development.

The education system has two major objectives: to ensure optimal conditions for the academic progress of students and to assist the process of structuring harmonious personalities in students. Mulvey (1997) considers school to be, after the family, the second social system responsible for the socialisation of children and young people. Appropriate socialisation results in access to constructive and socially useful social behaviours. Considering a person's genetic background, family and school have a major impact on the structuring of personality.

Given that the period of compulsory education overlaps with the period of personality structuring, schools (teachers working directly with children) need to rethink, reformulate and redefine their educational roles and goals. "The school is the place where the

child's individual life meets social life" (Albulescu, 2005, p.103). Its purpose is to facilitate his or her systematic and methodical integration into social life.

2. Theoretical foundation

Resilience has been described as "relative resistance to experiences of psychosocial risk" (Hirțuleac & Ceobanu, 2015, p. 119; Rutter, 1996).

In educational settings teachers are increasingly subject to psychosocial stress, for this reason an improvement in teaching strategies and methods is necessary. We are not born resilient, but we learn over time how to react in certain stressful situations, how to overcome obstacles in our lives or how to improve certain skills needed to successfully overcome difficulties. In this regard, Aquilar (2018) presents us with 12 habits that each teacher can develop to increase emotional resilience:

1. Know yourself
2. Understand emotions
3. Tell stories that mobilise



4. Build community
5. Be here now
6. Take care of yourself
7. Focus on the bright spots
8. Cultivate compassion
9. Be a learner
10. Play and create
11. Riding the waves of change
12. Celebrate and appreciate

The investigative approach preceding the formative experiment itself has the main purpose of ascertaining and verifying the problematic values of the phenomenon of emotional resilience under research, namely to identify the preferences of primary school teachers in terms of adopting a style of managing behavioural problems and mild emotional disturbances of primary school students, their frequency, and the effectiveness of adopting an emotional style to strengthen emotional resilience in students.

At the level of teachers teaching in primary education, the essential directions of investigation involve actions that have a confirmatory role, designed in such a way as to provide us with an overview of the level at which the dimensions that make up Emotional Style are found in teachers teaching in primary education. To this end, the researcher sets the following objectives:

O1. Selection of a sample of primary school teachers in the Municipality of Cluj-Napoca, from both urban and rural areas;

O2. Investigating the extent to which each dimension of Emotional Style is reflected in teachers teaching primary grades;

A first objective is to *identify the level of Emotional Style practiced by teachers in their teaching activity and in their relationship with students*. Also, by means of this questionnaire we want to obtain information about *teachers' opinions on concrete ways of operationally describing the behaviours underlying the teaching style in educational activity*. The description of positive behaviours specific to the teaching style adopted by primary school teachers is another aspect pursued at this stage.

Following the application of the questionnaire we expect that the main information obtained will relate

to the identification of the extent to which each dimension of Emotional Style is found in teachers teaching primary classes, to the assessment of the socio-emotional climate of the whole class, as well as to concrete ways of improving the emotional traits and dispositions of students and ways of optimizing and forming a teaching style adapted to the needs of the current student and the current educational context affected by the Coronavirus pandemic. The information obtained around these aspects is able to give us a real picture of the current situation faced by teachers, of the teaching style adopted as a result of the changes that have occurred in the classroom, both at the level of the activity of teaching scientific content and at the level of the form of organization in the educational reality. Also, from this information we find the existence of weaknesses, behavioural problems or emotional disturbances intensified as a result of major changes in the educational system, and how to overcome them by improving our own Emotional Teaching Style adopted in the classroom in order to improve students' emotional resilience.

Starting from the premise that the existing information in the literature is only partially relevant to the existing situation in schools and the effects of the pandemic on students are beginning to manifest themselves in the immediate educational reality, we consider it necessary to question primary school teachers in advance about the level of manifestation of Emotional Style in the classroom in order to improve the mild emotional traits and dispositions of students.

3. Research methodology

For the purpose of ascertainment, the *Emotional Style Questionnaire (24 items - teachers' version)*, a research instrument adapted for teachers, is administered to the present sample of teachers in order to identify the extent to which each dimension of Emotional Style is present. The questionnaire was translated from English by Valentin Vidu and adapted by drd. Ms. Florina Mora, after Davidson and Begley (2020), according to the educational, professional and chronological age peculiarities of the subjects intentionally selected in the research, i.e. teachers who teach primary school classes using the manner of formulating the items, modifying or replacing certain words without changing their meaning. Respondents receive a questionnaire in an adapted format containing 24 items. The items are reformulated, adapted and modified according to the school context and age level applied and illustrate behaviours that teachers adopt in their teaching activity. Subjects are

asked to express the extent to which they identify with these behaviours by choosing one of two options, namely True (A) when they identify with the behaviour and False (F) when they do not identify with the behaviour, drawing on their personal experiences related to their teaching activity. Each dimension of Emotional Style - *resilience, perspective, social intuition, self-awareness, context sensitivity and mindfulness* - is matched by 4 statements out of the 24 presented in the content of the questionnaire.

4. Results

Table 1. Summary presentation of the data recorded for each item of the Emotional Style Questionnaire administered to primary school teachers

Items	Valid answers	Absolute frequencies (f)	Frequencies relative to 100 (fi)	Valid percentage (p)	Cumulative frequencies (fc)
1. When something small but unexpected and positive happens to me, the positive mood evaporates within minutes.	True = 0 points	28	56%	56%	56%
	False = 1 point	22	44%	44%	100%
	Total	50	100%	100%	
2. If I try a new teaching method and find that it doesn't work, and the results aren't satisfactory, it ruins my whole day.	True = 0 points	38	76%	76%	76%
	False = 1 point	12	24%	24%	100%
	Total	50	100%	100%	
3. When communicating with students, I often notice subtle social cues about their emotions.	True = 1 point	31	38%	38%	62%
	False = 0 points	19	62%	62%	100%
	Total	50	100%	100%	
4. I am strongly oriented to the outside world and rarely aware of what is going on inside my body.	True = 0 points	26	52%	52%	52%
	False = 1 point	24	48%	48%	100%
	Total	50	100%	100%	
5. Sometimes I was told that I behaved in a socially inappropriate way.	True = 0 points	33	66%	66%	66%
	False = 1 point	17	34%	34%	100%
	Total	50	100%	100%	
6. If I decide to focus my attention on a particular task, I find that I can usually do it.	True = 0 points	15	30%	30%	70%
	False = 1 point	35	70%	70%	100%
	Total	50	100%	100%	
7. When I wake up in the morning I can think of a pleasant activity, and this thought gives me a good mood that lasts all day.	True = 1 point	21	42%	42%	58%
	False = 0 points	29	58%	58%	100%
	Total	50	100%	100%	
8. If I make a mistake at work and get reprimanded for it, I can put it in perspective and take it as a learning experience.	True = 0 points	32	64%	64%	64%
	False = 1 point	18	36%	36%	100%
	Total	50	100%	100%	
9. I'm not particularly good at reading people's emotions.	True = 0 points	26	52%	52%	52%
	False = 1 point	24	48%	48%	100%
	Total	50	100%	100%	

Therefore, we submit for analysis and reflection the following condensed statistical data after the 50 primary school teachers completed the research instrument in the format adapted by the researcher *Emotional Style Questionnaire* and we summarize in the table below, the values measured by using the following methods: counting, grouped classification and reporting to the sample considered as one hundred for the answers given to the items of the questionnaire addressed to primary school teachers.

10. I am usually very aware of my feelings, both in my mind and in my body.	True = 1 point	28	56%	56%	56%
	False = 0 points	22	44%	44%	100%
	Total	50	100%	100%	
11. I have sometimes encountered setbacks at work or had a fight with a friend because I was too friendly when a friend was in pain.	True = 0 points	38	76%	76%	76%
	False = 1 point	12	24%	24%	100%
	Total		100%	100%	
12. I find it easy to talk to someone in a crowded atmosphere.	True = 0 points	27	54%	54%	54%
	False = 1 point	23	46%	46%	100%
	Total	50	100%	100%	
13. I think the next ten years will be better for me than the last ten.	True = 1 point	30	60%	60%	60%
	False = 0 points	20	40%	40%	100%
	Total	50	100%	100%	
14. If I organise an activity with a colleague and she refuses me in the future, this puts me in a bad mood.	True = 0 points	28	56%	56%	56%
	False = 1 point	22	44%	44%	100%
	Total	50	100%	100%	
15. I am sensitive to the emotions of others.	True = 1 point	29	58%	58%	58%
	False = 0 points	21	42%	42%	100%
	Total	50	100%	100%	
16. I am not good at identifying my own feelings.	True = 1 point	24	48%	48%	52%
	False = 0 points	26	52%	52%	100%
	Total	50	100%	100%	
17. When people close to me ask me why I treat someone badly, I don't agree that I have done so.	True = 0 points	29	58%	58%	58%
	False = 1 point	21	42%	42%	100%
	Total	50	100%	100%	
18. I find that if I sit still even for a few moments a wave of thoughts fills my mind.	True = 0 points	32	64%	64%	64%
	False = 1 point	18	36%	36%	100%
	Total	50	100%	100%	
19. When things are bad, I find it hard to believe that they will eventually work out.	True = 0 points	28	56%	56%	56%
	False = 1 point	22	44%	44%	100%
	Total	50	100%	100%	
20. I recover quickly when things don't go my way.	True = 1 point	21	42%	42%	58%
	False = 0 points	29	58%	58%	100%
	Total	50	100%	100%	
21. I can sense when something bothers a person just by looking at them.	True = 1 point	28	56%	56%	56%
	False = 0 points	22	44%	44%	100%
	Total	50	100%	100%	
22. I don't usually pay attention to what's going on in my body.	True = 0 points	35	70%	70%	70%
	False = 1 point	15	30%	30%	100%
	Total	50	100%	100%	

23. Often when other people think something is inappropriate, they disagree.	True = 0 points	28	56%	56%	56%
	False = 1 point	22	44%	44%	100%
	Total	50	100%	100%	
24. If I get distracted by something, it takes me a long time to refocus.	True = 0 points	35	70%	70%	70%
	False = 1 point	15	30%	30%	100%
	Total	50	100%	100%	

Based on the answers given by primary school teachers, we aim to concentrate the results presented in the table above so that it is possible to sum the scores recorded for each subject surveyed and for the whole sample of teachers surveyed. Thus, we structure the results obtained in the form of a table containing specific items for each dimension of Emotional Style. Each dimension is assigned 4 items that describe and measure specific behaviours of the teacher related to his/her educational activity. The scores recorded for each of the six dimensions describe a continuum and indicate the extent to which a person falls on one or other of the extremes of this continuum, while some people fall somewhere in the middle. The combination of where a person falls in each of the six dimensions describes the Emotional Style that person has at that moment. We interpret teacher tendencies according to the following parameters: for each column a score of 30 points or more means a high score, a score of 20 points means a medium score, and a low score of 10 points or less means a low score.

Table 2. Organized summary table for recording primary school teachers' scores for each dimension of Emotional Style

Column I Self-awareness	Column II Context sensitivity	Column III Perspective	Column IV Social intuition	Fifth column Attention	Column VI Resilience
item 4r =	item 5r =	item 1r =	item 3 =	item 6 =	item 2r =
item 10 =	item 11r =	item 7 =	item 9r =	item 12 =	item 8 =
item 16r =	item 17r =	item 13 =	item 15 =	item 18r =	item 14r =
item 22r =	item 23 =	item 19r =	item 21 =	item 24r =	item 20 =

Each dimension describes a continuum with two extremes, which in most cases reflect high or low activity in brain circuits. Emotional Style also describes the type of emotional states that teachers experience in the school environment, as well as their intensity and duration. Like any other complex behavioural traits, emotional variations along the six dimensions are explained on the one hand by

hereditary and genetic inferences, and on the other hand by teachers' experiential factors in educational work.

In what follows, we aim to sum the totals obtained by the teachers for each dimension in order to obtain a final score for each column in Table 2, i.e. the level reached for each dimension of Emotional Style by the subjects surveyed. The numerical data obtained from this approach are interpreted and processed by mathematical and statistical methods, materialised by analytical and evaluative approaches, for the items corresponding to each column or each dimension that make up the Emotional Style.

Table 3. gives an overview of the teachers' sample with regard to the level of manifestation of each dimension, according to the four items distributed by columns.

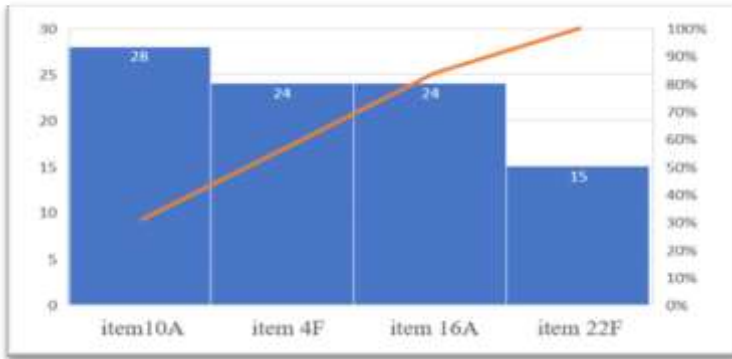
Table 3. Statistical data on the frequency of teachers' level of self-awareness

Column I items	Valid answers	Absolute frequencies (f)	Frequencies relative to 100 (fi)	Valid percentage (p)	Cumulative frequencies (fc)
4	False = 1 point	24	26%	26%	57%
10	True = 1 point	28	31%	31%	83%
16	True = 1 point	24	26%	26%	100%
22	False = 1 point	15	17%	17%	

From the above table we can see that teachers have an average level in terms of Self-awareness, the percentages obtained in the items describing the specific behaviours of this dimension are at an average level. With a percentage of 17% are teachers who have some difficulty in recognizing their own emotions, requiring a longer time to identify them. For the other items, the percentages are very similar, in the middle of the Self-Awareness Spectrum, 31% and 26%

respectively. These individuals most often recognize and identify their emotions and feelings and are attuned to the messages their bodies are sending them. Thus, we can deduce from the answers given by the teachers, according to the score obtained for each item that there is an average level of Self-Awareness.

Figure 1. Histogram, frequency polygon and distribution curve for the data corresponding to the Self-awareness dimension at the teacher level



In the case of this dimension, the curve shows a roughly symmetrical distribution of measured values, with most of the recorded frequencies being polarized in the middle of the Emotional Style rating chart. Studying the numerical data and the percentage expressions in Figure 1., we observe that the majority of the teachers with a cumulative percentage of 83% achieved an average level of Self-Awareness towards a high level, summing up average scores (20►29). For three of the analyzed items, regarding the recognition of own thoughts and feelings a medium level score is obtained, only 17% of them, register low scores (0►19) on the item regarding the extent to which the respondents recognize their emotions according to body cues.

Table 4. Statistical data on the frequency of the Context Sensitivity dimension among primary school teachers

Column II items	Valid answers	Absolute frequencies (f)	Frequencies relative to 100 (fi)	Valid percentage (p)	Cumulative frequencies (fc)
5	False = 1 point	17	24%	24%	41%
11	False = 1 point	12	17%	17%	70%
17	False = 1 point	21	29%	29%	100%
23	False = 1 point	22	30%	30%	

The Context Sensitivity dimension of educational reality reflects the degree to which the emotional and behavioural responses of primary school teachers take account of the social context. We noted earlier that the

dimension of Self-Awareness takes into account tuning with one's own physiological and emotional cues, the dimension of Context Sensitivity reflects teachers' ability to tune to the social environment, more so it involves awareness of the rules of social engagement and their ability to self-regulate according to these rules. From Table 4. we submit to analysis the numerical data and percentage expressions obtained for the measurement of the items corresponding to the dimension of Context Sensitivity at the level of the surveyed teachers. Thus, we observe a decrease in the level compared to the previous dimension, with most of the values being at the lower limit of the average level and towards the low level. For the first two of the items analysed, scores were obtained that fall in the low range of sensitivity to social context (0►19), with teachers obtaining a low score of 12 and 17 points, respectively, and for the other two items the percentages are at a medium level (20►29) with values of 21 and 22 points obtained with regard to teachers' behaviours in relation to others and how they react when another person characterises them in terms of their actions.

Figure 2. Histogram, frequency polygon and distribution curve for the data corresponding to the Context Sensitivity dimension at teacher level



The values extracted from the teachers' responses show an asymmetric distribution, with most of the recorded frequencies being biased to the right side of the diagram, towards the minimum frequency range, so we can infer that the teachers' level of Context Sensitivity is sometimes insufficiently sensitive to the surrounding context and their behaviour towards others may be judged as inappropriate. To a medium to low extent, they know how to modify their responses to the rules and expectations governing different social situations.

According to the numerical data and percentage expressions in Table 5, teachers have a medium to high level when it comes to positive attitude in the classroom. For 3 of the items analysed the percentages

recorded are medium level, 22% and 23%, which can be said that teachers have a fairly good capacity when it comes to maintaining and transmitting positive emotions to students over longer periods of time, and with a percentage of 32% there are teachers who have a high capacity to remain optimistic and sustain positive emotions over time.

Table 5. Statistical data on the frequency of the Perspective dimension among primary school teachers

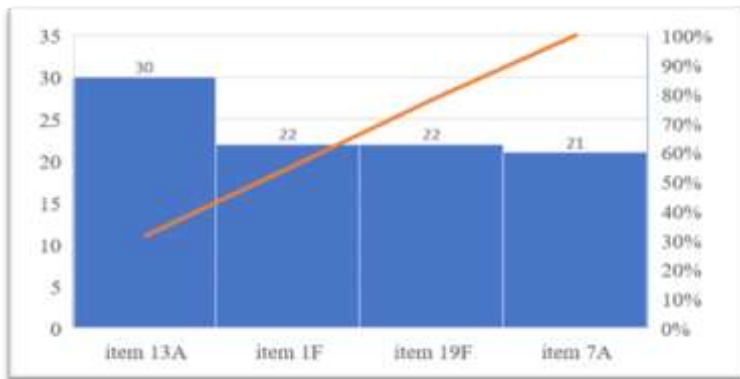
Column II items	Valid answers	Absolute frequencies (f)	Frequencies relative to 100 (fi)	Valid percentage (p)	Cumulative frequencies (fc)
1	False = 1 point	22	23%	23%	45%
7	True = 1 point	21	22%	22%	77%
13	True = 1 point	30	32%	32%	100%
19	False = 1 point	22	23%	23%	

obtained approximately equal scores, from 21% to 26% which means that they scored average on the items that make up the Social Intuition dimension, and with a percentage of 28% are the teachers who scored high, which means that they can read nonverbal cues, facial expressions, body language or tone of voice conveyed by students' emotional states, manifested in the school context.

Table 6. Statistical data on the frequency of the Social Intention dimension among primary school teachers

Column II items	Valid answers	Absolute frequencies (f)	Frequencies relative to 100 (fi)	Valid percentage (p)	Cumulative frequencies (fc)
3	True = 1 point	31	28%	28%	50%
9	False = 1 point	24	21%	21%	76%
15	True = 1 point	29	26%	26%	100%
21	True = 1 point	28	25%	25%	

Figure 3. Histogram, frequency polygon and distribution curve for the data corresponding to the Perspective dimension at the teacher level

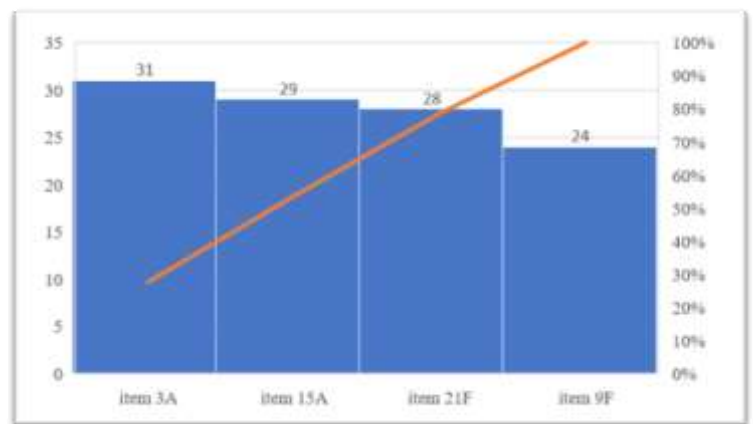


The histogram in Figure 3 shows the roughly symmetrical distribution of teachers' scores on the level of perspective reflected on formal instructional activities in relation to students. With a cumulative frequency of about 76%, teachers record a medium level of values reflecting the maintenance of a positive attitude in school activities, and 32% have a high capacity to maintain positive emotions, being at the high end of the perspective spectrum.

If the Context Sensitivities dimension reflected the teacher's ability to tune in to the social environment, the Social Intuition dimension complements this by reflecting on a personal level and refers to the degree to which a person tuned in to non-verbal social cues. In the table below, we report the numerical data and condensed statistical expressions. According to these measured data, the teachers

The statistical interpretation of the values obtained from the teachers' responses on the level of Social Intuition leads us to identify a relatively symmetrical distribution of the frequencies recorded. From the histogram shown in Figure 4, we can see that all the values recorded lie to the left of the interval with the highest frequency.

Figure 4. Histogram, frequency polygon and distribution curve for the data corresponding to the Perspective dimension at the teacher level



From the figure above, it can be seen that in the case of the first item there was a high score (30 > 40), with 31 points, and in the case of the other items there were scores u average values, but with a high number of points (20 > 29), respectively 29 or 28 points, which denotes that teachers have a high sensitivity to the emotional states of students, also show a high level of empathy and compassion towards them, because they

have the ability to decode and interpret their emotional cues.

Table 7. Statistical data on the frequency of the attention dimension among primary school teachers

Column II items	Valid answers	Absolute frequencies (f)	Frequencies relative to 100 (fi)	Valid percentage (p)	Cumulative frequencies (fc)
6	False = 1 point	35	38%	38%	63%
12	False = 1 point	23	25%	25%	83%
18	False = 1 point	18	20%	20%	100%
24	False = 1 point	15	17%	17%	

The Emotional Style of the teacher also includes the dimension of Attention, even though it is considered a cognitive skill that requires the ability to concentrate, because when certain elements in the environment distract our attention, they overlap an emotional layer and can destroy it even more. Since emotional stimuli "largely control our attention, maintaining a stable internal boundary that allows us to focus calmly and resist distractions is an aspect of Emotional Style" (Davidson & Begley, 2020, p. 121).

With a cumulative percentage of 37% of teachers scoring low (0►19), which means that people who recorded these values may be easily distracted and lack the ability to concentrate when there are various disruptive factors. We consider it appropriate to highlight an additional observation concerning the first category of subjects: 38% scored high having a selective attention which implies teachers' ability to focus on certain features in the environment and ignoring others. This ability allows teachers to successfully eliminate sensory distractions and focus on the essential features. Thus, attention and emotion are closely interdependent, and increased attention is associated with greater emotional balance and well-being. People who are distracted by certain impulses or people who have a wandering mind, called by Kilingsworth and Gilbert (2010) is "an unhappy mind". Therefore, we expect the Attention perspective to be closely related to psychological well-being.

The selected responses for items 6, 12, 18 and 24, using the given quantitative rating scales, show that the highest score recorded is within this dimension, with a very high score (30►40), i.e. 35 points shown graphically in Figure 5. on the left side of the histogram. Most teachers, with a cumulative

percentage of 63% have a high level of attention concentration and have developed the ability to eliminate outside distractions, having a clear focus.

Figure 5. Histogram, frequency polygon and distribution curve for the data corresponding to the Attention dimension at the teacher level



Resilient teachers are characterized by the speed with which they recover from negative events, in the current school context, the Coronavirus pandemic which has led to a restructuring of the educational system, and teachers have had to make a number of changes in the way they teach formal instructional activities. From Table 8., we see that obtaining low scores are associated with good resilience, i.e. good resilience and that person is quick in recovery. A cumulative percentage of 41% of the teachers scored high, which means that they have good resilience skills following negative emotional experiences or traumas, and a cumulative percentage of about 60% are the values obtained by teachers who scored average, reflected by an average ability to bounce back from adverse situations.

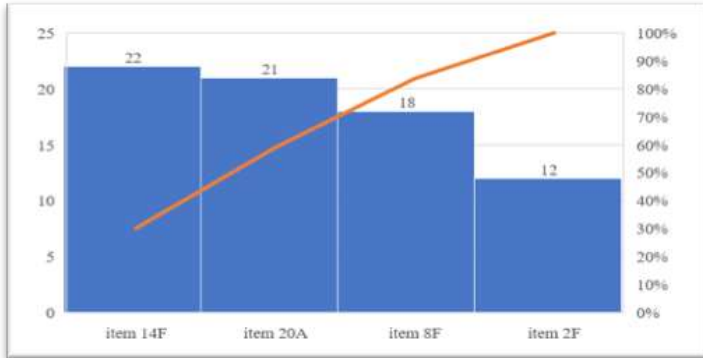
Table 8. Statistical data on the frequency of the Resilience dimension among primary school teachers

Column II items	Valid answers	Absolute frequencies (f)	Frequencies relative to 100 (fi)	Valid percentage (p)	Cumulative frequencies (fc)
2	False = 1 point	12	16%	16%	41%
8	False = 1 point	18	25%	25%	71%
14	False = 1 point	22	30%	30%	100%
20	True = 1 point	21	29%	29%	

The values measured for items 2, 8, 14 and 20 of the questionnaire for primary school teachers show an almost normal/symmetrical frequency distribution curve between the medium and low range which, compared to the other dimensions is interpreted

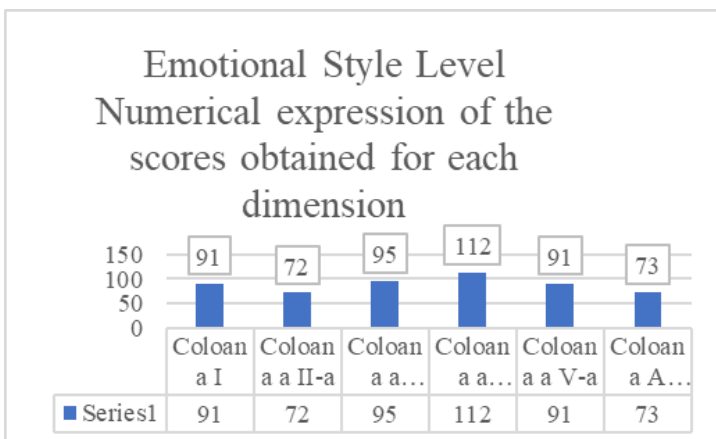
inversely, i.e. high values suggest that a person recovers slowly from negative events and medium or low values are associated with good recovery skills and therefore this person is quite resilient.

Figure 6. Histogram, frequency polygon and distribution curve for the data corresponding to the Resilience dimension, at teacher level



In the comparison diagram in Figure 7. we present the scores for each dimension of Emotional Style obtained by the teachers interviewed. The highest scores are recorded in the fourth column with 112 points, corresponding to the Social Intuition dimension, which means that teachers teaching in primary education are attuned to social cues, showing empathy and compassion towards their students. They are also easily able to read and decode the social cues conveyed through nonverbal language: facial expressions, body language or tone of voice conveyed by students' emotional states, manifested in the school context.

Figure 7. Comparison chart: Numerical expression of the scores obtained for each dimension of Emotional Style, at primary school teachers' level



Teachers' Perspective level is shown in the third column of the chart, with a score of 95 points, meaning that they have a good ability to maintain positive emotions over a longer period of time. In relation to the teaching activity, they have a good ability to create a pleasant atmosphere in the class, to convey positive

feelings of joy, happiness, and to maintain these feelings throughout the educational act. In third place are two dimensions of Emotional Style, with a score of 91 points, namely the Self-Awareness dimension and the Attention dimension. While high values were recorded in the above-mentioned dimensions, the level of the dimensions of Self-awareness and Attention had normal values, recording average scores. Of the six dimensions of Emotional Style, only one of them, i.e. Context Sensitivity, scores low 72 points, which means that, in the educational context, the degree to which the emotional and behavioural responses of primary school teachers take into account the social context is low.

The answers given in the Resilience dimension also score at a medium level. Given that a low score for this dimension indicates a good ability to bounce back from negative events, teachers have an average level of resilience development, so we can infer that they are relatively resilient to risk factors exposed in the school environment.

Figure 8. Areolar diagram: Percentage expression of the frequency of Emotional Style, at the primary school teacher level



Through the areolar diagram in Figure 8. we present an overview of the stratification of the sample of primary school teachers according to the level recorded for each dimension of Emotional Style in relation to formal instructional activity.

5. Conclusions

The high level of teachers' Social Intuition related to the identification and recognition of social cues conveyed by students through emotional states and experiences is identified in 21%, having the highest percentage. The teacher's perspective or ability to induce and maintain a positive attitude during school activities scores 18%. With a percentage of 17%, the teachers who have a medium level of self-awareness, with moderate perception of body signals reflecting

emotions, have a less developed perspective on their emotional life and the level of the Attention dimension, teachers are often distracted by various emotional factors or impulses, which can be an impediment both to the performance of school tasks or to maintaining a balance in the class.

The lowest values are recorded by teachers in the Context Sensitivity dimension, with only 13%. The low level of teachers' sensitivity can be interpreted as a low capacity of teachers to be sensitive to the context. In terms of developing Resilience of teachers, they obtain a medium percentage, having the ability to recover relatively easily after some negative experiences lived at work, either in the teacher-teacher relationship at college level or in the teacher-student relationship. By *developing the specific dimensions of Emotional Style* the teacher improves their *emotional resilience* as well as adopting an effective teaching style so as to influence the socio-emotional climate of the class of students (Seeger & Seeger, 2007).

The teaching of an Emotional Style by the classroom teacher implies the emotional maturation of the personality expressed in emotional skills: *awareness of emotional states, emotional balance and discipline, expression of feelings* reflected in a style of conduct. The emotional experiences conveyed in educational communication have a cognitive, formative and social impact, which is why, as Rime (2007) points out, teachers must competently and professionally expand and amplify both their own emotional spectrum and that of their students. Emotions such as frustration or anger can hinder the teacher from effective classroom management. Also, hesitant teacher behaviour has negative repercussions in relationships with students (Marzano et. al., 2003).

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Kindergarten Teachers' Perception on Preschoolers' Formative Assessment

Roxana Apostolache

Kindergarten Teachers' Perception on Preschoolers' Formative Assessment

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Abstract

Keywords:

formative assessment, kindergarten teachers, qualitative study

Formative assessment is a primary process within the preschool education system because it contributes to the optimization of the instructional actions carried out by the teacher. Working directly with preschoolers need to lead to a constant observation of their evolution, progress, development. Assessment in early childhood should be performed for the primary aim of supplying teachers with useful information to plan more careful children's ongoing development and to involve evaluation strategies that develop rather than threaten children's feelings of self-confidence and positive social attitudes. Kindergarten teachers are important catalyst for developing opportunities to increase preschoolers' abilities, knowledge and validate/improve their performances through formative measures in terms of assessment. This study is conducted to investigate teachers' perceptions on formative assessment in kindergarten. Through a focus group we planned to gather responses of 12 kindergarten teachers, therefore our approach presents results of this analysis. At the same time, present article emphasizes on importance of using different formative instruments and methods in order to facilitate children progress and knowledge development along the way in the didactic process.

Zusammenfassung

Schlüsselworte:

formative Beurteilung; Kindergärtnerinnen; Qualitative Studie

Die formative Beurteilung ist ein primärer Prozess im vorschulischen Bildungssystem, da sie zur Optimierung der vom Lehrer durchgeführten formativen Maßnahmen beiträgt. Die direkte Arbeit mit Vorschulkindern muss zu einer ständigen Beobachtung ihrer Entwicklung, ihres Fortschritts und ihrer Entwicklung führen. Die Beurteilung in der frühen Kindheit sollte mit dem vorrangigen Ziel durchgeführt werden, Lehrern nützliche Informationen zu liefern, um die weitere Entwicklung der Kinder sorgfältiger planen zu können, und Beurteilungsstrategien einzubeziehen, die das Selbstvertrauen und die positive soziale Einstellung der Kinder fördern und nicht gefährden. Kindergärtnerinnen sind wichtige Katalysatoren für die Entwicklung von Möglichkeiten, die Fähigkeiten und das Wissen von Vorschulkindern zu erweitern und ihre Leistungen durch formative Beurteilungsmaßnahmen zu validieren/verbessern. Diese Studie wird durchgeführt, um die Wahrnehmung von Lehrern zur formativen Beurteilung im Kindergarten zu untersuchen. Im Rahmen einer Fokusgruppe wollten wir die Antworten von 12 Kindergärtnerinnen sammeln. Daher stellt unser Ansatz die Ergebnisse dieser Analyse dar. Gleichzeitig betont der vorliegende Artikel die Bedeutung des Einsatzes verschiedener Bildungsinstrumente und -methoden, um den Fortschritt und die Wissensentwicklung der Kinder im Laufe des didaktischen Prozesses zu erleichtern.

1. Introduction

Preschoolers from kindergarten need to have the opportunity in experiencing effective assessment that encourage their learning and development, they have the right to be assessed under formative cases responsive to their requirements. They enter the educational system with specific needs, interests, learning styles and some meanings of the world (Buldu, 2010). On the other hand, parents develop their own perspectives on what is useful for their children and have expectations for learning experiences of their children in the middle of kindergarten classrooms and for evaluation practices used by teacher in order to assess children's competencies.

Therefore, teachers have the responsibility to meet each child needs using objective assessment tools.

Teachers experience various interactions with these children in order to capture the meaning and of what/how they learn as well as how they adapt at world's developmental challenges.

Nowadays, there is an increased interest surrounding the issues of assessment in early childhood. Assessment of children's development and learning in early childhood settings is both informal and conducted in a methodical way, with a focus on evaluating learning as a product, not a process (Krechevsky & Stork, 2000). Early childhood care has been integrated into the wide formal educational system due to educational reform; moreover, it became compulsory before proceeding to primary school. It has been proven that early childhood education is an essential foundation in children life



development, both cognitively and socially (Asare, 2015), especially in today's society dynamic progress. We conclude that every teacher who wants to implement formative assessment must reconstruct the traditional didactic approach to develop skills and practices acquired by his pupils (Black & William, 2010)

2. Theoretical foundation

Formative assessment has been defined as “activities undertaken by teachers—and by their students in assessing themselves—that provide information to be used as feedback to modify teaching and learning activities” (Black & William, 2010, p. 82). Formative assessment aim is primarily to educate and improve child performance, not supervise it (Dixson, 2016). In addition to delivering an ongoing source of data to educators about current preschooler understanding so that they can adjust teaching to maximize children learning, formative assessments are also used to develop instruments and methods to improve child learning (Shepard, 2006).

“Teachers of young children are moving from more traditional strategies of assessing for knowledge and facts to assessing the students' ability to reason and solve problems” (Worham, 2005:13). Formative assessment gathers information about student learning in order to facilitate knowledge development. Teachers are exploring different didactic manners and assess preschoolers to ensure that teaching and learning become more meaningful to both teacher and learner. Formative tools are being used during a lesson or unit of study. It is constantly used to provide descriptive feedback, to track children progress, to make changes into instruction process, to improve formative process. Most frequently used formative methods are observations, homework question and answer sessions, self-evaluations, portfolios, reflections on performance, curriculum-based measurement games, discussions, informal interviews (Lungu et al., 2021). Planned formative assessments also include activities such as quizzes that are assigned to assess child progress.

Furthermore, some studies (Gullo & Hughes, 2011; Pyle et al. 2020) indicate four main priorities for assessment actions in kindergarten: (1) assessment of children learning should be a continuous process; (2) assessment should involve multiple formats (observation, conversations) suitable for different children; (3) evaluation should describe children's learning toward academic standards and developmental targets; (4) assessment must develop a

child-centred approach and developmentally appropriate practices.

When placed in kindergarten, assessment involves collecting evidence of children progress toward curricular goals in order to draw conclusions regarding their achievement (summative assessment). On the other hand, assessment means more than that and we can underline the difference between assessment of learning and assessment as learning (Braund et al., 2021; de Luca et al., 2019).

Assessment for learning and assessment as learning practices are developed to be child centred and involves regulation of their cognitive processes; they are active participants in bridging assessment and learning. Assessment for learning is a process where formative aspects are just a purpose because the focus is on collecting data in the present moment. Assessment as learning is a key function of assessment in the early years as developing learning independence is one of the main aims of kindergarten education (Pyle et al. 2020, p. 2258). When projected to enhance the instructional process, assessment means gathering information on children learning in an ongoing manner in order to develop teaching practices. Also, children can be engaged in monitoring their learning having the teacher feedback in order to support their independence through metacognitive and self-regulation development.

Formative assessment practices are growing in early education policies as core elements of kindergarten learning contexts. Teachers are integrating assessments throughout their teaching because formative assessment represents daily actions implemented by teachers. Therefore, kindergarten teachers are required to integrate evaluation throughout their daily practice in order to identify children's learning objective and assess learning toward academic and developmental standards (Roach et al., 2010). Formative assessment is the process of gathering data about student learning, which results in feedback to adjust instruction and inform student learning on the way. It is important to note that both teachers and students can be active agents throughout formative assessment (Braund et al., 2021).

In kindergarten, formative assessment involves daily practices that enable teachers and preschoolers to observe learning toward standards (conversations about learning intentions, aims, instruments or self-assessment). This kind of practices necessarily involve that teachers will make learning visible (noticing and

naming) by elaborating learning goals, monitoring learning and giving feedback more frequently.

3. Research methodology

Our research aimed to identify kindergarten teachers' perception about the formative assessment used in early education system. This qualitative study was carried out through an exploratory approach, using the focus group method and applying the categorical thematic content analysis. In this regard, we gathered information about formative assessment in kindergarten. Therefore, for each theme we develop some categories that describe the opinion about what formative assessment means.

3.1. Objective

Analysis of preschool teachers' perception about formative assessment in kindergarten.

3.2. Participants

All 12 participating teachers were women with a working experience in preschool between 5 and 18 years. The teaching staff gave their informed consent to participate and they were informed about the data recording and the confidentiality of the data usage.

3.3. Data Collection and Analysis

The focus group is based on the requirement to gather information that will help understanding formative assessment applied in kindergarten. The following stages were completed:

- 1) Develop an organizing focus-group;
- 2) Transcript of discussion;
- 3) Apply the thematic categorical analysis.

3.4. Research Tool and Procedure

First, discussions were preceded by integrating the participants within the group (each of them was asked to introduce themselves). The participants were given a time of 10 minutes for getting to know better the moderator and other group members.

Next, the moderator presented the discussion topic, the reason why the participants were brought together in the focus group, the research topic, the scientific relevance of discussion and usefulness of the obtained results. Participants received assurances regarding the anonymity and confidentiality of information and opinions they expressed. Group discussion lasted between 30-40 minutes. We have developed an interview guide based on open questions that offer the opportunity for the teaching staff to freely express their opinions and attitudes regarding

the proposed subject, questions formulated in close connection with the initially established objectives.

The interview was structured in 5 relevant questions addressed and structured on the following dimensions:

1. Analysis teachers' perceptions regarding the importance of formative evaluation.
2. Identify the advantages of formative evaluation.
3. Describe effective formative assessment methods.
4. Detect disruptive factors in the formative evaluation process.
5. Elaborate solutions through which we can make formative assessment more efficient.

4. Results

A mixed categorical thematic content analysis was created, following the recording of answers to interview guide questions addressed to participants.

Here are the questions and the future themes and categories:

1. Analysis of teachers' perceptions regarding the importance of formative evaluation.
 - What is the importance of preschool formative assessment in kindergarten from your point of view?
 - What are the attributes of an effective preschool formative assessment in your view?
2. Identify the advantages of formative evaluation.
 - What are the advantages and barriers/limitations of formative assessment in kindergarten?
 - How does formative assessment influence children's development/progress?
3. Identify effective formative assessment methods.
 - Describe the most effective formative assessment methods.
 - What effective formative assessment methods are you using?
4. Identify obstacles in fair formative evaluation process.
 - What are the obstacles in conducting an objective formative evaluation?
5. Identify solutions through which we can make the formative evaluation more efficient.

- What are the reasons why some preschoolers do not acquire the minimum knowledge and what methods should be applied to prevent stagnation?
- What solution should be applied to prevent ineffective formative assessment?

Table 1. Theme and categories of the responses to research question 1

Theme	Category	Relevant response/Frequency
Analysis teachers' perceptions regarding the importance of formative evaluation.	Importance of preschool assessment in kindergarten	<ul style="list-style-type: none"> - formative assessment aims to measure children's knowledge in short periods of time and to notice the learning process efficiency; - is a key factor in planning of instructional activities. Through this process, we know clearly from which level we start and which aspects must be followed in order to improve them; - involves designing and organizing instructional activities to assess children's knowledge in order to conduct them towards good results and performances; - in kindergarten, it reflects ways to individualize learning, to facilitate knowledge acquiring, but above all to train younger generation integrating into a dynamic and demanding society; - it creates a link between the completed stage in accomplish pedagogical objectives and the next one; - it helps preschoolers consolidate knowledge through repetition and validation; it stimulates and conducts learning, contributes to self-esteem development and discourages negative behaviours; - encourage teachers to design instruments that facilitate adapting pedagogical content to children's needs, to discover learning gaps and to design remedial activities;
	Attributes of an effective preschool formative assessment	<ul style="list-style-type: none"> - attributes are determined by the person applying the assessment - teachers must take responsibility for pedagogical content to children's needs; - main attribute is to fairly determine child's progress and establish their developmental level; - effective assessment means taking into account other indicators besides cognitive performances, such as behavior, social attitude, emotional development and turning the child into a permanent partner of the educator; - teacher must describe assessment as a playful task, not as a

		punishment.
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Responses given by participants indicated a fundamental role attributed to formative evaluation which is considered a key factor in planning school contents according to the daily learning needs of preschoolers. Also, it is considered to stimulate and conduct learning, encourage self-esteem development and it can be set up as a playful task due to preschooler's age. Teachers reported that formative assessment encourage them to design instruments that facilitate adapting pedagogical content to children's needs, to discover learning gaps and to design remedial activities. Teachers are aware that many social, emotional, intellectual factors can arise in preschoolers' personality development, so that formative assessment has to take into account all these external conditions.

Table 2. Theme and categories of the responses to research question 2

Theme	Category	Relevant response/Frequency
Identify the advantages of formative evaluation	Advantages and limitations of formative assessment in kindergarten	<ul style="list-style-type: none"> Advantage: adapts pedagogical content to actual learning needs (x2); A: improves learning process day by day (x2); A: familiarizes children with different assessment contexts; A: stimulates self-knowledge, self-appreciation; A: develops communication with families; Limit: educators can be influenced by subjective factors (x2), some children are shy or refuse to cooperate; L: does not deliver enough information in order to know the real potential (x2); L: formative assessment only allows short-term predictions about child's cognitive and behavioural development;
	The influence of formative assessment on children's development / progress	<ul style="list-style-type: none"> L: external factors which can influence formative aspects; - formative assessment aims to establish day by day the cognitive and behavioural acquisition level and to design remedial learning activities when necessary (x2); - it gives valuable information about what children need in everyday school interaction; - following the results obtained by preschoolers, it is necessary to establish additional training programs for those with very good academic results and recovery programs for those with poor

	academic results (x2); - influences consists in identifying children's learning competencies, the level of knowledge, skills and socio-cognitive abilities required; - through evaluation, educators prepare the child for a functional integration in school, but also can fundament the bases for following his progress after finishing kindergarten; - help children to recover pedagogical content that was not appropriated.
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Most mentioned advantages surprised the possibility of filling learning gaps on the go, during the teaching process and initiate remedial measures. Regular discussions with families about the child's results intensifies the cooperation between school and parents, an aspect that facilitate complete development of the child personality. On the other hand, some respondents consider that assessment along the way do not deliver enough information in order to know the real child potential.

The formative assessment influence on children's development/progress consists in offering valuable information about what children need in everyday school interaction. Also, teachers reported that following the evaluation results obtained by preschoolers, it is necessary to establish additional training programs according to preschooler's level.

Table 3. Theme and categories of the responses to research question 3

Theme	Category	Relevant response/Frequency
Describe effective formative assessment methods	The most effective formative assessment methods used by teachers in kindergarten	- an objective assessment involves a plurality of methods because when you have a lot of instruments used it accurately captures all the child's abilities; - I most frequently apply didactic game; - observing children during their daily routine represents the organized, systematic, long-term image of children's behaviour in various situations. It involves setting a goal, developing a plan, specifying the tools, recording the data, interpreting them from a pedagogical point of view (x4); - didactic instruments and methods like gallery tour, storytelling chair, pyramid, cube (x2); - practical works, portfolios with children's works (drawings, paintings, collages)

	(x3), verbal evaluations, self-evaluation, didactic play (x4), role-playing games; - day by day pedagogic conversation with verbal feedback (x2); - graphical recording of preferences: allows sampling and interpretation of the data obtained about each child, by highlighting the areas of interest, child preferences, but also the areas where he encounters difficulties; - instruments that mark the progress they have made in small time units. - assessment sheets (x4).
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According to the content analysis, using different assessment instruments for formative aim assures accurate captures all the child's abilities and marking the progress made in small time units. Teachers reported that they use diverse tools for preschoolers, such as: practical works, portfolios with children's works (drawings, paintings, collages), verbal evaluations, self-evaluation, didactic play, role-playing games, assessment sheets, storytelling chair, pyramid method, cube method. Responses included references to planning the formative assessment process: it involves setting a goal, plan developing, specifying the tools, data recording, interpreting them from a pedagogical point of view. Teachers also reported to have used formative assessments such as homework, oral questioning, collection of samples, portfolios and interview guides.

Table 4. Theme and categories of the responses to research question 4

Theme	Category	Relevant response/Frequency
Detect disruptive factors in the formative evaluation process	The obstacles in conducting a fair formative evaluation	- some obstacles could be overestimation or underestimation of results, factors related to organizational environment; - the lack of fairness of the teaching staff who apply the assessment (x2); - assessment tests that are not adapted to age or personal characteristics of preschoolers; - nature of assessment tests, tools used, the educator's expectations; - influence of teacher's general impression of a preschooler knowledge level; - teacher's behaviour to avoid the extremes of the grading scale due to the desire not to make mistakes and not to depreciate the children; - wrong choice of evaluation methods and strategies in relation to the assessment aim;

		<ul style="list-style-type: none"> - some particularities of the teacher-preschooler relationship; - direct influences of the social environment in which children grow; - some influences due to the pedagogical context in which the assessment is carried out; - lack of cooperation between educator and preschoolers.
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Participants' responses indicated multiple obstacles that can interfere with an objective formative assessment process, such as: overestimation or underestimation of results, teaching staff lack of fairness, didactic tools used, the educator's expectations, particularities of the teacher-preschooler relationship, teacher's general impression of a preschooler, instruments not adapted to age or personal characteristics of preschoolers. At the same time, teachers are aware that assessment at early ages involves taking into account the influence of some factors like emotional development or cultural aspects.

Table 5. Theme and categories of the responses to research question 5

Theme	Category	Relevant response/Frequency
Elaborate solutions through which we can make the formative evaluation more efficient	Reasons why preschoolers do not reach the minimum knowledge level	<ul style="list-style-type: none"> - no progress is recorded when preschoolers who are absent a lot (x2), those who are hyperactive (x2) or who have other social problems; - preschooler's medical problems (x2); - intellectual disorders or deficiencies; sensory and motor disorders; visual perceptual disorders; auditory perceptual disorders; language disorders; attention and concentration deficits; impulsivity. - action solutions for teachers and parents: managing time allocated to the child; emphasis on learning and self-control; establishing a clear activity program; using a system of symbolic rewards and sanctions for desirable or undesirable behaviours; using clear addressing formulas; - it is important that the educator makes sure that child's attention is drawn before relevant explanations regarding work tasks are transmitted to him; - increasing time spent with their family;

		<ul style="list-style-type: none"> - lack of adequate intellectual training; - states of fatigue and overwork; - absence of breaks between activities; - non-compliance with the principle of progressive dosing (decreasing the intensity of effort during the day and the week); - large volume of knowledge that must be acquired in a short time;
	Solution applied to prevent ineffective formative assessment	<ul style="list-style-type: none"> - set out the accurate goals, establishing some behaviours that interest us, observe in as varied conditions as possible, different places and different times, avoiding interpretations or subjective labels, taking notes about important new aspects for the child's development; - we can prevent stagnation by setting clear short-term goals, remedial plans tailored to the needs of each preschooler; - remedial instruments (3); - improvement of the formative assessment instruments and methods leads to complete achievement of real school progress; - the formative assessment aim is not to reach certain data, but to improve the educational process; - preschoolers constantly need new and interesting methods, so that they become active in the teaching-learning-evaluation process. Interactive methods create skills, facilitate learning at one's own pace, stimulate cooperation, not competition and are attractive also; - being a fair examiner involves exercise and self-control.

Teachers' responses mentioned as reasons why preschoolers don't achieve minimum knowledge level the following: when they don't attend kindergarten for a long time, those who are hyperactive, who have other social/medical problems, intellectual/sensory/motor/language disorders; attention and concentration deficits; impulsivity. At the same time, they proposed some solution for erasing obstacles in formative assessment: set out the accurate

goals, establishing some behaviours that interest them, taking notes about important new aspects for the child's development, constantly applying new instruments to assess children progress.

5. Discussions

Formative assessments occur in two primary forms: spontaneous and planned. Spontaneous formative assessments are improvisation, such as: (a) when a teacher notice misunderstanding in the body language of child during a class session and discuss about that; (b) when an educator calls on a child to provide an example of a concept just covered; (c) when question and answer sessions are conducted during a lesson (Dixson, 2016). These kind activities and tools provide relevant information about preschoolers' learning in "real time."

Formative assessment should be used during instruction to help students learn material throughout the learning process. Formative assessment develops preschoolers' success on these more summative assessments by providing ongoing and continuous feedback on where children are in their lesson learning path.

Continuous evidence from classroom didactic discourse, observation and analysis of preschoolers' in-process working and social interactions, formal checks afford the diagnostic information teachers and child need to take immediate steps to fill in any gaps and keep children on the pathway to success. The evidence gathering of formative assessment may utilize both formal and informal methods and be more dynamic, interactive and individually oriented than that of summative assessment (Brookhart & McMillan, 2019).

6. Conclusions

Feedback to any preschooler should include specific qualities of their work, with advice on what can be improved and should avoid comparisons with other children. We conclude that the feedback on tests should offer each preschooler guidance on how to work on the improvement and offer them help on the way (Black & William, 2010). Formative assessment needs to be productive and that is the reason why children should be trained for self-assessment starting with kindergarten because this is the way they can understand main purposes of their learning and grasp what they need to do in order to achieve it.

Learning activities in kindergarten have to be developed in terms of the aims that they serve and preschoolers can work efficiently only if opportunities

for them to communicate their growing understanding are set into the planning. Discussion, observation, role play, marking of written work can be used to provide essential information, but it is also important to look at or listen carefully the conversations, the writing and the actions through which preschoolers enhance and expose their understanding level. Also, formative conversation with teacher provides the opportunity to respond and explain all the necessary aspects that has to be improved in the next learning steps.

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The Influence of Embodied Cognition Activities on Early Language Education Approaches for Small Preschoolers

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The Influence of Embodied Cognition Activities on Early Language Education Approaches for Small Preschoolers

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Abstract

Keywords:

embodied cognition activities, early language education, preschoolers, language acquisition, preschool education

Embodied cognition activities involve active interactions that train the motor system, the perceptual system and physical interactions with the proximal environment. In the language education of young preschoolers, these types of activities train young preschoolers in the process of learning new words, their comprehension and correct pronunciation. The article presents the influence exerted by the „Integrated exploitation of sensory-motor stimuli” educational program with an emphasis on capitalizing on embodied cognition activities, in the early language education approaches of small preschoolers. Early language education through this type of activity proves effective because it encourages children to make connections between words and concepts using tactile, visual and motor experiences. This approach helps to develop strong connections between words and their meanings. The methods used were the observation of the language behavior of the preschooler and the psychopedagogical experiment method, and the applied research tools, the observation grid of the language behavior of the preschooler and the educational program „Integrated exploitation of sensory-motor stimuli”. The study involved 98 small preschoolers, aged between 3 and 4 years, from 3 state preschool education units, from the urban and rural areas of Hunedoara County. The three educational units involved in the research are: „Mircea Sântimbreanu” Secondary School Brad, „Flore de Colț” Extended Program Kindergarten Brad and „Crisçior Extended Program Kindergarten”.

Zusammenfassung

Schlüsselworte:

verkörperte kognitive Aktivitäten, frühe Spracherziehung, Vorschulkinder, Spracherwerb, Vorschulerziehung

Verkörperte kognitive Aktivitäten beinhalten aktive Interaktionen, die das motorische System, das Wahrnehmungssystem und physische Interaktionen mit der proximalen Umgebung trainieren. Bei der Spracherziehung junger Vorschulkinder trainieren diese Arten von Aktivitäten junge Vorschulkinder im Prozess des Erlernens neuer Wörter, ihres Verständnisses und der korrekten Aussprache. Der Artikel stellt den Einfluss dar, den das Bildungsprogramm „Integrierte Nutzung sensorisch-motorischer Reize“ mit Schwerpunkt auf der Nutzung verkörperter kognitiver Aktivitäten auf die Spracherziehung junger Vorschulkinder ausübt. Der Sprachunterricht durch diese Art von Aktivität erweist sich als wirksam, da er Kinder dazu ermutigt, mithilfe taktiler, visueller und motorischer Erfahrungen Verbindungen zwischen Wörtern und Konzepten herzustellen. Dieser Ansatz hilft, starke Verbindungen zwischen Wörtern und ihrer Bedeutung zu entwickeln. Als Methoden kamen die Beobachtung des Sprachverhaltens des Vorschulkindes und die psychopädagogische Experimentiermethode zum Einsatz, als angewandte Forschungsinstrumente das Beobachtungsraster des Sprachverhaltens des Vorschulkindes und das Bildungsprogramm „Integrierte Ausnutzung sensomotorischer Reize“. An der Studie nahmen 98 kleine Vorschulkinder im Alter zwischen 3 und 4 Jahren aus drei staatlichen Vorschuleinrichtungen aus städtischen und ländlichen Gebieten des Kreises Hunedoara teil. Die drei an der Forschung beteiligten Bildungseinheiten sind: „Mircea Sântimbreanu“ Secondary School Brad, „Flore de Colț“ Extended Program Kindergarten Brad und Crisçior Extended Program Kindergarten.

1. Introduction

Active sensory, motor experiences and physical interactions with the proximal environment contribute to the development of neural connections in children's brains. Through embodied cognition activities, strong links are created between sensory experiences, words and meanings, pronunciation, which strengthens the understanding and use of language in various contexts.

Identifying terms/expressions difficult for preschoolers to understand, the factors that prevent them from understanding the meaning of new words, and determining the factors that determine the poor pronunciation of new words are essential steps in the successful implementation of embodied cognition activities, helping to create a stimulating and effective learning environment that supports the language



development of young preschoolers. When children feel the texture of an object or are involved in miming and role-playing activities, these experiences contribute to better understanding and retention of associated words and concepts.

2. Theoretical foundation

The concept of embodied cognition was introduced in the 1970s and 1980s by Glenberg in 2010, Price et al. in 2012, and Winkielman in 2015. It aims to highlight how psychological processes are rooted in the human body, particularly through the use of an individual's sensory-motor experiences and social interactions, as per the work of Fuchs in 2009.

The concept of embodied cognition is an innovative research topic within contemporary cognitive science. Although there have been varying views over time on the nature of this phenomenon, the essence of the approach is that psychological processes are influenced by body morphology, sensorimotor systems and emotions (Glenberg, 2010).

Anghelache et al. (2022, p. 125) says „in preschool education, the development of language is pursued through all experiential domains, taking into account the fact that the development of speech is, at the same time, an act of knowledge and that the reality of the young child takes shape through language.”

The role of „embodied cognition” type activities is to influence the way language learning processes are approached for young children in the preschool period. These activities involve the interaction of the motor system, use the senses and involve the body in the process of learning new words, understanding their meaning and developing correct pronunciation. Emphasizing teaching and learning methods that allow students to actively participate in multiple ways in their education process is important to create an educational environment that promotes embodied learning (Ionescu & Glava, 2015).

Educational methods designed to stimulate language development in preschool children can be effectively capitalized by adopting embodied cognition activities. These pedagogical approaches focus on actively engaging the child's whole body and providing tangible physical experiences. They are characterized by interactivity and are based on promoting experimentation and movement as essential ways of learning and developing language in this age group.

Educational methods aimed at developing language among young preschoolers through

embodied cognition activities provide engaging and effective means of stimulating language and supporting language progress. These approaches involve physical and interactive experience, which makes learning a more engaging and memorable experience for children. Through games, movement, tactile experiences and dialogues, children have the opportunity to expand their vocabulary, identify unknown words, recognize their meaning and pronounce them correctly in a natural and fun way. Customizing these methods to suit each child's individual needs and interests is essential to ensure an effective and tailored educational experience.

„During the kindergarten years, children acquire a wealth of knowledge, and speech becomes clear, correct, ensuring the intensive development of thinking” says Șargu (2024, p. 40).

Through embodied cognition activities, language development can be enhanced through the active interactions children have with their environment. Manipulating objects, exploring space, and interacting with other children or adults allow children to learn new words and concepts in a real and meaningful way. This process helps to develop vocabulary, understand the meaning of words and improve communication skills. Embodied cognition language education involves approaching thinking and problem solving in a physical context. Children are challenged to think logically to solve tasks and respond to specific challenges, which can stimulate the development of cognitive skills.

Through sensory-motor experiences and direct manipulation and interaction with objects, more effective information can be retained, and the approach to educating young preschoolers' language is effective. When a preschooler learns through activities that involve movement or sensory stimulation, such as manipulating objects or directly exploring the environment, information can become more accessible in a person's memory through the process of learning and remembering. When a child learns something new, the information is processed and stored in their memory. As this information is reviewed and reinforced through repetition or practice, it becomes more readily accessible in long-term memory. In other words, the information becomes „learned” and is stored in long-term memory, and can be accessed when needed for retrieval and use in different contexts or situations. So the process involves both learning and subsequent accessing of information from memory.

By regularly participating in embodied cognition activities, children can understand terms identified as difficult and correct their pronunciation. These activities involve children in their own learning process by participating in well-planned simulation games and applying techniques that focus on perception and movement, with an emphasis on visual, auditory and tactile aspects.

Active participation of young children in activities involving movement and stimulation of the senses can increase their motivation and involvement in the learning process. Sensory-motor experiences can make the learning process an enjoyable and interactive experience, which encourages young pre-schoolers to be engaged and focused on the subject matter.

Language education approaches through embodied cognition activities involve the integration of physical and sensory experiences. This type of integration is based on the connection between body and language.

3. Research methodology

The following question was sought to be answered:

Can the educational program „Integrated exploitation of sensory-motor stimuli” focusing on embodied cognition activities influence the early language education approaches of small preschoolers involved in the research?

In the research, a within-subjects research design was adopted, in which only the experimental sample was involved, without a control group. The research sample consists of 98 preschool children, 52% girls and 48% boys, attending the small group of three educational establishments: „Mircea Sântimbreanu” secondary school Brad (30.6%), „Floare de Colţ” Brad extended program kindergaten (41.8%), and „Crişcior extended program kindergarten” (27.6%). Parents of preschoolers were informed about their children's participation in this study, and the confidentiality of the data provided was guaranteed.

The method used was observation and the research instrument applied was the observation grid of the preschooler's linguistic behaviour to identify level of word comprehension and to discover the quality of word pronunciation in spontaneous speech, before and after participating in the educational programme.

The psycho-pedagogical experiment method was used in the experimental phase. This involved the

application of the educational program „Integrated exploitation of sensory-motor stimuli” focused on embodied cognition activities.

The educational programme involved ten interactive activities aimed at comprehension of unfamiliar words/expressions identified by the educators as difficult for the preschoolers to understand and activities involving spontaneous word pronunciation.

Explaining the meaning of unfamiliar words/expressions was done by reading ten stories as part of the educational programme. Each story contained words/expressions unknown to the young preschoolers, which contained the following sounds: „C”, „F”, „H”, „J”, „L”, „M”, „P”, „R”, „Ş”, „T”, inventoried by applying the observation grid. Unknown words/phrases were explained using embodied cognition interventions. Thus, the teacher organised a simulation game and the pre-schoolers physically manipulated the materials she provided. At the end of each activity, she re-read the ten stories to see if the meaning of the word/phrase was understood by the young preschoolers.

To mentally simulate the action described by the unknown words/phrases, the pre-schoolers imagined the action implied by the initial reading.

Pronunciation of the words in spontaneous speech was achieved through participation in speech games and physical manipulation of materials provided by the teacher. Together with her they looked in the mirror and carried out gymnastic movements of the phono-articulatory apparatus and breathing exercises for the correct emission of sounds, involving the neural and bodily systems of perception, action and emotion of the young children.

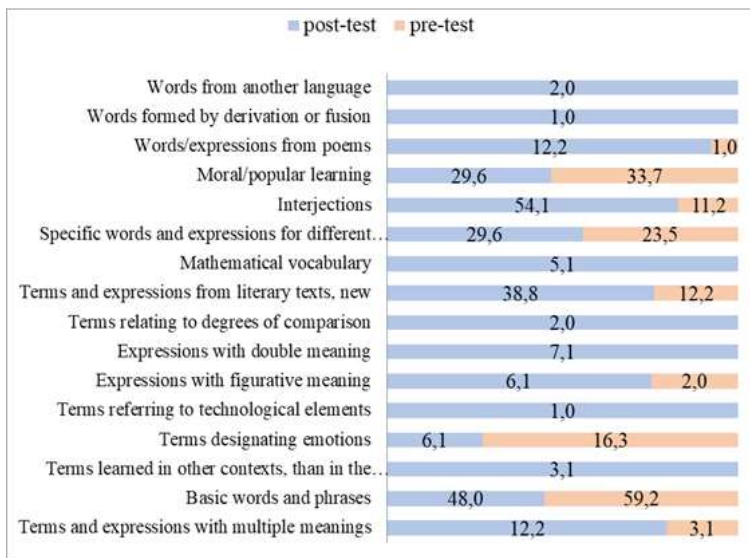
4. Results

Data collected following the application of the observation grid were processed and analyzed using IBM SPSS Statistics 20.0. The grouping and coding of the responses served to carry out the analyses from Figure 1.

In the pre-experimental stage, the most difficult terms for small preschoolers to understand were identified. Some of them refer to interjections such as „Brr”, „Buff”, „Pst”, not being very clear to them in which context they are used (54.1%), basic words and expressions which, although common, are not used very often in conversations, such as brooch, mysterious, distraught (48%), literary terms and expressions from new texts such as friends, boot,

earwig, mud, „kin of kin” (38.8%), moral and popular teachings difficult to decipher by pre-schoolers „to lie down to talk”, „fire and pear were made”, „cheese is for money”, „jerkin”, „the little stump overturns the big cart”, „Don't go to the praised tree with your sack”, „Where the sun doesn't come through the window, the doctor comes through the door!”, „Where there's no head, woe betide the feet”, and words and expressions specific to certain areas that put them in difficulty such as „quilted jacket”, „library”, „roll-up”, „cupboard”, „jagged”, „floor”.

Figure 1. Terms and expressions with multiple meanings



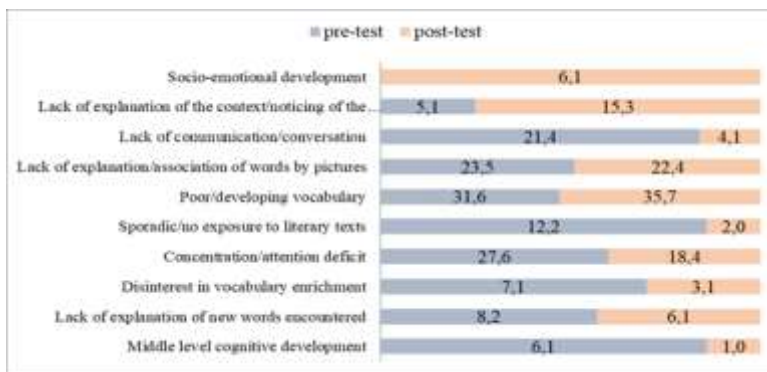
Following the intervention, the biggest changes (difference between post-test scores and pre-test scores) were observed in the comprehension of expressions involving words from the moral/popular teachings domain (+4.1%). Small preschoolers also identified and named words from the emotions domain (+10.2%). Preschoolers, following participation in the educational programme, used new, learned terms in conversations with other partners (+11.2%).

Four terms are mentioned in both the pre- and post-experimental stages, „fleoşc” (18.8%/4.3%), „splash” (12.5%/4.3%), „blockhead” (4.2%/1.4%) and „brr” (3.1%/7.2%), terms that preschoolers are likely to have encountered in other works. The most frequently mentioned moral/popular teachings in the pre-experimental stage are „keep an eye aut” (6.3%), „get in trouble” (3.1%), „rain bucket” (3.1%), „mindful” (2.1%), „uplifting thought” (2.1%) or „take shelter” (4.2%), „sit” (3.1%), while in the post-experimental stage the preschoolers list „to get over your head” (7.2%), „I get stuck” (7.2%), „to learn mind” (7.2%), „early childhood” (2.9%), „to meci” (2.9%) respectively „muddle” (2.9%), „dug” (2.9%).

Table 1. Examples of identified terms/expressions difficult for small preschoolers to understand

	Pre-test	Appearance	Post-test	Appearance
1	Fleoşc	18.8%	Brr	7.2%
2	Splash	12.5%	„To screw up”	7.2%
3	„Keep an eye aut”	6.3%	„I'm getting stuck”	7.2%
4	Very big man	6.3%	Diligent	7.2%
5	Snow	5.2%	Capricious weather	7.2%
6	Brooch	5.2%	Alinated	7.2%
7	Buff	5.2%	„Get a grip on yourself”	7.2%
8	Blockhead	4.2%	„In vain”	7.2%
9	Freak	4.2%	Fierce	7.2%
10	Bâzz- bâzz	4.2%	Fleoşc	4.3%
11	„Take shelter”	4.2%	Splash	4.3%
12	Brr	3.1%	Meadow	4.3%
13	„To make trouble”	3.1%	Very big man	2.9%
14	Mysterious	3.1%	„Weave cloth”	2.9%
15	„It's raining buckets”	3.1%	Silky	2.9%
16	„To sit down”	3.1%	Spider web	2.9%
17	Carefully	2.1%	„To match”	2.9%
18	Giddy	2.1%	„Tender Baby”	2.9%
19	Blushed	2.1%	Booth	2.9%
20	„Uplifting Thought”	2.1%	Blockhead	1.4%

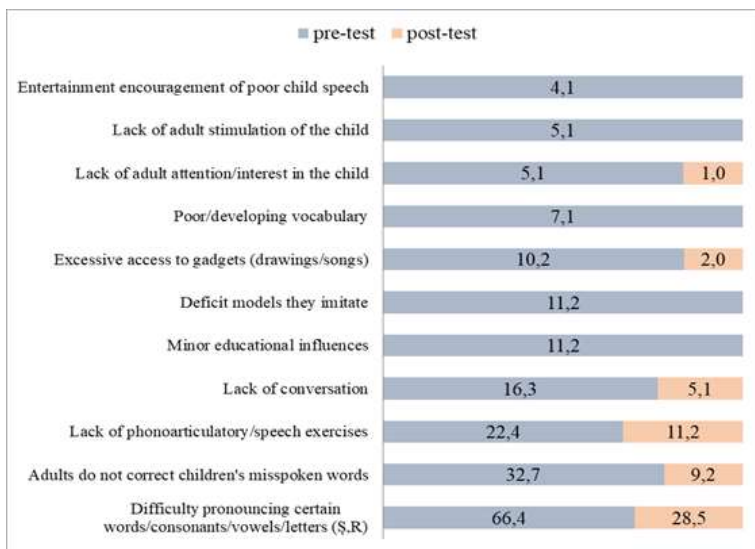
Figure 2. Factors that prevent small preschoolers from understanding the meaning of new words



At the pre-experimental stage, the frequency of factors that prevent small preschoolers from understanding the meaning of new words are: poor vocabulary in the developmental stage (31.6%), lack of concentration and attention from children (27.6%),

lack of explanation/association of words through pictures (23.5%) and lack of parent-child communication/conversation (21.4%). Following the application of the educational programme „Integrated exploitation of sensory-motor stimuli” focused on embodied cognition activities it is observed that the action of the factors preventing preschoolers from understanding new words is reduced (difference between the scores obtained in the pre-experimental stage and the scores obtained in the post-experimental stage). Thus, in the post-experimental stage, the emphasis is on decreasing the lack of parent-child communication/conversation (-17.3%), sporadic exposure to literary texts (-10.2%), lack of concentration/attention to activities (-9.2%), decreasing disinterest in vocabulary enrichment (-4.1%) as well as accessing a new level of cognition (-5.1%).

Figure 3. Factors leading to poor pronunciation of new words in small preschoolers



At the pre-experimental stage, the most frequent factors leading to poor pronunciation of new words in small preschoolers are difficulties in pronouncing some words/consonants/vowels/letters, especially „S” and „R” (66.4%), mispronouncing words (32.7%), lack of phonoarticulatory exercises and diction (22.4%), poor communication or even lack of parent-child conversation (16.3%), minor influences or poor patterns they imitate (11.2%) and last but not least excessive access to gadgets (10.2%).

Following the participation of small preschoolers in the educational program „Integrated exploitation of sensory-motor stimuli”, major decreases (difference between the scores obtained in the pre-experimental stage and the scores obtained in the post-experimental stage) are observed in the frequencies of the variables represented by: poor pronunciation of

words/consonants/vowels/letters („S”, „R”) that put preschoolers in difficulty (-37.9%), adults' non-involvement in correcting children's mispronounced words (-23.7%), lack of phonoarticulatory and diction exercises for clearer pronunciation of words (-11.2%), lack of parent-child conversations (-11.2%), reduction of minor educational influences and poor models they imitate (-11.2%) and decreased access to gadgets (-8.2%).

5. Discussions

To ensure that we obtain reliable and meaningful results, it would be beneficial to extend the duration of the study to monitor the long-term impact of the educational program on language development. This approach would allow us to observe changes and trends over time and better assess the effects of the program.

It would also be advisable to diversify the language education activities included in the program. This could include adopting different teaching and learning strategies as well as integrating modern technology and other additional resources to encourage children's participation and engagement in learning.

To ensure that our results are relevant and applicable to a wider range of contexts, it would be necessary to expand the sample of participants. This would involve recruiting a larger number of children from diverse socio-economic and cultural backgrounds, which would allow us to examine the effects of the program in a wider variety of settings and obtain more representative data.

6. Conclusions

Embodied cognition activities involve small preschoolers actively interacting with content to train the motor system, the perceptual system, and to physically interact with the environment in the process of learning new words, recognizing their meaning, and pronouncing them correctly. The manner in which these types of activities are carried out influences the way in which the language of small pre-school children is educated. They encourage children to make associations between words and concepts using tactile, visual and motor experiences, helping to develop strong connections between words and their meanings.

The responses analysed from the preschool language behaviour observation grid highlight terms/expressions identified as difficult for young preschoolers to understand, factors that directly

influence their approaches to understanding the meaning of new words and poor pronunciation.

If in the pre-experimental stage, factors, terms/expressions difficult to be understood by young preschoolers were identified, in the post-experimental stage, the improvements brought about by the application of the educational programme „Integrated exploitation of sensory-motor stimuli” focused on embodied cognition activities.

The terms/expressions identified as difficult for small preschoolers to understand refer to moral/popular notions/expressions/teachings that they have never encountered before, the limited cognitive level of identifying and naming the emotions they encounter during a day.

Factors that lead to mispronunciation include: difficulties pronouncing words, consonants or vowels, mispronouncing words and poor parent-child conversation.

Factors that prevent small preschoolers from understanding the meaning of new words refer in particular to preschoolers' limited vocabulary, concentration and attention deficits, lack of word-picture associations and parent-child conversation.

This research addresses an unmet need in the education by focusing on the use of embodied cognition activities to improve comprehension and pronunciation of new words among young preschoolers. Until now, preschool education has often been focused on traditional methods that do not put enough emphasis on sensory-motor aspects and on children's active interaction with the contents.

By introducing and implementing this educational program, study brings an innovative approach that focuses on the integral development of children through tactile, visual and motor experiences. This approach is an effective way to help small preschoolers make strong connections between words and their meanings in a way that allows them to actively engage and exercise their motor and perceptual systems as they learn.

The study also brings into focus the factors that influence poor understanding and pronunciation of new words among young preschoolers, thus identifying the specific problems they face and providing concrete solutions to address them.

Therefore, by addressing an unmet need in the field and providing an innovative and effective solution, this research has the potential to significantly

improve language learning and development among small preschoolers. By using embodied cognition activities, teachers can provide preschoolers with active learning opportunities and hands-on experiences that facilitate understanding and retention of information.

Educators can develop personalized educational plans that specifically address the learning needs of preschoolers, focusing on comprehension and correct pronunciation of words in an interactive and engaging way. By understanding the individual needs of preschoolers, teachers can adapt their activities and provide additional support in areas where they are struggling.

Thus, the educational program „Integrated exploitation of sensory-motor stimuli” focused on embodied cognition activities had a beneficial influence on the small preschoolers involved in the study.

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

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Promoting Kindergarten Teachers' Personal and Professional Well-Being Through a Program Based on Positive Psychology

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Promoting Kindergarten Teachers' Personal and Professional Well-Being Through a Program Based on Positive Psychology

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Abstract

Keywords:

personal well-being, professional well-being, kindergarten teachers, positive education, social-emotional learning, occupational stress

This study aims to test the effect of a program intended to promote personal and professional well-being for kindergarten teachers. The program is based on positive psychology and social-emotional learning (SEL) principles. Seventy-seven kindergarten teachers from Israel participated in the study. The research tools used were four questionnaires that had to be filled out at the program's beginning and end. The results indicate that the program was able to promote the personal and professional well-being of kindergarten teachers, lower the level of stress they experience in their work, and increase the degree of job satisfaction. These findings were achieved through practical and applied tools for their daily and professional lives based on the PARMA model of positive psychology and the SEL model. The research findings have an important value in raising awareness of the issue and implementing similar programs as an integral part of the training processes of kindergarten teachers and their professional development processes.

Zusammenfassung

Schlüsselworte:

persönliches und berufliches Wohlbefinden, Kindergärtner, positive Erziehung, sozial-emotionales Lernen, beruflich bedingter Stress

Ziel dieser Studie ist es, die Wirkung eines Programms zur Förderung des persönlichen und beruflichen Wohlbefindens von Kindergärtnerinnen zu testen. Das Programm basiert auf den Grundsätzen/Prinzipien der positiven Psychologie und des sozial-emotionalen Lernens (SEL). Siebenundsiebzig Kindergärtnerinnen aus Israel nahmen an der Studie teil. Als Forschungsinstrumente dienten vier Fragebögen, die zu Beginn und am Ende des Programms ausgefüllt werden mussten. Die Ergebnisse zeigen, dass das Programm in der Lage war, das persönliche und berufliche Wohlbefinden der Kindergärtnerinnen zu fördern, den Stress, den sie bei ihrer Arbeit erleben, zu verringern und die Arbeitszufriedenheit zu steigern. Diese Ergebnisse wurden erreicht, durch praktische und angewandte Werkzeuge/Instrumente für ihr tägliches und berufliches Leben, die auf dem PARMA-Modell der positiven Psychologie und dem SEL-Modell basieren. Die Forschungsergebnisse sind von großem Wert für die Sensibilisierung für dieses Thema und die Umsetzung ähnlicher Programme als integraler Bestandteil der Ausbildungsprozesse von Kindergärtnerinnen und ihrer beruflichen Entwicklung.

1. Introduction

Early childhood education is considered one of the most influential factors for children's development and future. According to studies from the last decades, early childhood experiences can shape behaviors, attitudes, and skills throughout life and affect academic achievements, mental health, and social leadership (Barnett, 2000; Danis et al., 2011; Heckman et al., 2010; Schweinhart et al., 1993).

Kindergarten teachers are at the center of the early childhood education process, by having a crucial role in shaping the children's learning and play environment (Seefeldt & Barbour, 1990). Even though there is indication that their teaching and care quality can be affected by occupational and personal (De Stasio et al., 2017), there is a lack of quantitative

studies examining methods to improve the personal and professional well-being of kindergarten teachers.

2. Theoretical foundation

Personal well-being is a multifaceted concept encompassing subjective experiences, cognitive evaluations, emotional states, and behavioral patterns. Seligman (2002) defines personal well-being as a subjective experience influenced by positive emotions, engagement in meaningful activities, nurturing relationships, finding life purpose, and achieving personal goals. This understanding aligns with the PERMA model, highlighting the interconnectedness of positive emotions, engagement, relationships, meaning, and accomplishment in fostering well-being. Benevene et al. (2018) further elaborate on personal well-being, emphasizing its



association with individual resources that facilitate optimal functioning in the workplace. Components such as life satisfaction, positive self-esteem, and absence of negative influences contribute to an individual's overall well-being.

Keyes (2002) expands the definition of personal well-being to include social aspects, such as social interaction, coherence, self-realization, acceptance, and contribution. This broader perspective underscores the significance of social connections and community engagement in enhancing overall well-being. Barry (2013) emphasizes the interconnectedness between mental health, subjective personal well-being, and physical health. Positive mental health, characterized by self-esteem, self-efficacy, resilience, optimism, autonomy, and positive relationships, is crucial in promoting effective life management and overall functioning. Research suggests that individuals with higher levels of subjective well-being are better equipped to cope with stressors, maintain positive relationships, and adopt healthier lifestyle behaviors, enhancing their physical well-being.

In the context of preschool education, the personal well-being of kindergarten teachers emerges as a critical factor influencing the quality of education provided to young children (Wong & Zhang, 2014). Emotional work, defined as the effort required to manage emotions and display appropriate responses in interactions with children, families, and the community, represents a significant aspect of kindergarten teaching (Cumming, 2017). Teachers' well-being directly impacts their ability to form positive relationships with students, create supportive learning environments, and effectively manage classroom dynamics.

By prioritizing teachers' well-being and addressing their unique challenges, educational institutions can promote a culture of support and resilience, ensuring that teachers are equipped to meet the diverse needs of their students. Professional development programs focusing on stress management, self-care strategies, and emotional regulation can empower teachers to navigate the demands of their profession while maintaining their personal well-being. Additionally, fostering a collaborative and inclusive school culture can enhance social support networks and promote collective well-being among educators.

Professional well-being is a multifaceted construct significantly influencing educators' personal fulfillment, job satisfaction, and effectiveness in

educational roles. By addressing the various dimensions of professional well-being and implementing supportive interventions, educational institutions can create environments that prioritize educators' holistic development and facilitate positive outcomes for both educators and students (Ryff & Keyes, 1995; Warr, 1990). Professional well-being comprises dimensions such as emotional well-being, autonomy, and purpose in life. Professional well-being is integral to educators' job satisfaction, organizational commitment, and overall quality of life (Cumming, 2017; Van Horn et al., 2004). Amidst growing recognition of the importance of educators' well-being, there is a need for comprehensive understanding and interventions to support their holistic development and mitigate potential stressors within educational settings.

Educators' well-being is influenced by factors such as job satisfaction, motivation, efficiency, and achievement, which collectively shape their experiences in the workplace (Yildirim, 2014). Moreover, the quality of relationships with students, colleagues, and administrators significantly impacts educators' sense of fulfillment and job engagement (Cefai & Askeff-Willians, 2017). Central to professional well-being is the concept of job satisfaction, characterized by positive emotions, experiences, and perceptions related to work (Aziri, 2011). High levels of job satisfaction contribute to educators' sense of fulfillment, productivity, and overall well-being, thereby enhancing their effectiveness in educational roles (Royer & Moreau, 2016).

The educational environment plays a pivotal role in shaping educators' well-being and job satisfaction. Initiatives aimed at enhancing professional well-being should focus on improving communication skills, teaching techniques, and classroom management strategies (Yildirim, 2014). A positive classroom climate characterized by caring relationships, empathy, and mutual respect fosters educators' sense of belonging and supports their holistic development (Cefai & Askeff-Willians, 2017). Additionally, promoting personal well-being and mental health is imperative for creating a supportive organizational culture that prioritizes educators' well-being and fosters collaboration among staff members (Miri et al., 2023).

Despite the critical role of educators in fostering student success, they face numerous challenges that impact their well-being and job commitment. Factors

such as increased workload, role ambiguity, and limited resources contribute to stress and burnout among educators (Pete, 2016). Moreover, high turnover rates exacerbate instability in educational settings, hindering continuity in learning and relationships (Holochwost et al., 2009). Addressing these challenges requires comprehensive strategies prioritizing educators' well-being, including interventions to mitigate stressors, enhance job satisfaction, and promote supportive workplace climates (Jeon & Ardeleanu, 2020).

3. Research methodology

The main goal of this study is to examine the impact of the training program on the personal and professional well-being of the kindergarten teachers (KTs) and their kindergarten climate using quantitative research tools. Proving the program's impact can support policymakers in integrating the content into academic studies of new KT's and professional training during their years of work, relying on supporting theories. The purpose of the study was to check the state of personal and professional well-being of the KT's and their perceptions of their kindergarten climate in the experimental and control groups before and after the training program. The perceptions collected before the training aimed to serve as relevant information in the process of developing and implementing a training program based on various tools developed from the principles of positive psychology and Social-Emotional Learning theories. At the end of the training program implementation, the aim was to re-examine the state of well-being and the kindergarten climate using quantitative and qualitative tools. The current paper presents only the quantitative data analysis.

The study examined four research questions: (1) Would significant differences be found between the two study groups (experimental, control) in the KT's personal well-being following the intervention program? (2) Would significant differences be found between the two study groups (experimental, control) in the KT's professional well-being following the intervention program? (3) Would significant differences be found between the two study groups (experimental, control) in the kindergarten climate where the KT's work following the intervention program? (4) Do the KT's demographic characteristics and grouping variables significantly contribute to the explained variance (EPV) of their improvement in their personal and professional well-being as well as in the climate of their kindergarten?

3.1. Participants

The participants were KT's for children ages 3-6 in practice, in regular preschool education and special education settings in Israel, in different roles (kindergarten management, substitute KT, part-time basis), and at varied levels of seniority ranging from young to senior KT's. Seventy-seven female KT's aged 24 to 63 were recruited to participate in the research. The KT's were randomly assigned into two study groups: 38 KT's in the experimental group that underwent a training program aiming to empower KT's personal and professional well-being using Positive Psychology and SEL tools to promote a positive kindergarten climate, and 39 KT's in the control group that answered the questionnaires.

3.2. Research Tools

In order to examine KT's personal well-being, two questionnaires were administered: *Subjective Happiness Scale* (SHS) and *Satisfaction with Life Scale* (SWLS).

The SHS was developed by Lyubomirsky and Lepper (1999). In this study, the officially translated Hebrew version was used. SHS assesses the level of subjective happiness using a 7-point Likert scale. This scale was used in numerous studies in Israel and other countries worldwide. The scale includes four items. Higher scores on this measure indicate higher subjective happiness. The internal consistency of Cronbach's alpha for the four items of SHS was high $\alpha = .75$.

The SWLS, which stands for the Satisfaction With Life Scale, is a concise questionnaire comprising five items, initially developed by Diener et al. (1985). It aims to assess an individual's overall cognitive evaluations of their life satisfaction. Previous research has established the scale's strong internal consistency, with a coefficient alpha of .87 (Diener et al., 1985; Lucas et al., 1996). It has also demonstrated both convergent and discriminant validity when compared to other measures of subjective well-being, independent ratings of life satisfaction, self-esteem, clinical symptoms, neuroticism, and emotionality (Diener et al., 1985; Lucas et al., 1996). The Cronbach's alpha value for the five questionnaire items was high $\alpha = .81$.

In order to examine the KT's professional well-being, the Teacher Subjective Wellbeing Questionnaire (TSWQ) was administered. Renshaw et al. (2015) developed the TSWQ to assess the positive psychological well-being of teachers in their

workplace. The scale's initial structure was established based on van Horn et al. (2004) theory, which emphasizes three key indicators of teacher well-being: self-efficacy, positive emotional states, and nurturing relationships. These three concepts were incorporated into the envisioned subscales of the TSWQ, specifically, self-efficacy, Joy of Teaching, and School Connectedness. The items related to teaching efficacy were adapted from those found in the Teachers' Self-Efficacy Beliefs Scale (Caprara et al., 2006). Similarly, the school connectedness items were fashioned after items used in the California School Climate Survey (Furlong et al., 2014). The internal consistency of Cronbach's alpha for all eight questionnaire items was high $\alpha = .77$ and $\alpha = .76$ for the School Connectedness Scale and Teacher Efficacy Scale factors, respectively.

In order to examine the kindergarten climate, a questionnaire from the Teaching and Learning International Survey (TALIS) was administered. In 2018, the OECD conducted the TALIS research, which is an international study aimed at investigating the perspectives of teachers and school principals. The study focused on their views concerning aspects such as teaching and learning, classroom instructional methods, and the professional development of educators. Furthermore, in 2018, the TALIS research was extended by RAMA (Israel's National Authority for Measurement and Evaluation in Education) to include kindergartens in Israel. In this study, only specific sections of the questionnaire were utilized to explore factors such as KT's personal and professional background and various indicators associated with evaluating the kindergarten climate and job satisfaction. The internal consistency of Cronbach's alpha for the 14 items of the KT stress level questionnaire was high $\alpha = .87$. The internal consistency of Cronbach's alpha for the 13 items of the KT satisfaction level questionnaire was high $\alpha = .77$.

3.3. Procedure

Training programs in education are a form of training for students that can help them develop key competencies and enhance their performance in the workplace (Marinescu & Toma, 2013). Axinte and Pruteanu (2021) state that training programs are essential to teachers' professional development strategy since they provide professional growth and development opportunities. By participating in training programs, teachers can learn new skills, techniques, and strategies to improve their teaching practices and better meet the needs of their students

(Axinte & Pruteanu, 2021). KT are in charge of promoting social-emotional activity from an early age. Therefore, it is essential to be provided training in this field, integrating these programs into their educational curriculum, if possible. Acquiring theoretical and procedural knowledge in these areas will provide the teachers with tools, skills, and feelings of personal well-being, resilience, management, and empowerment. There is widespread agreement that professional development and training in socio-emotional learning will improve educational frameworks' short- and long-term climate, leading to realizing personal, academic, and social potential and successful results. The effective way to instill these skills is through long-term training .

This research included the development of a training program for KT's named "Positive Education for Well-being (PEW)." In order to attract KT's to register for the training program, it was necessary to define a more attractive name for the program. The name "Happiness (in Kindergarten) Begins in You" (HBY) was created to reflect the essence of the program and its core principles. The purpose of the HBY program is to provide KT with tools of positive psychology (Seligman & Csikszentmihalyi, 2000), SEL (Social and Emotional Learning) (CASEL, 2005), mindfulness, and Compassionate Communication (Rosenberg, 2003). This tool aims to empower KT and promote an optimal kindergarten climate originating from feelings of personal and professional well-being and resilience. This training program includes various techniques, from personal coaching to actively sharing experiences and using different learning styles. In the first stage, KT's established these behaviors personally, developed skills, practiced communication tools, and engaged in critical thinking. KT's gained a sense of ownership and naturalization of the developmental processes affecting the children, the staff, the parents, and the community.

The goals of the HBY Program:

1. To deepen the familiarity with Positive Psychology and Social and Emotional Learning theories.
2. To provide practical and applicable tools for KT to increase personal and professional well-being and self-awareness, manage positive relationships and personal resilience, and achieve personal and professional goals.
3. To create guided reflective experiences in order to promote an optimal kindergarten climate.

4. To create a supportive professional group to build joint knowledge in this field .

The program was held at a training center for educators and delivered by the researcher for 30 academic hours during the school year. The structure was a 17-week training program with ten lessons, 135 minutes each (3 academic hours). The program included Emotional self-awareness, Emotional management and proactivity, and emotional discourse in kindergarten. Signature strengths according to Positive Psychology. Empathy, giving, and helping others. Effective, respectful, and empowering communication. The power of gratitude. At each meeting, the kindergarten teachers learned how Positive Psychology can be integrated into the kindergarten's work and ongoing learning program and into the annual curriculum.

4. Findings

Before examining the research questions and hypotheses, we examined whether the dependent variables were normally distributed. Shapiro-Wilk tests were conducted for each study group. The dependent variables were the KT scores on the SHS, SWLS, and TSWQ questionnaires and four measures from the TALIS questionnaire (kindergarten climate, work climate, job satisfaction, and stress level). The results indicated that the dependent variables in each study group were not normally distributed ($p < .05$). Therefore, we conducted non-parametric and parametric analyses. The Mann-Whitney tests served as the non-parametric analyses to examine the differences between the two groups on each measure. The Wilcoxon test served as the non-parametric

analysis in order to examine the differences in the performance on all measures between the two-time points among each study group. The findings and the significance level of the non-parametric analyses matched the findings of the parametric analyses. Therefore, we presented the findings of the ANOVA analyses and reported the means and standard deviations instead of the means and sum ranks among each group.

4.1. Differences in the kindergarten teachers' personal and professional well-being and their kindergarten climate

Before examining the first three research questions and hypotheses, a t-test analysis was conducted to examine whether the two study groups differed in their personal and professional well-being and kindergarten climate at T1 (see Table 1).

As seen in Table 1, the KT efficacy scale (TES) score was significantly higher among the teachers assigned to the control group than those assigned to the experimental group. According to the first three research hypotheses, the KT will report a significantly higher level of personal and professional well-being and a more positive kindergarten climate due to the training program compared to the KT from the control group. In order to examine these research hypotheses, one-way ANCOVA analyses were conducted for each study measure. In each analysis, the independent variable was the study group, the covariate variable was the KT scores on each measure at T1, and the dependent variable was the KT scores on each measure at T2 (See Table 2).

Table 1. Mean, SD, and t-values of the KTs' personal and professional well-being and their kindergarten climate by group (N = 77, df = 75)

	Control (n = 39)			Experiment (n = 38)			t	p	ES ¹
	M	SD	Range	M	SD	Range			
Personal well-being									
SHS	5.60	0.90	3.75-7.00	5.50	0.83	3.75-7.00	.50	.620	0.12
SWLS	5.51	0.82	3.60-7.00	5.12	0.96	3.20-6.80	1.93	.057	0.44
Professional well-being – TSWQ									
SCS	3.21	0.53	2.00-4.00	2.99	0.74	1.00-4.00	1.54	.128	0.34
TES	3.47	0.45	2.25-4.00	3.28	0.37	2.25-4.00	2.12	.037	0.46
*									
Kindergarten climate									
Stress level	3.01	0.72	1.29-3.93	3.06	0.46	2.14-3.86	.31	.754	0.08
Satisfaction level	3.01	0.39	1.62-3.69	2.88	0.32	2.08-3.46	1.57	.121	0.36

* $p < .05$; ¹ES = Effect Size of Cohen's d

Table 2. Mean, SD, and F-values of the KT's personal and professional well-being and their kindergarten climate by group and time ($N = 77$, $df = 75$)

	T1		T2			F-values - ANCOVA		
	M	SD	M	SD	M.E ¹	F	p	η_p^2
Stress level								
SHS	5.60	0.90	5.37	0.86	5.35	9.82**	.002	.12
	5.50	0.83	5.82	0.82	5.85			
SWLS	5.51	0.82	5.30	0.97	5.21	6.97**	.010	.09
	5.12	0.96	5.57	0.69	5.66			
Professional well-being – TSWQ								
SCS	3.21	0.53	3.16	0.60	3.13	8.38**	.005	.10
	2.99	0.74	3.45	0.47	3.48			
TES	3.47	0.45	3.38	0.54	3.33	10.78**	.002	.13
	3.28	0.37	3.63	0.37	3.68			
Kindergarten climate								
Stress level	3.01	0.72	3.11	0.57	3.12	6.14*	.016	.08
	3.06	0.46	2.83	0.59	2.82			
Satisfaction level	3.01	0.39	3.05	0.39	3.04	.17	.677	.00
	2.88	0.32	3.06	0.29	3.07			

* $p < .05$, ** $p < .01$; ¹M.E = Mean Estimated

Table 2 shows significant differences between the two KT groups in their personal and professional well-being at T2, controlling over these measures at T1. In line with our hypotheses, the KT in the experimental group reported a higher level of personal and professional well-being at T2 compared to the KT in the control group. A paired sample t-test, examining the differences between the two time points in each group, indicated that only the KTs from the experimental group reported an improvement in their personal and professional well-being. The Cohen's d effect size indicated a medium effect of the training program for the SHS, SWLS, and SCS measures ($d = 0.43 - 0.56$) and a high effect for the TES measure ($d = .81$).

Regarding the two measures of the kindergarten climate, a significant difference was found between the two KT groups in their stress level at T2, controlling over this measure at T1. In light of our hypotheses, the KT assigned to the experimental group reported a lower stress level at T2 compared to the KTs assigned to the control group. A paired sample t-test, examining the differences between the two time points in each group, indicated that only the KTs from the experimental group reported a decrease in their stress

level at work. The Cohen's d effect size indicated a medium effect of the intervention for the stress level measure ($d = 0.42$). Finally, no significant difference was found between the two KT groups in their satisfaction level at T2, controlling this measure at T1. Nevertheless, the paired sample t-test, examining the differences between the two-time points, indicated that only the KTs from the experimental group indicated an improvement in their satisfaction from working at the kindergarten. Cohen's d effect size indicated a medium effect of the training program for the satisfaction level measure ($d = 0.55$).

4.2. The contribution of the kindergarten teachers' background characteristics and the grouping assignment to the EPV of their improvement of the target variables

In order to examine the fourth research hypothesis, hierarchical regression analyses were conducted. In the first step of the regression model, the teachers' background characteristics were entered in a stepwise manner. In this manner, only variables that contributed significantly to the EPV were entered into the regression model.

In the second step of the regression model, the grouping assignment was entered into the regression

model stepwise. This variable was entered only in the second step of the regression for two reasons. First, significant differences between the two study groups were found in KT's country of birth and residence area distribution. As a result, we aimed to control these differences between the two study groups and examine the contribution of the grouping assignment to the

EPV of the improvement on the levels of personal and professional well-being and the kindergarten climate beyond these differences. Second, we desired to examine the unique contribution of the grouping assignment beyond the contribution of the teachers' background characteristics (see Table 3).

Table 3. Results of hierarchical regressions for the KT's personal and professional well-being and their kindergarten climate by the teachers' background characteristics and the grouping assignment (N = 80)

Explained variables	Steps	Explanatory variables	B	SE.B	β	R ²	ΔR ²
Improvement in Personal Well-Being							
SHS	1	Job at the kindergarten ¹	-.47	.22	-.24*	.056*	---
	2	Job at the kindergarten ¹ Group ²	-.46 .56	.21 .18	-.23* .33**	.168***	.112**
SWLS	1	---	---	---	---	---	---
	2	Group ²	.66	.20	.36**	.128**	---
Improvement in Professional Well-Being							
SCS	1	Residence ³	.44	.19	.26*	.068*	---
		Residence ³	.44	.18	.26*		
		Job at the kindergarten ¹	-.40	.19	-.23*	.123**	.054*
	2	Residence ³	.23	.20	.14		
		Job at the kindergarten ¹	-.39	.18	-.23*		
		Group ²	.41	.18	.28*	.184**	.061*
TES	1	Residence ³	.31	.14	.25*	.063*	---
	2	Residence ³ Group ²	.09 .43	.15 .13	.07 .39**	.185***	.121**
Improvement in Kindergarten Climate							
Stress level	1	---	---	---	---	---	---
	2	Group ²	-.31	.15	-.24*	.060*	---

*p < .05, **p < .01; ¹Job at the kindergarten: 0 = Not a manager, 1 = Kindergarten manager; ²Group: 0 = Control, 1 = Experiment; ³Residence: 0 = Not in a city, 1 = Living in a city.

As seen in Table 3 and in line with the ANCOVA results, the grouping variable contributed significantly to the EPV of all measures (between 6%-12.8%). The positive β coefficients indicated that KTs assigned to the experimental group reported significantly higher improvements in all measures than those assigned to the control group.

Regarding the first step of the regression model, i.e., the job at the kindergarten (whether the participant is the kindergarten manager or not) contributed significantly to the EPV of the SHS and SCS

measures, with negative β coefficients. These results indicated that the KT who were not the managers improved their subjective happiness (SHS) and school connectedness (SCS) compared to KTs who were managers. In addition, the KT's residence (whether the teacher resided in a city) contributed significantly to the EPV of both professional well-being measures (SCS and TES), with positive β coefficients. These results indicated that the KT who lived in a city improved their professional well-being compared to KTs who did not live in a city. It should be noted that

although the percentage of KT residing in a city was significantly higher among the experimental group, the grouping assignment contributed significantly beyond this demographic variable.

5. Discussions

The purpose of the study's second phase was to examine the effect of the PEW training program on the personal and professional well-being of KT and the perception of the climate of their kindergarten. Another purpose was to examine the contribution of the demographic data on the personal and professional well-being of the KT and their effect on the climate of their kindergarten. In order to achieve this, questionnaires were given to the two research groups (the experimental group that went through the PEW training program and the control group) at two-time points, before and after the training program.

The results indicated significant differences in the personal and professional well-being between the experimental group and the control group after the PEW training program. The KTs in the experimental group reported an improvement in their personal and professional well-being indicators. These findings are consistent in accordance with the theories of positive psychology and social-emotional learning on which the program was based, that intrapersonal skills, self-awareness, interpersonal skills, social conduct, and communication provide educators with tools to maintain personal and professional resilience, reduce the degree of burnout and enable personal and professional development and growth (Ergas & Avisar, 2022).

Another aim was to examine whether there is a significant difference in the kindergarten climate between the KTs who went through the training program and the control group. In this part of the study, two leading indicators were used to examine the kindergarten climate: the KT's stress level and job satisfaction. In accordance with the research hypothesis, which assumes that there will be a significant difference in the kindergarten climate between the two research groups, in these two indicators, the KT in the experimental group reported a significant decrease in the level of stress and an increase in the level of job satisfaction.

The stress in KT's work is influenced, according to Korczyński (2018), by various factors, including didactic and administrative responsibility of the kindergarten, lack of social recognition of the profession, low financial compensation, dealing with children with developmental problems that require

special support, and physical difficulties such as working in a constantly noisy environment. According to Jeon et al. (2018), reducing the feeling of stress contributes a lot to the quality of activities in the kindergarten and to a positive kindergarten climate. Friedman-Krauss et al. (2014) claim that moderate stress levels in preschool teachers were associated with the perception of a more positive classroom atmosphere. However, high and low stress levels were associated with a less favorable emotional environment. Their study suggests that well-regulated teachers are more likely to create a positive emotional environment in the classroom. Therefore, reducing stress levels is crucial for professional advancement and the kindergarten climate.

The second indicator that affects the kindergarten climate is the level of job satisfaction. According to Kume (2022), job satisfaction is influenced by the work environment, measured by factors such as systemic support, working conditions, relationships between colleagues, and workload. The study of Tatalović Vorkapić and Velan (2023) links job satisfaction and a positive kindergarten climate. In accordance with previous research findings, our current findings indicate that the PEW training program improved the participants' job satisfaction in the experimental group.

Another objective of the study was to examine the relationship between demographic data and the PEW training program's impact on KT's personal and professional well-being and their perceptions of the kindergarten climate. Consistent with the research hypothesis, which assumes that demographic data will impact the results of the PEW training program, the study has found that the PEW training program had a more significant impact on KT in those roles that do not include kindergarten management. In Israel, there are KT who work in several kindergartens, one day a week in each kindergarten. These KT are known as "supplementary KTs".

6. Conclusions

The results of the current studies are supported by concepts presented in the literature. The first concept is the need for belonging, in accordance with the Social Determination theory (Deci & Ryan, 2000), which specifies three basic needs for boosting motivation – self-efficacy, autonomy, and the need for belonging. According to Huppert and So (2013), resilience, one of the foundations of personal well-being, is based on the three needs of the Social Determination theory. KTs who are not in

management roles have a lower sense of belonging than managing KT because of their multiple affiliations. Belonging to a KT group and the close conversation created in the group can offer them a sense of belonging and connection to the KT community in general and the experimental group in particular. The second concept is social recognition. Supplementary KTs receive lower social recognition for their role than the managing KT, negatively affecting job satisfaction. According to Korczyński (2018), social recognition is essential for reducing stress, which contributes to improving the quality of education (Jeon et al. (2018; Jennings et al., 2020). The third concept refers to the level of pressure and responsibility. One can assume that the level of pressure and responsibility of supplementary KTs is lower due to their role. The PEW training program provided them with a sense of meaning in their work, reflected in the unique content they acquired.

In terms of identified limitations of the research, it is important to mention that the participants' sample was selected as a convenience sample of the researcher. The KT's choice to participate in the training program was based on their knowledge and openness to the topics of the training program or the recognition of their need for those tools. Also, answering questionnaires implies a certain degree of subjectivity and it can be influenced by external personal and professional factors that constantly change and can provide a biased answer when filling out the questionnaire, affecting the results. Therefore, backing up the research with additional qualitative data is essential for gathering relevant information on the target variables.

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Navigating the Maze: Parental Alienation, Self-Esteem and Parenting Styles

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Navigating the Maze: Parental Alienation, Self-Esteem and Parenting Styles

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Abstract

Keywords:

parental alienation, self-esteem, parenting styles

This study examines the interplay between childhood parental alienation, adult self-esteem, and parenting styles experienced during upbringing. The sample comprises 125 Romanian participants (76% female, 24% male), aged 21 to 59 (M= 33.8, SD= 8.88). Distinct datasets were formed based on the absence of either parent during childhood, enabling separate analyses for mother-child and father-child relationships. Results reveal a statistically significant negative association between childhood parental alienation and adult self-esteem. Moreover, a significant positive correlation is found between experiencing democratic parenting during childhood and current self-esteem. The study also demonstrates that the authoritarian parenting style only moderates the relationship between parental alienation and self-esteem within the father-child relationship, albeit at a low to moderate level of influence. Conversely, this effect is not observed within the mother-child relationship. These findings have been further analyzed in the context of current research on the topic, thus contributing to the comprehension, prevention and management of parental alienation, its impact on adult self-esteem, and the promotion of healthier parent-child relationships

Zusammenfassung

Schlüsselworte:

Elterliche Entfremdung, Selbstwertgefühl, Erziehungsstil

Diese Studie untersucht das Zusammenspiel zwischen elterlicher Entfremdung in der Kindheit, dem Selbstwertgefühl im Erwachsenenalter und den Erziehungsstilen, die während der Kindheit erlebt wurden. Die Stichprobe umfasst 125 rumänische Teilnehmer (76% weiblich, 24% männlich) im Alter von 21 bis 59 Jahren (M= 33.8, SD= 8.88). Basierend auf dem Fehlen eines Elternteils während der Kindheit wurden getrennte Datensätze gebildet, um getrennte Analysen für die Mutter-Kind- und Vater-Kind-Beziehungen zu ermöglichen. Die Ergebnisse zeigen eine statistisch signifikante negative Assoziation zwischen der elterlichen Entfremdung in der Kindheit und dem Selbstwertgefühl im Erwachsenenalter. Darüber hinaus wird eine signifikante positive Korrelation zwischen der Erfahrung einer demokratischen Erziehung in der Kindheit und dem aktuellen Selbstwertgefühl festgestellt. Die Studie zeigt auch, dass der autoritäre Erziehungsstil nur die Beziehung zwischen elterlicher Entfremdung und Selbstwertgefühl innerhalb der Vater-Kind-Beziehung moderiert, wenn auch auf einem geringen bis moderaten Einflussniveau. In der Mutter-Kind-Beziehung ist dieser Effekt hingegen nicht zu beobachten. Diese Ergebnisse wurden im Kontext aktueller Forschung zu diesem Thema weiter analysiert, wodurch sie zum Verständnis, zur Prävention und zum Management von elterlicher Entfremdung beitragen, zu deren Auswirkungen auf das Selbstwertgefühl im Erwachsenenalter und zur Förderung gesünder Eltern-Kind-Beziehungen.

1. Introduction

Parental alienation involves intentional acts by one of the parents to create a separation between the child and the other parent. Typically, parents engage in alienation because they believe it will help them maintain a closer relationship with the child after a separation or divorce. By convincing the child that spending time with the other parent is unsafe or that the other parent doesn't love them as much, the parent engaged in alienation aims to gain advantages regarding child custody, establishing residence, the schedule of personal connections, and ultimately, the significant time they will spend with the child.

In the specialized literature (Johnston & Sullivan, 2020), it has been noted that such attempts can have significant and long-lasting negative effects on

children, especially on their self-esteem. Additionally, in cases where parental alienation is proven, this aspect can influence the decision regarding parental authority/custody of the children, as well as their placement with the rejected parent. Some of the actions that can lead to these consequences include various alienating behaviors from one party, such as blaming the other parent for the separation or divorce, telling the child that the other parent was violent or dangerous in some way, making negative comments about the other parent, involving the minor in separation or divorce proceedings, etc.

This study delves into exploring how the childhood experience of parental alienation influences the present-day self-esteem of adults. This inquiry is



crucial as strong self-esteem is linked to improved mental well-being (Sowislo & Orth, 2013), academic achievement (Di Giunta et al., 2013), effective stress management (Lo, 2002), and reduced occurrence of external behavioral issues (Teng et al., 2015).

2. Theoretical foundation

2.1. Parental Alienation

The commonly used definitions of parental alienation refer to a child being encouraged by one parent (referred to as the alienator or favoured parent) to reject contact with the other parent (referred to as the rejected, alienated, target, or unfavoured parent), thereby destroying the relationship between the unfavoured parent and the child (Darnall, 2010; Gardner, 2002).

Furthermore, for parental alienation to be present, it is essential that the child had a normal relationship with the alienated parent before the alienation occurred (Lowenstein, 2002).

In classic cases of parental alienation, the alienating parent typically exhibits a certain level of psychopathology and/or significant sociopathy (Gardner, 2002), as they consciously engage in alienating behaviours, disregarding the destructive impact on the child.

However, it is possible that the alienating parent may not be aware of the significant distortions in the child's perceptions and thinking regarding the rejected parent (Friedlander & Walters, 2010).

According to Gardner (1985), Parental Alienation Syndrome (PAS) is defined as follows:

".../ Its primary manifestation is the campaign of denigration against one parent, a campaign that has no justification. It results from the combination of indoctrination (brainwashing) activities by the favoured parent and the child's own contributions to the denigration of the target parent. In cases where there is genuine abuse and/or neglect by the target parent, the child's hostility may be justified, and the explanation of Parental Alienation Syndrome does not apply." (Gardner, 1985).

This definition highlights three factors: brainwashing actions by the alienating parent, situational factors, and the child's own contributions (Visu-Petra et al., 2016). Another important factor, according to this theory, is time, meaning that the more time the alienating parent has with the child, the higher the likelihood that their alienation efforts will succeed.

Some authors (Fidler et al., 2013; Harman, 2016) argue that parental alienation should be considered a form of child abuse or even a form of family violence. They assert that the favoured parent abusively wields power over the other parent by controlling the child's contact. This model is based on the hypothesis that there is an abusive power dynamic at play and emphasizes the importance of recognizing this type of violence in the family context.

As a result, clinical studies and some extensive empirical studies describe disturbed and disruptive behaviours from favoured parents, often characteristic of borderline and narcissistic psychopathology (Eddy, 2010). Favoured parents are more likely than rejected parents to exhibit controlling and coercive behaviours, poorly regulated bursts of anger, paranoid traits, and parenting styles that encourage enmeshed relationships between parent and child, such as invasive and infantilizing behaviours (Garber, 2011).

Based on research on 1000 child custody disputes, Clawar and Rivlin (2013) identified that programming/indoctrination by the favoured parent is the primary dynamic behind child alienation and consider it a psychologically abusive behaviour. Kelly and Johnston (2001) also agree that the behaviours of the favoured parent constitute emotional abuse of the child.

Furthermore, Romanian legislation also includes parental alienation in the category of "child abuse," as defined by Law no. 272 of June 21, 2004, on the protection and promotion of children's rights ("Law 272/2004"). According to Article 94 of Law 272/2004, "child abuse" is defined as "any voluntary action of a person who is in a relationship of responsibility, trust, or authority towards the child, which endangers the life, physical, mental, spiritual, moral or social development, bodily integrity, physical or mental health of the child, and is classified as physical, emotional, psychological, sexual, and economic abuse."

2.2. Self-esteem

Self-esteem is typically defined as the overall positive evaluation a person has of themselves (Rosenberg et al., 1995). Rosenberg recognized as one of the pioneers in the field of self-esteem, emphasized that high self-esteem involves self-respect and a sense of one's own worth. Sedikides and Gregg (2003), in line with Rosenberg's perspective, described self-esteem as the subjective perception or evaluation a person has of their own worth.

Brown et al. (2001) distinguish three ways in which the term "self-esteem" is used: (a) global self-esteem or trait self-esteem - referring to how individuals typically feel about themselves, i.e., feelings of self-affection; (b) self-evaluation - referring to how individuals assess their various abilities and characteristics, and (c) state self-esteem - referring to momentary emotional states, for example, a person might say their self-esteem increased after getting a promotion, or another person might say their self-esteem decreased after a divorce.

Similarly, Branden (1969) proposed that self-esteem consists of two fundamental elements: (a) self-efficacy, which reflects the confidence in one's capacity to reason, acquire knowledge, make choices, and navigate challenges effectively, and (b) self-respect, which embodies the conviction in one's entitlement to happiness and the belief that individuals inherently deserve respect, love, and the pursuit of fulfilment in life.

The results of the meta-analysis conducted by Orth et al. (2018), which synthesizes available longitudinal data on average changes in self-esteem, showed that average levels of self-esteem increased from the age of 4 to 11, remained stable between the ages of 11 and 15, increased significantly up to the age of 30, continued to rise until the age of 60, peaked at the age of 60, and remained constant until the age of 70. Self-esteem slightly decreased until the age of 90 and declined more pronouncedly until the age of 94.

2.3. Parenting styles

Baumrind (1966, 1967, 1971) is generally regarded as a pioneer in the research on parenting styles. Her research significantly contributed to the understanding of different parenting styles and their impact on child development. She emphasized the importance of both parental demands (control) and responsiveness (affection) in child rearing. Based on these criteria, Baumrind (1966) identified and described three primary parenting styles: authoritative (i.e., democratic), authoritarian, and permissive, highlighting the positive outcomes associated with authoritative parenting.

Regarding the criterion of parental control, according to a meta-analysis conducted by Power (2013), two factors were identified. The first (identified in seven studies) reflects highly directive and often critical parental behaviour (such as orders, restrictions, negative comments, and threats), while the second (identified in four studies) reflects forms of

control that promote autonomy (such as suggestions, offering choices, cooperation, and encouragement). These types of control align with what Baumrind (1971) termed authoritarian and authoritative control practices, and what other authors (Hughes et al., 2004) referred to as parent-centered control and child-centered control.

Recent findings (Chen et al., 2000) suggest disparities in parenting styles between fathers and mothers. Maternal warmth emerged as a significant factor in fostering emotional adjustment, whereas paternal warmth was notably linked to subsequent social and academic achievements. Additionally, indulgence from fathers, rather than mothers, was found to be a significant predictor of children's challenges in adjustment.

3. Research methodology

3.1. Research design

The cross-sectional correlational study aimed to investigate the relationship between childhood parental alienation, adult self-esteem, and parenting styles (authoritative, authoritarian, and permissive) experienced during childhood. In the first stage, the study intends to analyze the connection between parental alienation (independent variable) and current self-esteem (dependent variable), as well as between parenting styles (independent variable) and current self-esteem (dependent variable). Additionally, in a second stage, the study has tested the moderating effect of parenting styles within the relationship between childhood parental alienation (independent variable) and adult self-esteem (dependent variable).

The objectives and hypotheses of the study involved examining the relationship between childhood parental alienation, parenting styles experienced during childhood, and adult self-esteem. Given that the authoritarian parenting style may contribute to increased conflicts and ineffective communication between parents (Deslandes et al., 2019; Reitman et al., 2002), the study has also investigated the manner in which this parenting style interacts within the relationship between childhood parental alienation and adult self-esteem.

In order to increase the specificity of the analyses and better understand the relationship between the variables, the sample has been divided in two: the first group aimed to investigate the participant's relationship with the father, whilst the second evaluated the one with the mother. Therefore, the following hypotheses were formulated:

H1: Childhood parental alienation towards the father has a statistically significant negative relationship with self-esteem in adulthood.

H2: Father's democratic parenting style during childhood has a statistically significant positive relationship with self-esteem in adulthood.

H3: Father's authoritarian parenting style moderates the relationship between childhood parental alienation and self-esteem in adulthood.

H4: Childhood parental alienation towards the mother has a statistically significant negative relationship with self-esteem in adulthood.

H5: Mother's democratic parenting style during childhood has a statistically significant positive relationship with self-esteem in adulthood.

H6: Mother's authoritarian parenting style moderates the relationship between childhood parental alienation and self-esteem in adulthood.

3.2. Procedure and participants

Participants were recruited from the online environment, through social media platforms (Facebook, WhatsApp), in the period of April - May 2023, mainly from among the students of the Faculty of Psychology and Educational Sciences at the University of Bucharest. They were invited to complete an online form, created using Google Forms, with questions marked as mandatory to eliminate the risk of incomplete responses. The form included three scales regarding the analyzed variables, namely parental alienation, current self-esteem, and parenting styles.

In the initial section of the form, participants gave their consent to participate in the study and for the processing of personal data in accordance with the Regulation (EU) 2016/679 of the European Parliament and of the Council dated 27 April 2016 concerning the safeguarding of individuals regarding the processing of personal data and the free movement of such data, and the repeal of Directive 95/46/EC (General Data Protection Regulation or GDPR).

In the second part, they completed a section regarding socio-demographic data: gender, age, place of origin, level of education, own relational status, parents' relational status, quality of parents' relationship, and the presence of parents during childhood and adolescence. In the third part, they completed the scales corresponding to the three studied variables. Regarding the scale on parental alienation and parenting styles, participants responded

to items about the behaviors of each parent separately - mother and father.

The convenience sample included in this study consisted of 125 participants from Romania, with 76% being female (N=95) and 24% being male (N=30), aged between 21 and 59 years old. Most of the participants came from urban areas, accounting for 86.4% (N=108).

Based on the *a priori* power analysis conducted using G*Power 2.1.9.7 software (Erdfelder et al., 2009), the required number of participants to achieve a statistical power of .95 and a medium effect size is 111 individuals. The only exclusion criterion was a minimum age of 18, which was met by all participants.

Based on the absence of either the father or mother during childhood (up to 18 years), two separate samples were formed - one sample for the analysis of research variables in the context of the participant's relationship with the father, and one for investigating constructs within the participant's relationship with the mother.

3.3. Instruments

A custom questionnaire was crafted for the study, comprising 58 questions. These encompassed: (a) basic demographic information, consisting of five questions, and three questions about the participants' parents; (b) retrospective accounts of exposure to parental alienation behaviors, with 20 items; (c) current self-esteem, with 16 items; and (d) parenting styles of the parents, with 33 items.

The initial scale employed in the questionnaire was The Baker Strategies Questionnaire (Baker & Chambers, 2011), comprising 20 items focused on experiences of parental alienation behaviors. These behaviors were described as "actions the parent (mother/father) could have done during childhood and adolescence." The items were drawn from studies on adults suffering from "Parental Alienation Syndrome" (Baker, 2007) and investigations involving parents worried that the other parent was trying to alienate the child from them (Baker & Darnall, 2006).

Participants were requested to assess the frequency of their encounters with these behaviors separately for each parent, which affected their relationship with the other parent, both from the mother and from the father, using a 5-point Likert scale, namely 1 (never), 2 (rarely), 3 (sometimes), 4 (often), and 5 (always). In other words, there was a separate scale for each of the two parents, with items

adjusted accordingly depending on the targeted parent (e.g., "Retained or prevented phone messages, letters, cards, or gifts from my father that were meant for me", "Encouraged me to ignore or consider less important the rules, values, and authority of my mother").

The second scale included in the questionnaire was the Self-Liking, Self-Competence Scale - Revised (SLCS-R), developed by Tafarodi & Swann (1995), comprising two sub-scales aligned with the dual dimensions of self-esteem: Self-Competence and Self-Liking. Each sub-scale has 8 items, with both positive and negative items balanced, with a total of 16 items. Participants were requested to indicate the degree of their agreement with general statements reflecting a high or low level of self-competence and self-liking. Their responses were evaluated using a 5-point Likert scale, spanning from 1 (strongly disagree) to 5 (strongly agree).

The final scale integrated into the questionnaire concentrated on parenting styles was the Short Version of the Parenting Styles and Dimensions Questionnaire (PSDQ - SV) developed by Robinson et al. (1995, 2001). This questionnaire is based on the democratic, authoritarian, and permissive parenting styles developed by Baumrind (1968, 1971). The democratic style included three dimensions, each with five items: Connection/Warmth and Support, Regulation/Reasoning or Induction, and Granting Autonomy/Democratic Participation. The authoritarian style included three dimensions, each with four items: Physical Coercion, Verbal Hostility, and Non-Reasoning/Punitive and the permissive style comprises a single dimension, consisting of five items related to Indulgence. Participants provided responses to questions on a 5-point Likert scale: 1 (never), 2 (sometimes), 3 (about half the time), 4 (very often), and 5 (always), for each parent separately, namely, mother and father.

4. Results

4.1. Descriptive Statistics

Table 1. Sample characteristics for the full sample

	n	%
Gender		
Female	95	76
Male	30	24
Provenance		
Urban	108	86.4
Rural	17	13.6
Education		
High school	25	20
Undergraduate studies	54	43.2

Master studies	43	34.4
Doctorate	3	2.4
Marital status		
Single	15	12
In a relationship	47	37.6
In a complicated relationship	1	.8
Married	56	44.8
Divorced	5	4
Living with partner	1	.8
The parents' marital status:		
Not separated or divorced before the participant turned 18 years old	106	84.8
Separated or divorced before the participant turned 18 years old	19	15.2
The quality of the relationship between parents:		
During the most fraught time, the relationship was not that bad	70	56
During the most fraught time, the relationship was extremely bad	55	44
The presence of parents:		
Both parents were present during childhood (18 years old)	115	92
At least one parent was absent during childhood (18 years old)	10	8

Table 1 presents sample characteristics for the full sample. However, in order to accurately assess the relationship between the participant's self-esteem in adulthood and the two variables pertaining to their childhood: parental alienation and parenting style, further analyses were conducted on two groups. The first one aimed to investigate the participant's relationship with the father (n=110), whilst the second evaluated the one with the mother (n=114).

4.1.1. Descriptive Statistics – Group 1: the relationship with the father

Tabel 2. Sample characteristics

	n	%
Gender		
Female	84	76.4
Male	26	23.6
Provenance		
Urban	93	84.5
Rural	17	15.5
Education		
Highschool	23	20.9
Undergraduate studies	51	46.4
Master studies	34	30.9
Doctorate	2	1.8
Marital status		
Single	14	12.7

In a relationship	40	36.4
In a complicated relationship	1	0.9
Married	50	45.5
Divorced	4	3.6
Living with a partner	1	0.9
The parents' marital status:		
Not separated or divorced before the participant turned 18 years old	104	94.5
Separated or divorced before the participant turned 18 years old	6	5.5
The quality of the relationship between parents:		
During the most fraught time, the relationship was not that bad	67	60.9
During the most fraught time, the relationship was extremely bad	43	39.1
The presence of parents:		
Both parents were present during childhood (18 years old)	108	98.2
At least one parent was absent during childhood (18 years old)	2	1.8

Tabel 2 presents sample characteristic for Group 1 – the relationship with the father.

Table 3. Means, Standard Deviations, psychometric properties and normality

	M	SD	Cronbach α	Skewness	Kurtosis
Parental alienation (towards the father)	29.6	12.8	.94	2.38	6.67
Self-esteem	53	11.6	.91	-.46	.23
Authoritarian parenting style (father)	24.7	10.9	.93	1.18	1.02
Permissive parenting style (father)	10	2.67	.28	.47	.20
Democratic parenting style (father)	35.7	17.3	.97	.75	-.59

Table 3 displays the Means and Standard deviations for the relationship with the father across the five analysed variables, along with the internal consistency of the scales and the distribution indices. The reliability was adequate for all variables, except the permissive parenting style which was excluded from further statistical analyses. Regarding the parametric nature of the data, the values for Kurtosis and Skewness for all variables, except parental alienation, support the assumption of normality. As a result, the association between parental alienation and the other variables has been investigated using the Spearman analysis of correlation.

4.1.2. Descriptive Statistics – Group 2: the relationship with the mother

Table 4. Sample characteristics

	n	%
Gender		
Female	87	76.3
Male	27	23.7
Provenance		
Urban	97	85.1
Rural	17	14.9
Education		
Highschool	24	21.1
Undergraduate studies	52	45.6
Master studies	36	31.6
Doctorate	2	1.8
Marital status		
Single	14	12.3
In a relationship	43	37.7
In a complicated relationship	1	0.9
Married	50	43.9
Divorced	5	4.4
Living with a partner	1	0.9
The parents' marital status		
Not separated or divorced before the participant turned 18 years old	104	91.2
Separated or divorced before the participant turned 18 years old	10	8.8
The quality of the relationship between parents		
During the most fraught time, the relationship was not that bad	66	57.9
During the most fraught time, the relationship was extremely bad	48	42.1
The presence of parents		
Both parents were present during childhood (18 years old)	110	96.5
At least one parent was absent during childhood (18 years old)	4	3.5

Table 4 presents sample characteristic for Group 2 - the relationship with the mother.

Table 5 presents the Means and Standard Deviations for the relationship with the mother across the five analysed variables, as well as the internal consistency of the scales and the distribution indices. The reliability was adequate for all variables, except the permissive parenting style which was excluded from further statistical analyses. Regarding the parametric nature of the data, the values for Kurtosis and Skewness for all variables, except parental alienation, support the assumption of normality. As a result, the association between parental alienation and the other

variables has been investigated using the Spearman analysis of correlation.

Table 5. Means, Standard Deviations, psychometric properties and normality indices

	M	SD	Cronbach α	Skewness	Kurtosis
Parental alienation (towards the mother)	25.4	8.17	.92	2.88	10.9
Self-esteem	53.4	11.7	.91	-.46	.22
Authoritarian parenting style (mother)	26.8	10.1	.91	.86	.09
Permissive parenting style (mother)	11.4	2.97	.43	.59	-.03
Democratic parenting style (mother)	41.9	16.5	.96	.20	-.97

4.2 Inferential Statistics

4.2.1 Inferential Statistics - Group 1: the relationship with the father

Table 6. Correlations for Study Variables for the relationship with the father (Pearson correlation coefficient)

Variable	1	2	3
1. Self-esteem	-		
2. Authoritarian parenting style (father)	-.12	-	
3. Democratic parenting style (father)	.34***	-.32***	-

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

Table 7. Correlations for study variables (Spearman correlation coefficient)

Variable	1
1. Parental alienation	-
2. Self-esteem	-.30**
3. Authoritarian parenting style (father)	.22*
4. Democratic parenting style (father)	-.40***

The correlations among the investigated variables are presented in Table 6 and Table 7. A positive statistically significant association between the father's democratic parenting style and the participant's self-esteem in adulthood has been identified ($r = .34$, $p < .001$) (Table 6), supporting hypothesis 2. A negative statistically significant correlation between self-esteem and parental alienation ($r = -.30$, $p < .01$) (Table 7) has also been identified, providing evidence for hypothesis 1.

Table 8. Moderation estimates – the moderator role of father's authoritarian parenting style on the relationship between parental alienation towards the father and self-esteem

Dependent variable	Predictor	B	SE	95% Confidence Interval		Z	p
				Lower Limit	Upper Limit		
Self-esteem	Parental alienation	-.25	.08	-.40	-.09	-3.12	.002**
	Authoritarian parenting style (father)	-.09	.09	-.27	.09	-.99	.32
	Parental alienation * Authoritarian parenting style (father)	.02	.00	.01	.04	3.06	.002**

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

Table 9. Simple Slope analysis: the effect of the predictor (parental alienation) on the dependent variable (self-esteem) at different levels of the moderator (father authoritarian parenting style)

	B	SE	95% Confidence Interval		Z	p
			Lower Limit	Upper Limit		
Average	-.25	.08	-.41	-.08	-2.93	.003**
Low (-1SD)	-.56	.14	-.83	-.28	-4	<.001***
High (+1SD)	.05	.12	-.19	.30	.45	.65

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

A moderation analysis was performed, and the results are presented in Table 8 and Table 9. The results indicate that parental alienation towards father has a statistically significant effect on self-esteem ($\beta = -.25$; $Z = -3.12$, $p < .01$), and although the father's authoritarian parenting style has an insignificant effect on the latter ($\beta = -.09$; $Z = -.99$, $p > .05$), there is a significant interaction effect ($\beta = .02$; $Z = 3.06$, $p < .01$) (Table 8). Consequently, the father's authoritarian parenting style serves as a partial moderator in the relationship between parental alienation and self-esteem. Specifically, at a low and medium level of the moderator, the father's authoritarian parenting style has a significant effect on the self-esteem registered in adulthood ($\beta = -.56$; $Z = -4$, $p < .001$) ($\beta = -.25$; $Z = -2.93$,

$p < .01$) (Tabel 9). Therefore, these results partially support hypothesis 3.

4.2.2. Inferential Statistics - Group 1: the relationship with the mother

Table 10. Correlations for Study Variables for the relationship with the mother (Pearson correlation coefficient)

Variable	1	2	3
1. Self-esteem	-		
2. Authoritarian parenting style (mother)	-.23*	-	
3. Democratic parenting style (mother)	.34***	-.56***	-

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

Table 11. Correlations for study variables (Spearman correlation coefficient)

Variable	1
1. Parental alienation	-
2. Self-esteem	-.23*
3. Authoritarian parenting style (mother)	.36***
4. Democratic parenting style (mother)	-.27**

The correlations among the variables investigated concerning the relationship with the mother are displayed in Table 10 and Table 11. A positive statistically significant association between the mother's democratic parenting style and the participant's self-esteem in adulthood has been identified ($r = .34$, $p < .001$) (Table 10), as well as a negative statistically significant correlation between the latter and mother's authoritarian parenting style ($r = -.23$, $p < .05$) and parental alienation ($r = -.23$, $p < .05$) (Table 11). These results support both hypothesis 4 and 5.

An exploratory moderation analysis was further conducted, with the results presented in Table 12. The results indicate that parental alienation towards mother has a statistically significant effect on self-esteem ($\beta = -.31$; $Z = -2.34$, $p < .05$), as well as the mother's authoritarian parenting style ($\beta = -.23$; $Z = -2.32$, $p < .05$). However, the interaction variable has an insignificant effect on self-esteem ($\beta = .01$; $Z = 1.60$, $p > .05$). Consequently, the mother's authoritarian parenting style does not act as a moderator in the relationship between parental alienation towards the mother and self-esteem in adulthood.

Table 12. Moderation estimates- the moderator role of mother's authoritarian parenting style on the relationship between parental alienation directed towards the mother and self-esteem

Dependent variable	Predictor	B	SE	95% Confidence Interval		Z	p
				Lower Limit	Upper Limit		
Self-esteem	Parental alienation	-.31	.13	-.57	-.05	-2.34	0.01*
	Authoritarian parenting style (mother)	-.23	.10	-.44	-.03	-2.32	.02*
	Parental alienation * Authoritarian parenting style (mother)	.01	.01	-.00	.03	1.60	.11

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

Table 13. Simple Slope analysis: the effect of the predictor (parental alienation towards mother) on the dependent variable (self-esteem) at different levels of the moderator (mother's authoritarian parenting style)

	B	SE	95% Confidence Interval		Z	p
			Lower Limit	Upper Limit		
Average	-.31	.13	-.57	-.04	-2.32	.02*
Low (-1SD)	-.48	.19	-.86	-.10	-2.48	.01*
High (+1SD)	-.14	.14	-.42	.14	-.96	.33

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

Table 13 illustrates that at a low level of mother's authoritarian parenting style, alienation towards the mother has a statistically significant effect on self-esteem in adulthood ($\beta = -.48$; $Z = -2.48$, $p < .05$). At a moderate level, the effect is also statistically significant ($\beta = -.31$; $Z = -2.32$, $p < .05$), but not at a high level of the moderator ($\beta = -.14$; $Z = -.96$, $p > .05$). Given that the interaction effect is not statistically significant, the mother's authoritarian style does not serve as a moderator in the relationship between alienation towards mother and self-esteem in adulthood. Therefore, the results do not support hypothesis 6.

5. Discussions

The results support the first and fourth hypothesis, parental alienation experienced during childhood, towards both father and mother, has a significant, though of reduced intensity, association to self-esteem in adulthood. This could be explained by the existence of various covariates, the participants having experienced different life events and encountered situations that influenced their self-image by the time they reported their self-esteem. Even though the intensity of the connection is not strong, its mere existence suggests the importance of a person's relationship with their parents during childhood, as the nature of this interaction influences outcomes in adulthood.

These findings align with the study conducted by Johnston et al. (2005), as well as clinical observations indicating that alienated children tend to experience more difficulties, exhibit greater emotional dependence, possess lower social competence, and display problematic self-esteem (either low or defensively high).

The second and fifth hypothesis is also supported by data, the democratic parenting style for both parents presenting a positive significant association to self-esteem in adulthood. The result promotes and supports further this parenting style. These results are congruent with findings from other studies (Baumrind, 1991; Lamborn et al., 1991; Steinberg et al., 1994), which suggest that the democratic parenting style consistently correlates with favorable outcomes in children's development. Such outcomes include psychosocial competence (e.g., maturity, resilience, optimism, autonomy, social competence, self-esteem), as well as academic achievements.

The third hypothesis is only partially confirmed, as the authoritarian parenting style moderates the association between parental alienation and self-esteem solely within the participant-father dyad group. The results from the second group, that analyzed the relationship with the mother, could not support hypothesis 6.

This result would suggest that the child-parent dynamics differs for each parent. A person seems to be more susceptible to experiencing certain outcomes derived from parental alienation in the case of an authoritarian father compared to a mother with the same parenting style. However, the association between the mother's authoritarian style and self-esteem would indicate that the participants whose interaction with the mother was characterized by an

authoritarian parenting style tend to have a lower self-esteem in adulthood.

These latter results are in line with findings from other studies (Hoeve et al., 2008; Steinberg et al., 1994; Williams et al., 2009; Wolfradt et al., 2003), suggesting that an authoritarian parenting style consistently correlates with adverse outcomes in children's development. Such outcomes include aggression, delinquent behaviors, somatization, depersonalization, and anxiety.

6. Conclusions

Research on this topic can provide additional clarifications on the mechanisms through which parenting styles and parental alienation affect the current self-esteem of adults, contributing to the development of psychological and social theories in this field. Additionally, the results of studies can strengthen and validate existing theoretical models, providing a solid foundation for future research and the development of appropriate interventions and policies.

Understanding parenting styles and their influence on child development can empower parents to adopt more effective approaches and foster healthier relationships with their children. Furthermore, research findings can contribute to understanding, preventing, and managing parental alienation, its influence on the current self-esteem of adults, as well as promoting healthier parent-child relationships.

Future research directions could focus on conducting additional studies on various more representative samples (children, preadolescents, adolescents, adults, predominantly from families with divorced/separated parents). Continuing research on this topic would contribute to the theoretical and practical development of the phenomenon of parental alienation, understanding the psychological, familial, and social processes underlying it, as well as the development of effective practices and interventions to address issues related to parental alienation and its impact on self-esteem. Additionally, further studies on the role of parenting styles, especially the democratic parenting style, in the healthy development of the child are warranted.

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Civic Conscience, the True Educational Ideal in John Dewey and Jean Piaget

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Civic Conscience, the True Educational Ideal in John Dewey and Jean Piaget

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Abstract

Keywords:

civic conscience, democracy, educational ideal

In a world heavily challenged by new historical and technological developments, the civic conscience of the individual must regain a defining importance in the education process. As the culmination of efforts to shape the new generations, it reinstates democratic values in schools, so that we can find them later in society. Here, I will illustrate that two great philosophers of education, John Dewey and Jean Piaget, have already shown that educational systems should primarily aim towards civic conscience, even though neither of them uses the term explicitly. New solutions must be sought to reintegrate society into schools as an educational material, to foster the development of the skills that the citizen of tomorrow will need, a citizen who will not only have the mission to restore balance but also to ensure the progress of society.

Zusammenfassung

Schlüsselworte:

bürgerliches Gewissen, Demokratie, Bildungsideal

In einer Welt, die stark von neuen historischen und technologischen Entwicklungen herausgefordert wird, muss das bürgerliche Gewissen des Einzelnen eine entscheidende Bedeutung im Bildungsprozess wiedererlangen. Als Höhepunkt der Bemühungen um die Gestaltung neuer Generationen stellt es demokratische Werte in Schulen wieder her, damit wir sie später in der Gesellschaft finden können. Hier werde ich zeigen, dass zwei große Erziehungswissenschaftler, John Dewey und Jean Piaget, bereits gezeigt haben, dass Bildungssysteme in erster Linie auf das bürgerliche Gewissen abzielen sollten, obwohl keiner von ihnen den Begriff explizit verwendet. Neue Lösungen müssen gefunden werden, um die Gesellschaft wieder in Schulen als Bildungsmaterial zu integrieren, um die Entwicklung der Fähigkeiten zu fördern, die der Bürger von morgen benötigen wird, ein Bürger, der nicht nur die Mission hat, das Gleichgewicht wiederherzustellen, sondern auch den Fortschritt der Gesellschaft zu gewährleisten.

1. Introduction - Civic conscience and the aims of education

Defined as a component structure of the human psyche that connects oneself to human society, civic conscience is a part of the human personality, akin to thinking and memory. It should be understood with the same ontological consistency as self-awareness or moral conscience, psychic structures with an essential necessity demonstrated, if not otherwise, through the gravity of the consequences of their alienation. An impaired self-awareness leads to significant functional problems, and a tainted moral conscience is a danger both to oneself and to others. Similarly, when civic conscience is insufficiently formed or altered by internal or external factors, the individual lacks the necessary connections to identify with human society, doesn't understand their role, doesn't take a stance, doesn't engage, and doesn't contribute to the progress of the social organism. It functions in an autistic manner, thereby reducing its chances of development and it contributes to a social alienation.

Civic conscience is the third layer of human conscience. It cannot gain substance without the

preceding layers. It requires continuous self-knowledge to the same extent as it requires awareness and assimilation of moral principles. Therefore, the education of a human being must go through these steps, but the process of forming the human personality should not stop here. The knowledge and ability to act within the social sphere are skills without which one cannot achieve fulfillment as a human being. One must cover the informational level implied by the social sphere, develop the emotional capacities required for it, and form a motivational system, as well as the ability and promptness to act as a citizen. Human society, with its democratic values, depends therefore on the civic conscience of each citizen, and its formation primarily falls within the responsibility of the education system. The reality and concept of civic conscience, its development and stability for each new citizen, should be the backbone of the educational aims pursued throughout the entirety of the pedagogical process.



Two of the most influential theories of education to date demonstrate precisely the importance of civic conscience as an educational aim (Bhetuwal, 2022). Beginning with the definition of education and its entire theoretical and practical construction, Jean Piaget and John Dewey explain and demonstrate the symbiosis between democracy and education, pointing to the necessity of civic conscience, even though neither of them explicitly uses the term. The responsibility of education to look towards the future is emphasized, as well as using the past and the present to form a conscience that embraces common values. This perspective corrects the historical educational ideals that focused on an important yet limiting integration of the individual into society. Both Dewey and Piaget decontextualize the educational ideal by relating it not to a specific society, but to the universal values of democracy: progress and mutual respect, freedom, action and social harmony. Concrete reality becomes the teaching material, not the aim of education. The perspective of a future to which the individual must relate critically, autonomously, and creatively is taken into account, also highlighting the necessity of relating to the other, one seen as a conscious, not contextual, society.

At Dewey (1972) education involves restructuring or rearranging past experiences to enhance their significance and to improve the ability to influence subsequent developments. On the other hand, in Piaget's view (1972) education involves altering an individual's awareness and mentality, as *the transformation of conscience* regarding societal values, as *collective conscience* by aiding and expediting adjustment, along with its component processes of *accommodation and assimilation*.

Democratic values described through collaboration, mutual respect, non-violent solutions, participation, and assuming responsibility have a place not only in the educational ideal but also in the way the educational process is organized. Society must be reintegrated into the classroom, and a reevaluation of the educational process is essential for schools in order to support the transformation of society and facilitate the shift from patriarchy to democracy.

2. John Dewey - social reality, teaching material

Theorist, as well as a craftsman of such an educational revolution, is John Dewey, the American thinker who explains that any educational ideal that does not include the symbiotic relationship between the individual and society "is narrow and unlovely; acted upon, it destroys our democracy" (Dewey, 1977,

p. 87). A school that only seeks physical, cognitive, cultural and moral development has a narrow perspective, these are viewpoints that require expansion. The *individual-society* relationship must open this perspective, bringing the necessity and universality of democratic values. Dewey compares this relationship to the one between a parent and their child. They are mutually dependent and show an equal interest in progress. Similarly, by making available to future citizens all that it has gained for itself, society creates opportunities for its own future. However, it is not the individual who must adapt to a given society by ticking off the milestones set by the educational ideal society established; it is society that depends on its individuals and the direction it manages to impart to children's activities. Since the youth of today will eventually form the society of tomorrow, the characteristics of that future society will greatly depend on the guidance provided to children's activities in the past (Dewey, 1972).

In this equation, democracy appears both as an attribute of society and as a didactic principle. An essential element of the timeless ideal of society, and by extension, of education, democracy is also one of the means by which the educational ideal can be attained. That *methodos* (in greek: metha= after, odos= road, path) must bring democratic society into schools, and transform schools into the first society where young people understand and practice democracy. Dewey's pragmatism thus highlights the symbiotic relationship between *education* and *democracy*, with the primary aim of education being to prepare for life in a democratic society, to shape not only the individual but also the citizen. In other words, Dewey talks about democracy in terms of connected life and shared experience. This kind of democracy involves relating the individual's actions to those of others and maintaining a constant dialogue among community members. In a democratic context, it is important not only the autonomy of the individual, but also the inevitable existence of the other, through co-citizenship. The existential condition of the individual is inherently fragile and precarious, but it can be overcome by an individual that uses their full potential. It is not a matter of eliminating confrontation from one's life, but rather facing it by using one's own intelligence and creativity. If all of this is accomplished, social and cultural constraints and all types of obstacles can be removed, and one's horizons can be expanded through emancipation and empowerment. Only from the diversity and multitude of stimuli and interests can a real liberation from all

types of constraints be achieved. This can facilitate individual growth, serving as the starting point for the advancement of human progress as a whole. This latter aspect of pragmatism is extremely important for Dewey. Therefore, only in a democratic context can appropriate education be achieved, which, in turn, is the primary tool through which the values and ideals of democracy can be affirmed and consolidated. The role of the school is to shape individuals as protagonists of social life, as people capable of dialogue and collaboration towards achieving common goals. While not explicitly stated, the concept of civic conscience is implicit in John Dewey's endeavors, elucidating the correlation between the individual and society, as well as between education and democracy. By establishing democratic values as the aim of education, it is acknowledged that human development remains incomplete until individuals cultivate the capacities that link them with the broader social community. This enables them to identify communal issues, actively participate in resolving them, and comprehend their role in shaping the course of societal advancement.

Philosophy itself is a "theory of education as conscious practical activity" that enables the assimilation of democratic principles. Given the conflicts between the established social interests and the aspirations on the institutional front, philosophy is the way to harmonize contradictory tendencies, a source of viewpoints and approaches through which a more equitable distribution of interests can be attained (Dewey, 1972, p. 282).

It is important to highlight, however, that without a clear formulation of the concept of *civic conscience*, Dewey's discourse tends to become inconsistent at times. The moral aspects of education are included in the natural goals of schooling, in the form of "perfecting behavior, forming habits of punctuality, order, and work," but at the same time, they are considered insufficient for the goals formulated by a desirable educational ideal (Dewey, 1977, p. 87). In this context, the moral considerations of human decision-making are equated with social competence, or in other words, civic competence. Ultimately, the moral and social dimensions of behavior are one and the same, Dewey acknowledges (Dewey, 1972).

We can find an explanation for Dewey's established identity relationship between the moral and civic conscience levels here if we analyze the reason for this similarity. This relationship serves to accentuate the common principle underlying the

formation of both types of conscience. This precisely concerns Dewey's pragmatic perspective on education—the need to bring society into schools, with its problems and specifics. This is the main way in which one could develop both moral and civic competences, if we can name them as such, since Dewey does not use these exact terms. Both levels of conscience therefore need an analysis of social reality, in order to be formed.

Social perceptions and interests can only evolve in an authentic social environment – an environment in which, through common constitution, you give and receive. The advocacy for education through continuous instructive activities is based on the fact that they offer the possibility of creating a social atmosphere. Instead of a school isolated from life, a school that is a place where knowledge is passed on, we will have a miniature social group in which learning and development are features of shared experience in the present (Dewey, 1972).

When examined closely within the school environment, society imparts meaning to theories and explanations, enables the understanding of moral good and evil, as well as social good and evil. It provides examples, problems and solutions, along with a comprehensive portrayal of life with all its values and manifestations of alienation. This approach aims to facilitate the comprehension of moral issues, while providing the environment in which young people can understand and actively engage in their roles as citizens.

Contemporary pedagogy also underscores the necessity of aligning schools more closely with reality. The teaching principle of merging theory and practice exemplifies this viewpoint (Cucuș, 2014). Unfortunately, however, 123 years after Dewey's demonstrations, many schools around the world have great difficulty in applying the theory for the formation of moral and civic conscience. The social environment and moral dimensions of everyday life remain largely excluded from schools. This holds true in the case of Romania as well, where a subject like "moral education" cannot be found within the school curriculum, the steps taken to shape Romanian citizens being small and cautious, the concept of *civic conscience* being absent from both theory and practical implementation.

To dispel any doubt regarding the fact that Dewey's education actually aims at civic conscience

rather than just moral conscience, let's analyze the educational principles the great thinker recognizes and adopts. He acknowledges Friedrich Froebel's merit for being the first to introduce the educational principles that education should strive to implement throughout its entirety (Dewey, 1977).

The first principle defines the primary task of education as the cultivation of young individuals' ability to coexist harmoniously for the benefit of each, thereby fostering an awareness of mutual interdependence. The second principle directs attention to the child's instinctive and impulsive attitudes and activities as the foundation of the educational process, rather than the mere presentation and application of external material. In other words, it underscores the very hunger for knowledge, as Dewey describes, which the educator must trigger in the child to ensure that education unfolds as naturally as possible, with maximum involvement from the learner. The third principle speaks to the integration of the first two, allowing the spontaneity and natural inclinations of individual interests to be harnessed for the practice and learning of social coexistence. It does so by recreating, at the child's level, the contexts and dilemmas of the larger society, enabling the educated individual to comprehend the causes, consequences, and potential solutions involved. The founder of the kindergarten recognized the necessity of human interdependence and even used toys he crafted to help the child understand this essential aspect of human society and nature itself. However, it is civic conscience the one that ensures human interconnectedness the two great educators refer to, and the formation of this conscience is, in reality, the goal of education, as is evident from the Froebelian principles that have become essential values in Dewey's philosophy of education.

3. Jean Piaget – Democracy, the path and destination of education

The developments made by Jean Piaget delve into the intimate mechanisms of shaping moral conscience, highlighting the necessity of democratic values both in the educational process and in the social environment. The concept of *mutual respect* becomes pivotal, and the autonomous moral success of a human being is necessarily determined by collaboration and mutual respect between the educator and the learner. Furthermore, Piaget transposes the stages of moral development of the individual to the social level, thus showing that different stages of democratic progress are achieved through the education of individuals.

To begin with, he recognizes Pierre Bovet's mastery in explaining the mechanism of forming duty as a moral obligation to certain values. Thus, the sense of duty is possible through the acceptance of an external command or order. Bovet explains that merely adopting the habits of others or imitating them does not result in the development of a sense of duty. Additionally, the affective component is essential: in order to accept a command, it is strictly necessary for there to be *a feeling of emotional dependence between the subject and the person or people who convey the order which will be perceived as a duty* (Bovet, 1911, p. 100).

Piaget considers this the most realistic explanation for the formation of *moral feelings and judgments*, or what we might call moral conscience. He indicates that emotional dependence is the engine that sets the mechanism of accepting duty into motion (Piaget, 2006). Regarding the conscience of rules, Piaget follows in Bovet's footsteps, stating that the feeling of responsibility emerges solely when the child embraces a directive from individuals they respect. The sense of respect takes on a central value in this *educator-educated* relationship. Piaget distinguishes between unilateral respect – that of the child towards the adult – and mutual respect – which is formed as the child matures, with the development of their reasoning and their abilities to comprehend and process information, a respect between equals. Awareness and acceptance of duty subsequently emerge from the combination of knowledge and respect, as an effect of fulfilling both conditions. *The other* is the provider of commands, of information, and also the source that generates the necessary respect for accepting duty. *The others* become the authority that conveys moral norms, and these norms are accepted as duties only when there is a sense of mutual respect between these two social actors. The adults in a child's life are the first ones who, through their emotional-cognitive dependence, transmit moral values that become accepted. Over time, these adults are replaced by society as a whole. The affective co-dependency is strengthened by a co-dependency of respect, and now the focus is on the relationship between the *individual* and the *social*. Thus, society - and civic conscience - conditions moral conscience, because respect for the society in which one lives can only emerge within a formed and functional civic conscience.

Piaget compares Bovet's vision with those put forth by Kant and Durkheim that reverse the relationship between *respect* and *obligation*. In both Kant's and Durkheim's perspectives, respect arises as

a consequence of obligation, with obligation stemming from the recognition of the universal moral law in Kant's case and from the acknowledgment of societal power and *social facts*, in Durkheim's case (Durkheim, 2002; Kant, 2006).

Piaget (2006) dissociates himself from both approaches, explaining that they depart from the psychological mechanisms he previously presented, which showed that commands are not accepted without the mutual respect between the learner and the source of the command. His research, which demonstrates the logic of his approach, started with analyzing how children accept the rules of games – activities that reveal the child's nature with the utmost sincerity. At different stages of childhood, morality takes the form of managing the rules of games. The following relationships are the primary focus: between *children and adults*, *children and children*, and *children and rules*. During this research, several stages of the child's relationship with the game rules were identified: "1) simple individual regularities; 2) imitation of adults with egocentrism; 3) cooperation; 4) interest in the rule itself" (Piaget 2006, p 52).

Around the age of 7-8, the child experiences a *moral realism* which involves valuing the command itself, so it gradually detaches from the moral authority of *others* until it ends up perceiving its own role in modifying those commands that lead to social injustices. This is where the socio-political implications of accepting duty arise, with responsibility over the decision and the ability to modify commands/rules/laws, the command becoming necessarily democratic. This is the point at which Piaget is no longer discussing moral conscience but rather civic conscience. By transitioning from moral commands to social commands, Piaget demonstrates the con-substantiality of morality and civic-mindedness. He shows that his theory actually aims beyond moral conscience, and the related concepts of democracy that he considers *sine qua non* in his pedagogy support this idea once again.

Piaget introduces the necessity of a democratic education to shape the moral structure of human beings. Distinguishing between the two types of morality – constraint-based and cooperation-based – which are specific to different stages of moral development, Piaget reveals that heteronomy is a step towards autonomy, and the acceptance of externally imposed rules gradually transforms into the acceptance of rules based on rational justifications. Responsibility shifts from being objective initially to

becoming subjective in maturity, where individuals understand consequences and causality, with an awareness of connections and a complete vision of the social realm. The morality of cooperation is founded on solidarity, focusing entirely on the autonomy of conscience and intentionality. Respect, which in the first stage was unidirectional, becomes mutual in a moral-educational relationship where both poles recognize each other's dignity and authority. For adults, rules are viewed as *a product of agreement between contemporaries, acknowledged to be modifiable, provided there is a democratically established consensus* (Piaget & Inhelder 2005).

Piaget extrapolates his analysis from the realm of children's relationships to that of adults, clearly illustrating the correlation between the rules of games and social rules. Differences in their manifestations in the two relational fields arise from differences in attitudes, beliefs, intellectual development, and reasoning. These components of civic conscience indicate, once again, that the ultimate aim of education is to form this layer of conscience. What is essential, however, is how Piaget translates this theory to the social scale. *The morality of mutual respect opposes the morality of unilateral respect – in terms of values, but causally they stem from each other* (Piaget & Inhelder, 2005).

Childish individualism, in the form of "egocentrism", which refers to the child's state of closure, of natural focus on one's own interests, is seen as pre-social, as a stage prior to socialization and is associated with moral constraint. Adults hold authority, and children acknowledge it. This is the formula for managing authority that takes the form of gerontocracy. Childlike morality can persist into adulthood, especially in societies that prioritize conformity and adhere to traditional hierarchies, often labeled as primitive. Democratization or association with moral cooperation is the next stage, where we could say the formation of civic conscience begins. (Piaget & Inhelder, 2005)

In primitive or less developed societies, gerontocracy dominates, with younger generations accepting the structure of moral rules out of obedience to the previous generations and the wisdom bequeathed about the achievement of well-being. An *emancipation of societies* has led to generational equalization, so individuals are no longer as constrained by the legacy of previous generations. There is a consequent opening up and detachment leading to spiritual independence. How can this

change take place? Through the knowledge and understanding of various influences and through cooperation between equal individuals.

The more complex society is, the more autonomous the personality becomes, and the more important the relations of cooperation among equal individuals are. (...) Cooperation naturally takes the place of coercion, and consequently, the morality of mutual respect replaces the morality of authority (Piaget & Inhelder, 2005, p 374).

Hence, the necessity of social evolution from conformism and gerontocracy towards democracy becomes evident. This transition leads from a citizen insufficiently formed or alienated to one who, possessing civic conscience, understands societal interests and continuously relates to them to achieve personal ideals and improve social balance. Critical thinking, rationality, and the capacity to rationally filter and potentially modify the sets of rules established by authority become essential in evolved societies.

The transition from heteronomy to moral autonomy necessitates cooperation, which may initially lead to criticism and individualism, but it is essential for understanding diversity and comparing unique individuals within it. This marks the decline of unilateral respect. As the capacity for individual rational judgment develops, the conscience of what is good arises – a conscience whose autonomy stems from understanding and applying the rules of reciprocity and mutual respect. Instead of obedience, concepts such as justice and mutual assistance are emphasized, serving as the foundation for obligations that were previously enforced as incomprehensible commands (Piaget, 2006).

Why is democracy a desideratum? Because "mutual information and convictions formed through persuasion make for a higher quality of experience than what can otherwise be achieved on any wide scale" (Dewey, 1977, p 186). The chances for human life to be lived at its highest parameters are much greater in a democratic context, where values such as individual freedom, assuming responsibilities, cooperation, and mutual respect as the foundation of human relationships are genuinely put into practice. Mutual information and convictions formed through persuasion foster an open social environment built on trust, quite the opposite of one constructed through repression and coercion. Similar to a child subjected to constraint and force as educational methods, a citizen

raised in a totalitarian social context becomes duplicitous, at least. The values displayed in the official space differ from those governing the private space, and existential decisions deviate from official coordinates.

4. Civic conscience, the solution to present challenges

Ideas from these two great philosophers of education have been incorporated into subsequent writings, underscoring the essential importance of civic conscience formation in various forms for future social equilibrium. In 1988, for instance, six competencies were identified as strictly necessary for the 21st-century citizen (Newell & Davis, 1988).

These include civic literacy, critical thinking, social conscience, tolerance and respect for diversity, global citizenship, and political action. Civic literacy involves the ability to understand, analyze, and think of potential solutions for major societal issues. Critical thinking involves questioning everything coming from authority. Tolerance and respect for diversity are essential due to the heightened multiculturalism of societies on nearly every continent. Global citizenship involves identifying with humanity as a whole, addressing problems and solutions on a global scale. Political action is the behavior that embodies all the other requirements, including informed and rational voting, participating in public authority activities and involvement in politics, organizing elections, protesting against authority misalignment, or opposing unjust laws.

Among these six citizen requirements, *social conscience* seems closest to civic conscience. It is defined as the ability to identify the common good. It includes empathy, without which a society would become deeply segmented and morally bankrupt.

There are offered means necessary for cultivating these competencies, involving progressive education and interdisciplinary study, specifically their combination (Newell & Davis, 1988). The methodology of traditional education is rejected, including any other form of education that returns to it. Traditional education is one in which the student and the teacher are at a considerable distance, differences in status not allowing students to be involved in curriculum development, the teaching process, or even important decisions concerning them. The teacher is an expert, a dominant, infallible authority. In the same context, scientific knowledge is carried out in very clearly delimited disciplines, and the link between school and society is seriously

flawed. Progressive education and interdisciplinary study are designed to overcome these vulnerabilities and bring the student closer to the teacher and to knowledge in general. The student is given the opportunity to teach, while the teacher engages with the students and learns from their peers who specialize in other fields, since reality is studied through phenomena and processes in an integrative manner. The phenomena or facets of reality that teachers scrutinize require the intersection of numerous sciences and disciplines. We find with precision the principles of progressive education conceived and implemented in the United States by John Dewey. However, there are some interesting concrete proposals made by the authors of the 1980s to make the development of the six competencies possible. In this way, it is considered that encouraging experiences from actual social life can be achieved through the requirement of public and political projects lasting at least one semester, aimed at addressing concrete issues of the local, national, or international community. These projects involve interdisciplinary studies of the scientific aspects related to real-life experiences. Compensating educators who actively integrate the social dimension into their teaching and promoting a higher level of teacher engagement, both institutionally and individually, in external political life to serve as role models for their students, are among the suggestions made. Strong student involvement in campus administration, choosing leadership structures, and curriculum development directions is recommended as well. It is proposed that the teaching process should combine traditional disciplinary courses with interdisciplinary courses taught in a progressive manner both at introductory levels and at advanced stages of research. In conjunction with prioritizing active citizenship as a core element of a liberal education, regarded as a crucial priority within the education system, voting registration is even proposed as a graduation requirement (Newell & Davis, 1988).

Recent predictions targeting the challenges of the year 2050 suggest that Citizenship Education can prepare, guide, and direct new generations, endowing them with the skills they need to confront what lies ahead to the maximum benefit of humanity. Civic conscience assumes a central role. While we cannot accurately predict the precise circumstances of life in 2050 and beyond, Citizenship Education, as a school subject, can already in 2020, start preparing, guiding, and steering children and young adults towards acquiring a range of skills that will likely remain

relevant under any conditions. These include fostering a consciousness and ethical sense concerning actions that benefit humanity (van der Walt, 2020).

For the formation of civic conscience, the previous stages must be taken into account. These begin with a focus on one's own well-being, aiming at self-awareness, but they expand to include the capacity to differentiate between what is morally right and wrong, and what is just and unjust, with reference here to moral conscience. Future human performance is seen as a life characterized by goodness, productivity, and significance, a meaning that undoubtedly relates to the social scale, and the qualities envisioned for shaping the desired personality are innovative, creative, capable of independent thinking, and resilient in challenging situations.

5. Conclusions

Unfortunately, the 21st century is marked by the hardships and calamities faced by humanity, which, in the era of globalization, have a far-reaching impact across the globe. Events like the Covid-19 pandemic and the invasion of Ukraine by Russia seem to be the biggest so far. Solutions to mitigate the effects may, however, come from the same background of globalization, but also through the formation of civic a conscience of citizens of the new century which, if it does not remain democratic, may bring even greater disasters. Specialists' observations reveal an intense state-nation fragmentation due to global migration and inadequate integration of new groups. Dangerous populist nationalism is on the rise, with some racial, ethnic, cultural, linguistic, and religious minorities refusing to identify with the values and symbols of the nation-state. We are, therefore, witnessing a phenomenon of *failed citizenship* which can only be rectified through the promotion of a *participatory and transformative citizenship*, in other words, by instilling civic conscience (Banks, 2017). In this endeavor, schools are playing a central role.

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Will school (ing) ever change? School culture, distance learning and the COVID-19 pandemic

by Piotr Mikiewicz, Marta Jurczak-Morris

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The educational sector has never witnessed an unprecedented crisis that has dramatically transformed its landscape like COVID-19 has done. The pandemic constituted a substantial challenge for schools, educators, and students alike to remain resilient and committed to ensure continuity all around the globe. Without any predefined agenda to address the requirements of this urgent situation, school boards sought alternative methods to suddenly shift from presential instruction to online and distance learning. Although COVID-19 pandemic has disrupted education and resulted in negative outcomes and an array of pitfalls, the pandemic also affords potential opportunities to reflect and rethink current practices to seek innovative approaches and insights. The book entitled *Will Schooling Ever Change? School Culture, Distance Learning and the COVID-19 Pandemic* by Piotr Mikiewicz and Marta Jurczak-Morris is a long-awaited book that provides a retrospective overview of the functioning of the school system including (governments, school administrations, teachers, students, parents and educational organisations), reflects on unexpected challenges during crises and underscores prospective endeavours that may/ may not take place in school culture in post-pandemic era, and how school culture is resistant to change. This book, with its theoretical preliminaries, is particularly aimed at educators, researchers and academics who are willing to consolidate their knowledge about the crisis of educational provision throughout the lockdown of COVID-19 pandemic in light of the sociology of education approaches and analyses.

The introductory chapter offers a much-needed landscape of Education During the Time of the

Pandemic. The first part of the chapter highlights how COVID-19 has impacted humanity in every aspect including the dramatic death toll, a deterioration of mental health, social distancing and lockdowns, financial instability, educational disruption and school closures worldwide, which in fact, resulted in an abrupt shift from face-to-face delivery to distance, virtual education. This digital transformation has changed the traditional school culture at the level of setting, time, and daily routines; moreover, new modes of defining the pedagogical relation between teachers and pupils significantly emerged essentially synchronous, asynchronous, blended and hybrid learning respectively. In this respect, it is crucial to maintain teacher-learner interaction and feedback; furthermore, the learners should have the opportunity to work on their task individually or with their peers and present their work virtually for further feedforward from the teacher.

The second part of the chapter captures the responsive measures taken by two different case studies who vary at several levels: the Polish and the British educational systems to address the technical and organizational requirements during the pandemic namely the closures' duration and the implemented forms of instruction i.e face-to-face provision versus learning from home, amount of time allotted to remote and school learning in primary, secondary and tertiary level, and the status quo of digital learning (Eg., digital competency and access, home learning space, school digital adequacy, internet connection, ICT staff, and teacher digital training and lesson planning). Mikiewicz and Jurczak-Morris underline the reliance on asynchronous approach at the outset of the

pandemic, then a gradual transition towards synchronous learning through platforms, and finally a combination of both modes within the third wave of COVID-19 across Polish schools. In British school, school websites posted learning and online materials and downloadable packs in addition to applications. Later on, synchronous and asynchronous teaching took place. One major remark is that private schools, in Britain, outperformed public school at the provision of regularly synchronous sessions and emphasis on the learners' collaboration and technological support. It is evident that official exams were massively interrupted by the pandemic in both countries with regard to General Certificate of Secondary Education (GCSE) and A-level; however, responsive actions differed. The British government cancelled both exams, and a new grading system was introduced in July 2020. In January 2021, the exams were cancelled; instead, the teachers were responsible of assessing their students' performance. Polish pupils sit for their exams throughout the pandemic in strictly sanitary measures while the oral exams were cancelled.

The digital competency and online pedagogy constituted the major challenges for teachers since they lack remote teaching skills. In this prospect, the authors pinpoint the factors that accompanied the whole process of online teaching including time-management skills, workload, assessment, and a lack of students' self-regulation skills, intrinsic motivation and autonomy. Gradually, the teachers supported each other to develop their digital competency with the majority of teachers still preferred face-to-face teaching. The same section emphasises the students' positive and negative experiences of remote learning at the level of attainment, physical versus online learning, time flexibility, and freedom of expression. Furthermore, head teachers struggled with interpreting and implementing the guidelines of the governments' decisions, and at times, felt helpless since they needed clarity and relevant pedagogical and psychological support to resume teaching in time of crisis. Moreover, British parents responded to the fears about their children's learning loss by purchasing learning materials to consolidate their learning. The parents' social class and educational background were decisive factors in the allotted time and quality of children's homeschooling. In Poland, the parents assumed the responsibility of homeschooling at first. Then the teachers opted for an intensive online testing scheme that affected the pupils' mental health. The final phase

witnessed the adoption of the traditional timetable in virtual sessions.

By reflecting on the school culture during the pandemic, major issues surfaced such as the digital divide that is systematic across British schools in which pupils in deprived areas suffered the most; however, in the Polish context, internet connectivity, the quality of equipment and the parents' technological capital and its role in advancing their children's remote learning. Assessment presented another challenge when teachers distrusted some students' performance on homework with regard to parents' involvement; furthermore, assessment was fundamentally about testing rather than advancing active learning and chaotic situation of online marking and reception of homework. Finally, parents were dissatisfied with assessment apropos learning loss, fairness and effectiveness. All of which negatively impacted the involved agents' mental health. Fundamentally, the pandemic highlighted the function of schools as childcare institutions, rather than educational ones in the first place gained momentum during the pandemic since schools have primarily taken care of children on behalf of their working parents. Finally, there was a discontent among citizens in both countries due to the governments' inability to communicate effectively about decision making particularly about addressing critical domains (Eg., education). Eventually, two paradoxes emerged through the implementation of remote learning. Though Britain is considered as the hub of EdTech in Europe, its schools were not digitally in command of the adequate pedagogical and methodological practices to ensure an effective distance learning; moreover, discourse about online remote learning was confusing and contradictory when labelling it as a chance and a crisis concurrently during the pandemic.

The second chapter *Schooling in its Essence* is organised thematically in three parts. The first part delves into providing a thorough historical account of the logic of establishing school(ing) as key institutions in the functioning of modern societies thanks to industrialisation and the need to form proficient workforce that is no longer dependent on the family's repertoire of knowledge in a society, but rather on mass education that promotes scientific, technical and professional development in which meritocracy and selection based on educational achievement and the attainment of degrees are its direct fundamental outputs. Simultaneously, it highlights the different organisations and functioning of schools and the role

of international organisations in evaluating the uniformity of their education; nevertheless, other actors have also a solid standpoint about the logic of school institutions namely the students, their parents, and the governments, which directly impacts the institutional rigidity and resistance to change.

The second part endeavours to scrutinise school education in light of the sociology of education with a specific emphasis on three orientations: structural-functional, conflict and interpretive. In this vein, a thorough explanation of the underpinning principles of each dimension is associated with the social field of education, and how they can be translated into three outcomes of shaping individuals' lives through education precisely: the socialisation theory, the allocative approach and the institutional authority of education respectively. Within these approaches, the authors elucidate their basic features in relation to the individual student within the community of school and society in general, the installation of individuals in the societal structures by means of selection and allocation that are chiefly the direct output of formal education and its formative and regulative missions, and eventually the consideration of schools as dependent social venues whose task is to produce subordinate workers in favour of a dominant elite group. Though the abovementioned orientations may diverge in theoretical foundations, they unveil the complexities of school education as a system driven by rules. In this prospect, the authors highlight the logic of schooling by narrowing it down into three research traditions: institutional, socialisation and allocation that are complementary in understanding the functioning of formal education across societies.

Fundamental to the understanding of the school culture is the inclusion of the context of the social system in which schools are organisations and components of a larger system; accordingly, the last part synthesises the reasons of the persistence of school culture in modern times when it pinpoints the universal pedagogical relation between the teacher and the students in a school as a physical place. Essentially, the authors categorise the milestones of the permanence of the teacher-student relationship to fulfil futuristic social, political and economic expectations through assessment, school relations and positions governed by rules and resources, which automatically establish routinisation, regionalisation, the maintenance of rituals, and the hidden programmes of daily school life.

The last chapter entitled Potential Direction of Change: Looking Forward offers a profound analytical account of the previous two chapters and underscores the fact that school (ing) is so entrenched in modern societies that it may seem utopian to change its underlying foundations and principles despite severe crises (eg., COVID-19). Accordingly, the authors' reflections foreground possible futuristic hypotheses for change in the school culture. To begin with, it is high time the agents of the pedagogical relationship i.e teachers and students navigated and consolidated their digital repertoire to address the requirements of potential recurring distance learning and the new roles they may assume to ultimately reach productive outputs for the parties involved. Furthermore, discourse around change in schooling focuses on three dimensions: regionalisation, timing and the hidden curriculum in which technological devices can be implemented to assist the teachers in their work and enhance the students' ability to seek knowledge autonomously, yet technology has not made a significant change in regard with the educational processes and the system of mass education since the school has been recognised, mainly after the pandemic, as a child caring institution where the children need to belong and learn in a wider community to be prepared for their future role in their societies. Similarly, as long as the schooling system is fundamentally based on the central agent (the teacher) and a key element (assessment), no profound change will ever take place in the universal functioning of schooling.

Taken together, the chapters provide use with a comprehensive model of the uniqueness and the differences of addressing COVID-19 across British and Polish schools. Specifically, it underscores the theoretical principles of the logic of schooling and the reasons of its permanence despite the survival alternative digital shift. Mikiewicz and Jurczak-Morris's book is a milestone, not only for specialists in the sociology of education, but also for teachers and researchers who are interested in the experience of distance teaching and learning during the pandemic including the pedagogical relationship, the new roles of teachers and students, curriculum design and coverage, assessment, and the functioning of schooling across societies in general.

Reviewed by
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Classroom Management - Effective Strategies. Guide for Teachers and Students. Second edition revised and added

by Ramona Iulia Herman

Presa Universitară Clujeană Publishing House, 2023

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In the domain of pedagogical theory, the cultivation of authenticity and the facilitation of autonomy represent fundamental objectives. Achieving these aims requires a robust foundation rooted in empirical research, which serves to cultivate a commitment to ongoing enhancement in teaching efficacy. This scholarly endeavor serves as a cornerstone in the pursuit of pedagogical advancement, infusing the educator-student dynamic with qualities of courage, perseverance, and mutual respect. Core to this framework is the recognition that effective pedagogy transcends mere dissemination of information; rather, it entails the integration of students' intrinsic curiosity and enthusiasm for learning with a genuine relational closeness fostered by the educator. This relational aspect is not confined to the orchestration of learning environments; rather, it underscores the educator's multifaceted role, characterized by a rich spectrum of affective dispositions, cognitive frameworks, and attitudinal orientations.

A proficient educator, fortified by a judicious blend of technical expertise and intuitive insight, assumes a distinct persona that serves to amplify students' potentials and kindle their intellectual appetite beyond conventional boundaries. Such an educator operates as a catalyst for intellectual exploration, propelling students towards a deeper comprehension of substantive concepts and nuanced meanings, thereby transcending the constraints of conventional pedagogical practices.

Throughout the book, the author's vigor and rhetorical prowess resonate prominently, driven by deeply entrenched values aimed at fostering an environment conducive to cultivating curiosity, an

indispensable attribute within the realm of education. The structural framework adopted by the author, characterized by three principal chapters and corresponding subsections, ensures coherence and cohesion, thereby facilitating a logical and well-balanced presentation of information, suggestions, applications, and recommendations. Owing to its scientific rigor and stylistic finesse, the text immerses readers in an authentic journey of exploration, wherein the sequential traversal of intermediary segments within chapters engenders an appreciation for the efficacy and utility of the book's contents. The selected terminology is characterized by precision and fosters contemplation, facilitating facile comprehension without unnecessary tangential deviations or superfluous over-elaborations.

The work prominently highlights interdisciplinary intersections, thereby underscore the expansive breadth of research inquiries inspired by the author. Simultaneously, the stylistic execution of the text endeavors to imbue dynamism and vigor, countering tendencies toward passive consumption or mere mimicry, advocating for an impassioned attitude akin to sensualist-empiricist principles, which captivates and sustains reader interest throughout the narrative. Consequently, the text evokes perceptions of clarity and conscious engagement within readers, prompting introspective queries and fostering a commitment to continual personal development.

This compositional ethos engenders an environment conducive to imaginative and intellectual stimulation, thereby guiding readers towards the pragmatic concretization of ideas and their practical applicability through innovative solutions and nuanced interpretations.

Delving into the contents of this tome unveils perspectives and stances that uphold the foundational ideals of generosity and collaborative exchange, advocating for the embracement of risks and bold inquiry within the pedagogical sphere. Moving beyond conventional categorizations, and incorporating unexpected juxtapositions of terminology and scholarly resources, this work embodies a gesture of solidarity and empowerment for aspiring educators or those seeking a deeper comprehension, serving as a steadfast ally committed to exploring alternatives and fostering both interdisciplinary dialogue and interpersonal sensitivity within an ethical and axiological framework.

The discourse within the book fervently advocates against the imposition of uniformity and excessive teacher control within the classroom, instead championing evolution, transformation, communication, and autonomy, thereby nurturing self-actualization, intellectual and emotional well-being whilst empowering individuals to embrace innovative thinking with confidence and comprehend the intricate terrain of education comprehensively. Thus, the author places reliance upon the cultivation of teachers' discernment, the exploration of intersubjective learning spaces, and the development of competencies that authentically promote innovation, disciplined inquiry, and a spirit of playfulness.

Central to the underlying premise of this instructional guide for both educators and learners is the recognition that education embodies multifaceted and nuanced significances. The unfettered expression of abilities engenders spontaneity, self-motivation, originality, and an altruistic inclination towards aiding others, devoid of egocentricity or manipulation. Confronting the perpetual imperative of professional growth, educators will discover within this compendium pedagogical instruments expounded with clarity and evocativeness, accompanied by appropriate illustrations and meticulously selected bibliographic references.

Moreover, the theoretical constructs illustrated by the author are accompanied by accessible terminological descriptions, fostering reader comprehension and inspiring the adoption of a moral posture that nurtures initiative, empathy, adept management of unforeseeable circumstances, thereby promoting critical discernment, resilience, and the cultivation of diverse pedagogical strategies requisite

for navigating the dynamic exigencies encountered in everyday teaching scenarios.

In addition to articulating the theoretical imperative underlying such a pedagogical approach, as advocated by the author to the readership, the text proactively challenges and guides readers towards the fundamental tenets of the teaching profession. It provides methodologies aimed at emboldening educators to navigate the complexities inherent in their professional trajectory, replete with trials, transitions, and adaptations. At its core, education represents a nuanced form of socialization extending into the profound depths of engagement with the world. The discourse within this work serves to equip professionals with the tools necessary to cultivate traits of gentleness, magnanimity, and empathy, while fostering a persistent commitment to comprehension. This thereby mitigates apprehensions and counters inclinations towards passivity or acquiescent submission.

Harnessing didactic technology alongside the myriad procedures and applications delineated within the text facilitates the systematic and coherent organization of educators' knowledge repository.

Throughout the discourse, the author's methodology advocates for the transcendence of obstacles encountered during classroom instructional sequences. This endeavor engenders discernment and spontaneity, qualities deemed indispensable for professional efficacy and personal fulfillment. Indeed, the overarching aim of the work is to harness individual potentials, effectively address students' inclinations and enthusiasms, safeguard the foundational principles of human dignity, and foster collaborative engagement, negotiation, and continual self-refinement within the realms of science and culture for those practitioners invested in the contents of the text.

In this regard, the author's endeavors reflect a commendable level of conceptual refinement and perspicacity, cultivated through unwavering dedication to refining educational paradigms and seminal concepts. These theoretical underpinnings merge to advance an educational ideal that both reflects and anticipates the socio-cultural aspirations of the broader community, furnishing a dynamic model wherein the realm of pedagogical possibilities is intricately intertwined with the realities of the classroom environment—an embodiment of the multifarious phenomena encapsulated within the vision and utility of the book at hand. The author's

discernible commitment to eschew superficial or arbitrary treatment of the subjects under examination is readily discernible throughout the narrative discourse.

Therefore, the discourse within the text serves to embolden professionals to confront constructively the myriad dilemmatic scenarios inherent to their vocation, instilling a sense of self-assurance and equipping them with a comprehensive array of techniques conducive to fostering outcomes that validate personalized professional conduct, thereby mitigating susceptibilities and indecision. Tailored to address varied contexts, uncertainties, or adversities, readers will discern an ample reservoir of pragmatic resources to galvanize their individual contributions towards the conceptualization and execution of pedagogical endeavors, thus nurturing a fluid and imaginative professional expertise wherein practitioners are empowered to proactively anticipate, devise, and cultivate conducive environments conducive to achieving an optimal equilibrium between personal exigencies and the exigencies of their professional milieu. By dispelling tendencies towards inert compliance or disengagement, the text, through its spirited tone, advocates for mobilization in surmounting obstacles to learning, advocating for the application of principles aimed at systematically counteracting resistance to challenges.

The underlying ethos of the book is predicated upon instilling an appetite for a qualitatively enriched approach to pedagogy within educational settings, offering solutions congruent with the objectives and competencies of the stakeholders involved in the pedagogical endeavor. Furthermore, the internalization of societal norms and regulations, alongside the cultivation of intrinsic motivations and behavioral competencies, necessitates active engagement of students in diverse activities. Transitioning from reactive responses to environmental stimuli towards self-initiated actions, students are encouraged to establish their own behavioral standards, thus fostering autonomy and discernment—a motif pervading the entirety of the text, characterized by succinct, well-articulated expressions and formulations designed for facile comprehension.

Hence, the promotion of strategic cognition, emotional competence, facilitation of effective communication, mitigation of authoritarian excesses, and recognition of both individual and collective competencies is deeply espoused. Diverse

mechanisms and methodologies are advocated to foster constructive mental dispositions conducive to the cultivation of adaptive habits in response to variegated stimuli relative to one's own preconceptions or anticipations. Notably, the incorporation of play and imagination permeates the instructional methodologies advanced by the author, aligning with an optimistic paradigm that affirms students' individuality and fosters receptivity to experiential learning. This, in turn, nurtures the fluidity of creative expression and endorses a commitment to lifelong learning while underpinning adherence to norms conducive to psychosocial well-being.

A comprehensive engagement with the text yields robust methodological directives aimed at enhancing the self-esteem of stakeholders invested in the educational enterprise, including those striving for personal fulfillment and nurturing harmonious relationships with their setting. Guiding principles inherent in the textual recommendations advocate for audacity, actions that unify and fortify values, and an educational ethos characterized by a dynamic and intelligible imaginative substrate.

Beyond serving as a mere conduit for the dissemination of factual data and informational content, the guide aspires to foster a lucid comprehension of the functional and causal interrelationships inherent within the holistic construct of the educational phenomenon. Thus, the text intricately delineates intersections across diverse facets of the pedagogical landscape, encapsulating this intricate and cohesive process within a myriad of potential formulations. Access to such scholarly inquiry is deemed imperative in the pursuit of genuine progress and refinement within pedagogical praxis, advocating for the employment of complementary analytical and intuitive methodologies that underpin both personal development endeavors and the enhancement of learners' aptitudes. These qualitatively distinctive attributes manifest evidently, offering a palpable contribution of originality that facilitates the organic assimilation of the text's contents into classroom praxis. This, in turn, nurtures cognition as an expressive phenomenon characterized by individuality, spontaneity, resilience, and profound sensitivity.

The palpable satisfaction derived from delving into the pages of this instructional guide for educators and learners underscores the pervasive presence of a

robust vitality of thought and perspicacity throughout the text, reflective of an intellectual disposition that enriches the cultural underpinnings of educational discourse. The proffered repository of innovative methodologies within the text attests to the author's adept expertise, which, through its pages, serves as proof of a nuanced familiarity with the fundamental values intrinsic to the human experience, encapsulating the essence of (in)tangible realities.

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Visible Learning The Sequel

by John Hattie

Routledge

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The work "Visible Learning: The Sequel" by John Hattie adds value and novelty to the work "Visible Learning", representing a resource of great significance for specialists in the field of education.

John Hattie is one of the best-known and most widely read experts in education, currently serving as Professor Laureate Emeritus at the Graduate School of Education, University of Melbourne, Australia.

Preoccupied with research and practice in the field of education, the author builds his present paper based on areas of interest such as the implementation of the VL model (Visible Learning); the role of students in the educational process, evidenced by the importance of active involvement and individual responsibility for learning; the influence of the home, teachers, schools and society in promoting educational success; the importance of adapting and selecting pedagogical methods; the impact of technology on education.

The book is structured in 16 chapters and represents a synthesis of over 2,100 meta-analyses, extracted from over 130,000 studies addressing a problem as broad as it is well articulated.

Throughout the work, at the end of the chapters, the author offers general conclusions on the approached field and then specifies themes for reflection addressed to readers. It is a book that invites us first to reflection, and then to action!

Chapter 1 entitled "The Challenge" of John Hattie's "Visible Learning: The Sequel" reflects on the significant transformations that have occurred in the world and education since the first edition was published in 2008. Hattie discusses the technological, social, and economic impact on education and staff, his own experiences, and changes in his research career. He highlights the evolution of the "Visible Learning" model, criticisms of it, and improvements made based on feedback from educational

practitioners. The chapter focuses on the importance of carefully implementing research into educational practice and the essential role of teachers in promoting student success, highlighting the need for a critical and informed approach to education.

Chapter 2 addresses the complexity and criticisms of meta-analysis methodology in the context of the book. It highlights that the largest sizes of effect often come from lower-rated journals, suggesting a possible bias in publications. In contrast, high-quality journals show smaller effects, indicating a rigorous selection of studies, but also comfort that most quality papers are in these publications. The weighting of effect sizes according to sample size suggests the greater importance of large studies, thereby improving the reliability of the results. The geographical analysis of the first authors shows a predominance of meta-analyses coming from high-income countries, with a geographical distribution reflecting various impacts by region of origin.

Criticism of meta-analysis focuses on mixing studies based on correlations, pre-post, and experimental-comparative designs, with the recommendation to differentiate these types to clarify interpretations. A classification of influences into five categories, from causal interventions in teaching to non-intervention studies, relevant to understanding the diversity of observed effects is proposed.

An important aspect raised is the need to distinguish between correlations and causality, emphasizing that effect size does not necessarily imply a causal relationship. It is argued that it is essential to investigate plausible alternative hypotheses to strengthen causal claims. The chapter also addresses critiques of curricular domains and age-varying effects, highlighting the broad applicability of "Visible Learning" messages regardless of discipline or age

group. It also discusses the particularities of students with special needs and talent, as well as the overlapping of data between various meta-analyses, highlighting the importance of the uniqueness of studies to avoid biases.

In conclusion, criticism of "Visible Learning" focuses more on research methodology than on data interpretation or prescriptions. It emphasizes the importance of qualitatively interpreting effect sizes and argues that meta-analysis provides probabilities about high-impact interventions, emphasizing the quality of implementation of these interventions and the need for educators to assess their impact.

Chapter 3 addresses the visible learning model, based on five fundamental premises: purpose, way of thinking, "intentional alignment", quality of implementation, and evaluative thinking. These premises emphasize the importance of clarity of educational purpose, the need for appropriate mental frameworks for both educators and students, strategic alignment of educational decisions, and continuous evaluation of learning processes and outcomes.

The model begins with defining the goals of education, which can vary depending on the perspectives of educators, families, and students. The main goal is for students to become their teachers, invest in learning, and develop their skills to learn both individually and in teams. This requires not only a focus on curriculum or test results, but also fostering an educational environment that values progress, learning, and motivation.

"Mind frames" or mental frameworks play a crucial role in the model, highlighting the importance of how educators, families, and students think about goals, priorities, and success in education. These mental frameworks influence educational decisions and are fundamental to the professional ethics of teaching.

Intentional alignment refers to synchronizing educational decisions with the cognitive complexity of lessons, creating a safe and trustworthy learning environment for students, aligning teaching methods and learning strategies with educational goals, and evaluating student progress and success.

The quality of implementation involves five stages: discovery, design, delivery, return, and intensification of efforts. This systematic approach ensures that educational goals are clear, interventions are well designed and aligned with students' needs, and that learning is continuously evaluated and improved.

Evaluative thinking invokes the critical thinking of educators, representing strong reasoning in evaluative decision-making and significantly improving student learning.

Therefore, here it presents a comprehensive framework for understanding and implementing visible learning, emphasizing clarity of purpose, the importance of critical thinking, strategic alignment of educational processes, and continuous assessment of learning effectiveness. The model emphasizes the essential role of educators, students, and families in creating an educational environment that promotes excellence, innovation, and success for all students.

Chapter 4 addresses the implementation of the VL (Visible Learning) model of intentional alignment, looking from the perspective of teachers, students, leaders, and parents. The chapter details the major issues for these groups, focusing on the first three "Ds" of the 5D model, and will provide an overview of important considerations for later stages. It addresses the essential principles for achieving effective education, stressing the importance of intentional alignment of all components of the educational process: learning objectives, assessments, feedback, and teaching strategies. It highlights the need for rigorous planning, starting from what students want to understand and be able to do at the end of lessons and continuing with designing assessments and, teaching methods to facilitate the achievement of these objectives. Hattie stresses the importance of adapting education to the individual needs of students and their engagement in their learning process, through their active involvement in setting success criteria and evaluating progress. The key role of constructive feedback and error-based learning in promoting a positive attitude towards challenges and developing learners' autonomy is also emphasized. The chapter also highlights the need for close collaboration between all actors involved in the educational process- teachers, pupils, parents, and school leadership- to ensure a learning environment that values diversity, promotes trust, and fosters commitment to learning.

Chapter 5 focuses on the role of students in the educational process, highlighting the importance of active involvement and individual responsibility for learning. Hattie emphasizes the need to develop students as teachers of their own educational experiences, promoting self-reflection, self-assessment, and self-regulation as key elements of academic success. This chapter emphasizes the paradigmatic shift from teaching to learning, where

students are seen not only as receivers of information but as active partners in creating knowledge.

Chapter 6 explores the essential role of family and home in children's education. The COVID-19 pandemic has highlighted the importance of understanding and appreciating teachers' expertise among parents, who have had to experience their children's education from a new perspective. In this context, the need for parents to be "first teachers" is emphasized, promoting a family environment based on unconditional love and understanding.

The meta-analytic studies presented in the chapter highlight the small effects of different family structures, such as the presence or absence of fathers and divorce, on children's academic achievements. It is found that active parental involvement, high expectations, and a positive family environment have a significant impact on children's academic success.

In particular, the importance of parental expectations, which strongly correlate with children's academic achievements, is noted, highlighting that parents play a crucial role in shaping attitudes and behaviors that foster learning. It also discusses the integration of immigrant children into education systems and how certain policies and approaches can improve or worsen their educational experience.

In conclusion, the chapter emphasizes that children's educational success is profoundly influenced by the family environment, parents' involvement and expectations, as well as by the capacity of educational systems to support the diverse needs of families and children from different cultural and socio-economic contexts.

Chapter 7 reflects on the roles of school and society. Schools do not operate in isolation but are intrinsically linked to the society that supports them. Society and the educational system are deeply intertwined, and the search for world-class schools is futile when culture prevails over classrooms. There are fundamental questions in every society about what knowledge is privileged, facing class conflicts, profound inequalities, and cultural, gender, and identity influences. Schools are often a haven for students, being a defining space for the development of social norms and values.

School culture strongly influences the development of students' identity and sense of belonging. In some societies, the dominant culture does not always encourage diversity, and students from different backgrounds may face difficulties.

Racism, for example, is a significant burden restricting access to and recognition of opportunities.

The main purpose of education is to empower students to become their teachers, thus maximizing the likelihood that they will be well informed in choosing the content they want to learn, to be curious, and to criticize the information received. But becoming a teacher also involves a moral dimension, and questions about the purposes of education require ongoing debate.

Chapter 8 entitled "Classroom effects" examines the impact of the classroom on learning, emphasizing the importance of the learning environment and classroom dynamics in promoting educational success. The focus is on creating a space that encourages active student engagement and facilitates a deep understanding of the subject. This chapter explores effective strategies that can transform a classroom into an environment conducive to exploring and developing knowledge, laying the foundation for a more intentional and focused approach to learning. There are thus three major categories of effects within the classroom: composition, management, and classroom climate.

Chapter 9 of John Hattie's work explores the significant influence of teachers on student learning, highlighting the essential role of thinking assessment and teaching strategies in promoting educational success. Through methodical analysis of teacher effects, Hattie highlights the importance of adopting mental frameworks geared towards positive impact on students, encouraging a reflective and evidence-based approach to educational practice. The chapter highlights the need for teachers' active and conscious involvement in the learning process, reiterating the power of teachers to shape effective educational pathways and inspire academic excellence through passion, dedication, and pedagogical innovation.

In the context of contemporary educational development, chapter 10 of John Hattie's *Visible Learning: The Sequel* addresses the complexity and dynamics of curriculum in an era of diversity and rapid change. With the launch of the Mparntwe Education Statement in Australia, Hattie underlines the need to transcend traditional paradigms and embrace a curriculum that contributes to the comprehensive well-being of young people, preparing them not only for the labor market but also for being responsible and innovative citizens in society. The chapter reveals the challenges of the curriculum, marking the need for a flexible and critical approach to its design. Hattie

argues against a continuous and superficial reconfiguration, advocating for a curriculum that reflects the diversity of students' needs and aspirations, instead of rigid uniformity. This perspective is reinforced by exposing the diversity of educational systems and curricular approaches, stressing that there is no unanimously accepted "essential knowledge" or "perfect structure" of the curriculum.

In addition, Hattie highlights the importance of aligning teaching methods with curricular goals, arguing that educational success depends on the ability to combine theoretical knowledge ("knowing-that") with practical and conceptual application ("knowing-how" and "knowing-with"). An intentional and explicit approach to teaching curricular competencies is essential, as well as a focus on problem-solving and connection with students' prior learning, to avoid the "Matthew effect" and reduce educational gaps.

John Hattie's chapter "Teaching with Intent" focuses on the need for intentional alignment between various components of lessons, such as success criteria, feedback, learning strategies, teaching methods, activities, and assessments. The importance of teacher clarity is emphasized, even in the case of interesting deviations from the main topic, to avoid confusing students about the intention of the lesson. The chapter details five fundamental processes for choosing teaching strategies, which include: knowledge of learning progressions in the curriculum, cognitive analysis of tasks, understanding students' starting point and learning trajectories, provision of pedagogical interventions and appropriate feedback, and an assessment strategy for monitoring implementation and impact on students.

The "Intent to Teach" model states that student learning is maximized after learning intentions and success criteria have been established. Teachers need to set and communicate goals in a challenging way, with commitment as well as diverse strategies to achieve them, based on students' understanding of "knowing that" and "knowing how".

Intentional teaching emphasizes strategic alignment of lesson building blocks, with an emphasis on teacher clarity and coherence between learning objectives and assessments. The process includes an in-depth understanding of the curriculum, analysis of cognitive tasks, adaptation of pedagogical interventions to students' needs, and implementation of an effective assessment strategy. By focusing on these aspects, teachers can ensure a cohesive and effective learning experience for students,

encouraging them to achieve established success criteria.

Thus, Hattie outlines a call for a deeply humanistic educational vision, which puts at its core the integral development of students, and their ability to think critically and actively contribute to society. Chapter 10 discusses the need for deep reflection on the values and goals that guide curriculum construction in schools, highlighting the essential role of education in shaping the future of society.

Chapter 12 addresses the complex concept of learning strategies, highlighting the importance of adapting, and selecting pedagogical methods according to the specific phases of the students' learning process. At the heart of the discussion is the tripartite model of learning, which includes the acquisition of surface knowledge, its consolidation, and the transfer of knowledge to new contexts. The author emphasizes the crucial role of self-regulation and metacognition in effectively navigating these phases, encouraging an intentional and contextualized approach to teaching. This chapter highlights the need for a differentiated and intentional approach in the selection of learning strategies, focusing on adapting them to the specific needs and context of each student. This pedagogical approach not only supports the acquisition of knowledge but also prepares students for autonomous and adaptive learning, essential in the dynamic contemporary educational context.

Chapter 13 emphasizes that the effectiveness of teaching transcends the simple application of instructional methods. Central is the influence of teaching on students' progress, focusing not only on curricular coverage and the achievement of attractive tasks but especially on maximizing the impact on students' cognitive and emotional evolution. The importance of adapting teaching methods to the specific needs of students is emphasized, with an emphasis on the optimal time to use them in the learning process. The diversity of teaching methods is vast, each teacher having his arsenal of strategies, but their choice must be guided by the desired impact on students, not by rigid adherence to a single methodology. Hattie calls for a flexible and intentional approach to the selection of teaching strategies, balancing students' needs, learning objectives, and educational context.

Chapter 14, "Technology Implementation," explores the evolution and impact of technology in education after 2009, marking a significant shift from computer rooms to ubiquitous integrated devices such

as iPhones and iPads. However, despite enthusiastic promises of technological revolutions such as the one-laptop-per-child initiative, the reality has often been different, with limited adoption and solutions that have not brought about the expected changes. Meta-analyses reveal consistency in the average effect of technology on learning, oscillating between 0.3 and 0.5, highlighting that key questions focus not so much on the impact of technology itself as on how it is integrated into teaching. The chapter argues that technology will not be used in a transformative sense until we change our teaching methods, shifting from consuming knowledge to using technology as an aid to producing improved knowledge.

Chapter 15 deals with whole-school and off-school influences on the educational process. The discussion focuses on how factors within the school and in the external environment can affect student learning and development. The importance of an integrated school environment and collaboration between school and community to support educational success is emphasized. The chapter highlights the need for a holistic approach to education, including not only teaching methods and curriculum, but also the broader context in which students carry out their learning.

In chapter 16, "Conclusions," he gathers the main lessons, comparing them with those from the original work, and offering recommendations for the future. This section emphasizes the author's desire to go beyond simply stating what works in education, focusing on what has the greatest impact. The chapter raises crucial questions about the established structure

of the education system, the plateau of teachers' learning after the early years, and how their mindsets can develop to focus more on learning and listening. In addition, it explores how research-based evidence can be incorporated into school discussions.

This work is not just a new edition, but a sequel that highlights the major story of "Visible Learning", reflecting on its implementation in schools, how it has been understood and sometimes misinterpreted, and the future directions that research should take. The paper focuses on essential questions aimed at improving the educational system and engages in a discussion about the influence of family environment, students, teachers, classes, schools, learning, and curriculum on achievement.

"Visible Learning: The Sequel" by John Hattie is a dense work, which requires special attention to follow and at the same time a power of applied transfiguration of the multitude of information presented. It is a book built around numerous studies and above all, it is built through the author's research. The complex theoretical anchoring, the elaborated statistics, the devotion to "visible learning", as well as the multitude of opportunities for reflection make this work a practical-actional support in the didactic approaches undertaken by practitioners in the field of education.

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