

THE PEDAGOGY OF EMPATHY AND ITS IMPACT AT AN ONLINE SCHOOL IN GREECE

Georgios Kosyvas
Regional Director for Primary and Secondary Education of Attica, Greece
https://orcid.org/0000-0003-4497-685X
gkosyvas@gmail.com

Eftihia Papahsristou Education Coordinator for English as a Foreign Language, Second Directorate, Attica

Correspondence concerning this article should be addressed to Georgios Kosyvas, Regional Directorate for Primary and Secondary Education, 24 Xenias str., 11528 Athens, Greece.

Acknowledgments: We would like to thank the teachers of the Online School for their contribution to the Online School and participation in this research as well as all the members of the Coordination and Cooperation Group of the R.D.P.S.E.A. for their continuous support.

Funding: This research received no external funding.

Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Available from the authors upon reasonable request.

Conflicts of Interest: The authors declare no conflict of interest.

ABSTRACT

The suspension of schools during the academic year 2020-2021 due to the coronavirus outbreak necessitated establishing an "Online School" to meet the multifaceted needs of students with serious health problems. This paper addresses the creation of an online environment of safety and care in which vulnerable teachers delivered teaching applying the pedagogy of empathy, a holistic approach to develop the cognitive and emotional skills of vulnerable students. This research is qualitative with fifty teachers and fifteen students getting interviewed using open-ended interviews and the method of qualitative content analysis. The purpose of the study was to investigate the impact of empathy pedagogy on students' learning outcomes and highlight the factors that empowered students and teachers. According to the findings of the study, empathy pedagogy and particularly the cognitive, affective, communicative and sociocultural pedagogical components had a motivational effect on vulnerable students' academic achievements contributing to quality and inclusive education.

Keywords: Empathy, components of empathy, Online School, online learning, social-emotional development, vulnerable students and teachers, COVID-19 pandemic.

The Pedagogy of Empathy and its Impact at an Online School in Greece

1. Introduction

The contagious infection caused by the SARS-CoV-2 coronavirus dramatically changed all aspects of life causing serious repercussions worldwide, impacting economies, health sectors, and inexorably education systems (UNESCO 2020c). Many schools were ill-prepared for this situation that had never happened before (Eurydice Brief, 2022) and essentially did not have the knowledge which technologies and methodologies were the most suitable for teaching under these circumstances, in terms of effectiveness, security and accessibility (Cachia et al., 2021). The pandemic posed unparalleled challenges requiring teachers to adapt to online teaching (König et al., 2020), disrupting traditional teaching practices in physical settings changing at the same time the daily routines of students (Tzankova, et al., 2022) who participated in distance education (Buonsenso et al., 2021). Many of them started falling behind academically with the most vulnerable experiencing major setbacks paying inevitably the heaviest price (UNICEF, 2021). Schools implemented distance learning combining online and classroom-based teaching (Eurydice Brief, 2022) ensuring the temporary continuation of the educational process (Hodges et al., 2020). The ad hoc shift from face-to-face teaching to distance education enforced turning to distance learning platforms with insufficient technological equipment and difficulties accessing the internet (Bubb & Jones, 2020; Dimopoulos et al., 2021).

Greece, following the worldwide transition to emergency teaching (Hodges & Barbour, 2021), responded to the educational crisis recurring to a number of digital resources formerly developed through the Digital School Strategy, which focused on digital solutions for synchronous and asynchronous learning (OECD, 2020). Despite underfunding, lack of infrastructure and accessibility to online learning environments, insufficient teachers' training on the pedagogical utilization of computer technology (Anastasiades, 2022), teachers and students were finally supported. The need for abruptly implementing distance education forced teachers to deal with radical



changes in working, training as well as social and digital inequalities, which emergency distance education gave rise to (Jimoyiannis et al., 2020). Emphasis was put on ensuring equal access to distance education environments providing remote technological support to everyone involved in the educational process.

Under the specific educational, social and historical context, the Regional Directorate for Primary and Secondary Education of Attica (R.D.P.S.E.A.) ran the "Online School", which was an emergency remote teaching school (Hodges et al., 2020), in order to address the abrupt shift of delivering teaching to alternative distance learning modes and distance learning was the only available option for maintaining the quality of teaching and learning. The idea emerged under the pandemic education crisis, which created the necessity to think outside the box in order to meet the vulnerable students' needs, who should continue attending school without disruption throughout the academic year 2020-21. Five hundred and fifty one (551) vulnerable teachers provided online instruction for one thousand ninety six (1096) vulnerable students, who belonged to groups of increased risk due to serious health problems. The aforementioned groups needed special medical treatment or regular hospital visits. Subsequently, their health condition was at serious risk through face-to-face teaching so their involvement in distance learning was deemed imperative. Hence, teaching was organized exclusively remotely through online classes for both Primary and Secondary Education students (Kosyvas, 2022a) originating from various school units in the area of responsibility of the Regional Directorate of Attica.

While the pandemic had been tightening its grip, the social isolation of students and teachers had detrimental effects on their mental health, the manifestation of negative emotions and change in their behavior (Brooks et al., 2020). In order to mitigate the psychological impact, in addition to supporting the students' learning progress, a holistic pedagogical approach was necessary with emotional empowerment and strengthening of mental resilience due to serious health problems in order to maintain physical and mental well-being (Hatzichristou et al., 2022; Masten & Motti-Stefanidi, 2020).

For the achievement of the aforementioned goals, various prevention and intervention programs have been designed to promote the social-emotional development of children and adolescents in the school context (Cojocaru, 2023; Malti et al., 2016; Mondi et al., 2021). One of the most appropriate educational programs has been recognized empathy, which is a key component of social and emotional empowerment and balanced development. It is a widely accepted view that empathy can be cultivated and enhanced through such approaches (Batson, 2009; Jones et al., 2019).

Although there is a growing body of research on the benefits of developing social and emotional skills on learning achievements (Carlson & Dobson, 2020; Preston & de Waal, 2002; Wilce & Fenigsen, 2016), research on applying the pedagogy of empathy during synchronous and asynchronous distance learning is limited. In particular, to the best of our knowledge, there is a complete absence of studies which focus on students with severe medical conditions who were taught by vulnerable teachers during the pandemic in online environments, which is the aim of this paper.

2. Empathy and its conceptualisation

Empathy researchers and theorists have pursued the essence of this concept for almost a century having numerous and definitions (Batson, 2009; Cuff et al., 2016; Howe, 2013). The term is used haphazardly referring to a kind of emotion sharing when something happens to someone else (Wondra & Ellsworth, 2015). Accounting for a subjective experience, empathy involves understanding of other people emotional state feeling similar feelings with them (Decety & Jackson, 2004), imagining how other people think and feel, sharing experiences, needs, and desires between individuals (Riess, 2017). Therefore, empathy is related to emotional identification, recognition of another person's thoughts, feelings, state and condition. Through these varied definitions, it becomes obvious that there is not a consensus but a complexity of relevant definitions on behalf of different scholars.

The ability, then, to put oneself in another person's shoes, to experience their situation, to understand as much as possible the deeper motives of their behavior and to see the world through the eyes of other people can be attributed in various ways, as an individual ability, a personal trait, a competence, a reaction to other people experiences, and as interpersonal behavior (Luis et al., 2023) thus having a multidimensional nature (Baldner & McGinley, 2014).

However, empathy should not be confused with sympathy. A person may empathize with another person's suffering, but not understand the emotions causing it. With empathy we aim to understand others, whereas with sympathy we participate in their emotional experience, such as when expressing pity for a misfortune (Clark, 2010).



In order for true empathy to be manifested, the majority of clinical and counselling psychologists consent that three distinct skills are required, i.e. (a) the ability to share the other person's feelings, (b) the ability to observe what another person is feeling, and (c) the intention to respond compassionately to that person's suffering, which is "socially beneficial" (Hatfield et al., 2009). With reference to the aforementioned skills, Decety & Svetlova, (2012) claim that being able to perceive, share and recognize others' affective condition fundamentally facilitates surviving effectively in the social world. Essentially, this group of socioemotional competences constitutes some of the most meaningful human interactions, e.g. bonding between mother and child (Batson, 2009). Empathy has attracted the research interest of many disciplines such as neurology, psychology, philosophy and psychotherapy (Stephan & Finlay, 1999; Wang et al., 2022) and contributes to developing successful interpersonal relationships (Coutinho, et al., 2014).

In addition, empathy is considered a basic dimension of Emotional Intelligence being one of its components (Goleman, 1995), who supports that it comprises four main constructs - self-awareness, and social awareness amongst them. Self-awareness has to do with someone's ability to identify one's emotions whereas social awareness describes the ability to understand and appropriately respond to other people's emotions (Fianko et al., 2020) implying that by knowing yourself, you can understand the feelings of others.

Most definitions of empathy, which is a multidimensional concept, encompass different features and sides (Kaźmierczak et al., 2013). In the existing literature, the most prevalent fundamental dimensions identified by researchers are four, i.e. cognitive, emotional, communicative and sociocultural.

Cognitive empathy is the ability to take another person's point of view, to recognize and understand their feelings and the way they think and react to life events (Eslinger, 1998; Hogan, 1969; Rankin et al., 2005). It refers to the understanding of one's thinking (Davis, 1983; Eisenberg & Strayer, 1987) and emphasizes the role of cognitive processing in understanding another person's emotional state (Hogan, 1969; Eisenberg & Strayer, 1987) but without being in a similar situation (Decety & Jackson, 2004).

Emotional empathy refers to experiencing the emotional state of another person. This implies the existence of emotional response, which is consistent with the other person's emotional state. The individual reproduces the same emotions with other individuals, shares them, and feels similar experiences (Rankin et al., 2005). Emotional empathy is fundamentally an affective phenomenon (Iacoboni, 2011; Mehrabian et al., 1972; Preston & de Waal, 2002).

Communicative empathy refers to the ability of an individual to show another person that they understand their emotional state and that they can communicate this to their interlocutor accurately and honestly (Xiao et al., 2016). The communicative dimension of empathy focuses on its human-centered aspect contributing to a deeper understanding of the other person.

Finally, there is *sociocultural empathy*. Social empathy is the ability to understand people and acquire knowledge about their life conditions, situations and social inequalities (Segal, 2011; Segal et al., 2017; Segal & Wagaman, 2017). Cultural empathy focuses on solidarity, respect for diversity and develops intercultural communication skills (Dyche & Zayas, 2001; Shimizu, 2000).

According to Smith (2006), the aforementioned dimensions illustrate the fact that empathy refers to two interrelated human abilities, i.e. the vicarious sharing of emotions (emotional empathy) and the mental perspective (cognitive empathy). As regards mutual empathy, Jordan (1986) claims that it concerns the affective and cognitive experience of understanding another person carrying with it some notion of motivation to understand another's meaning system from their frame of reference and ongoing interest in their inner world. Hartling (2020) argues that "mutual empathy is a two-way dynamic process that involves joining in relationships that allow people to know and respond to the feelings and thoughts of the other person; it is a sophisticated skill that clears a critical pathway toward greater clarity and knowledge in relationships".

The ability to empathize is an important factor of social and emotional development, affecting an individual's behavior toward others and the quality of relationships (McDonald & Messinger, 2011). Across development, empathy contributes to promoting the development of children's and adolescents' social-emotional functioning and hindering their aggression in school contexts (Malti et al., 2016). One's ability to empathize develops gradually during childhood and is presumably influenced by children's social environment (Goldberg, 2021).



For the aforementioned dimensions of empathy to be evoked in school contexts, research highlights the critical contribution of teacher empathy in promoting student learning and maximising academic performance. When students feel safe and welcome, they fully participate in the learning process implementing tasks and activities efficiently and willingly.

2.1 Teacher empathy: role and importance

Teacher empathy is an integral part of their role and an essential element of their professional development (Feshbach & Feshbach, 2009; Swan & Riley, 2015). It is associated with the effort to feel students' positive and negative emotions in order to recognize their needs and concerns and empathize with them (Tettegah & Anderson, 2007). Psychologist Carl Rogers (1969) was the first to highlight teachers' empathy pointing out its crucial importance for increasing learning significantly whilst changing students' perceptions of education.

In everyday teaching practices, empathy is closely related to teacher-student interpersonal interaction (Boyer, 2010; Rogers & Webb, 1991). Teachers construct students' attitudes and values, creating an environment for their holistic development. In fact, the ability to empathize with students is an essential part of effective teaching and learning and building productive relationships (Narinasamy & Hasmah, 2013; Nieto, 2006).

In addition, empathetic communication between teachers and students contributes to creating a supportive learning environment, in which teachers make their lessons engaging and improve learning outcomes (Bozkurt & Ozden, 2010; Cooper, 2004). It has also been argued that teacher empathy has a positive impact on peer relationships reducing violent behavior (Ikiz, 2009; Schutz & DeCuir, 2002). Teacher empathy is an important skill that fosters supporting learning environments for all students (Arghode, et al., 2013) while it is a vital factor for launching teacher-student rapport (Teich, 1992). It follows, then, that expressing a keen interest on students' emotional state establishing at the same time constructive teacher-student relationships constitutes an essential factor in classroom.

By promoting high-quality teacher-student interactions, teachers' empathy can be assumed to foster student development (Aldrup et al., 2021). Research studies have revealed that empathy is of fundamental importance in teachers and learners' development as far as ethical, communal, and educational issues are concerned (Arghode et al., 2013). Consequently, teacher's empathy overwhelmingly contributes to students' empowerment. When teachers respond to students' emotional, social and academic needs in a sensitive way, the quality of teacher-student interactions is definitely enhanced (Pianta & Hamre, 2009). Hence, empathy also facilitates the development of social competence fostering, additionally, high quality meaningful and deep relationships.

Teacher's empathy is mainly related to interpersonal, social and intercultural empathy. Interpersonal empathy refers to knowing the inner state of the student, their possible difficulties in lessons and the teacher's response with sensitivity (Batson, 2009). Teachers' social empathy refers to the ability to recognize and understand the needs and feelings of students in the social environment of classroom, to identify differences among students in the way they interact with each other, and to adapt teaching to these differences by providing appropriate support to students who need it. Social empathy is the teacher's ability to understand the family and social conditions of his students (Segal, 2011) and is closely linked to students' academic success. It provides a framework for more effective social policies that address disparities and support social and economic justice for all people (Segal & Wagaman, 2017). Intercultural empathy focuses on understanding and respecting diversity developing intercultural communication skills. It facilitates students to develop alternative perspectives, avert cultural conflicts aiming at tackling prejudices, stereotypes and bias (Malikiosis-Loizou, 2008; McAllister & Irvine, 2002).

Intercultural and social situations refer to additional pressure each student experiences, due to low socioeconomic status, cultural identity, or regular hospitalization owing to chronic health problems. The better teachers understand the various personal, social and cultural state of students, the more they empathize cognitively and emotionally with them leading to compassion. This is also called compassionate empathy, and involves realising that someone feels discomfort and proceed to alleviating actions (Dolan, et al., 2017). Presumably, this type of empathy presupposes recognizing someone's emotions and understanding them.

Teachers providing a positive learning environment through empathy can actually activate learner engagement and studies have shown that empathy increases learner confidence in contexts where education takes place (Zhang, 2022). Empathetic teachers facilitate learners to boost their motivation and self-efficacy (Cooper, 2004) augmenting their self-confidence. Teachers with high empathy take the time to get to know their students' specific problems, paying particular attention to students with medical issues as well as to refugee students without a good command of the host country's language, who may feel the fear of failure.



Empathic teachers practice 'active listening', show flexibility in the delivery of homework and help students reach their highest potential by encouraging and supporting them. They also maintain high standards of academic achievement for their students (Janusik, 2002) striving to remove potential barriers to learning by implementing inclusive practices and providing differentiated instruction.

The cognitive component of empathy is associated with teachers' efforts to inhibit students' low performance and undesirable student behaviors (Hamre & Pianta, 2005). Thus, positive teacher-learner rapport can trigger learners to engage more in classroom activities (Wang et al., 2021). Empathy and teacher-student relationships are associated with boosting learning and increasing student performance (Barile et al., 2012; Cornelius-White, 2007). When teachers devote time and energy to understand isolated or discouraged students supporting them to fully develop their personalities, they benefit these students by enhancing their resilience (Bouton, 2016; Kosyvas, 2022b; Roorda et al., 2017). In these cases, proper questioning and active listening will yield significant benefits for learners (Fontana et al., 2015). Among others, the review strategy and the inclusion of motivational interviews are recommended to enhance student participation in the educational process (Miller & Rollnick, 2012; Reinke et al., 2011).

Nonetheless, Osler (2020) argues that "while empathy is discussed almost exclusively in the context of face-to-face interaction, we can empathetically perceive other people and their experiences in certain online situations". Additionally, in their research, Hancock et al. (2008) noticed that "emotional contagion", i.e. spread of emotions amongst individuals is possible via computer mediated communication.

2.2 Teacher empathy in online learning

During the past two decades, there has been a significant increase in research into online learning environments, the challenge of emerging 'digital empathy' as well as the social and emotional interactions as digital technology is increasingly used in teaching and learning (Artino, 2012; Humphry & Hampden-Thompson, 2019). In particular, researches carried out highlighted the impact that social interaction in online settings has on learning outcomes (Mayer, 2005) as well as student satisfaction (Borup et al., 2012), which, definitely, constitute critical factors that foster learners' progress.

It is worth clarifying that according to Friesem (2016), digital empathy regards a set of cognitive, emotional, social skills and processes, which enable individuals to analyze and evaluate other people's internal state, recognize, understand, and predict another's thoughts and emotions (cognitive empathy), and feel what others feel (affective empathy) through communication mediated with digital technology. Hence, digital empathy refers to showing traditional empathic characteristics such as concern and care for others (Terry & Cain, 2016), expressed through the medium of computers. Being compassionate and reflective, then, via digital media intersects communication in societies nowadays. In educational contexts, the flourishing of digital technology has fostered social interaction taking place online through computers. This constitutes digital empathy a crucial literacy, which promotes teaching and learning in online environments thus, making it a state-of-the-art approach in education.

For effective online teaching building empathy at the same time, a fundamental principle is developing a clear understanding of the learners' needs and expectations while adapting the instruction to learners' skills and viewpoints (Fuller, 2012). This way online empathy proves to be a useful tool for the creation of a community, which facilitates a sense of belongingness for students. Intimate relationships lasting for a long time can occur in online communities and people can find support when suffering from illnesses (Rheingold 1993). When people interact constantly, the foundations for stronger communities can be established (Berardi et al., 2020). However, a factor affecting online communities is the existence of trust amongst people facilitating communities not only to survive but thrive as well (Feng et al., 2003). Hence, connecting online with others continuously promotes empathetic practices. In online learning environments nowadays, the crucial role of showing empathy becomes evident providing valuable insights for teachers as to how they can fruitfully demonstrate genuine empathy online to empower learners. Conversely, the absence of empathic attitude on behalf of teachers would create a significant gap in relationships constraining building deep interactions in this context.

Teaching in online classrooms establishes a specific form of communication between students and teachers. As such, students' interpersonal and emotional experiences influence their engagement in learning and achievement of cognitive outcomes (Hastie et al., 2007; Price et al., 2007). Many studies highlight the importance of teacher-student interaction to support learning as well as caring, counselling and supporting students (Bryde, 2001; Richardson, 2009). Moreover, research on emotions involved in online learning environments offers an insight into relationships in academic achievements (Borup et al., 2012). Asynchronous modes of online communication (e.g. e-mail, texting) are integrated into teaching and learning practices. Nevertheless, during the



pandemic, synchronous modes of communication have been also used and researchers have studied their specific benefits, potential and challenge (Humphry & Hampden-Thompson, 2019).

Empathy and a sense of belonging during distance education favorably affect the learning process promoting students' learning motivation (Holmberg, 2003). Digital empathy can relieve students of mental pain and boost their confidence (Howe, 2013). As teaching becomes online, stress levels of a number of students may increase and empathetic teachers feel this anxiety and deal with it with specific reactions, e.g. expressing satisfaction when students understand the lesson content. In fact, teachers can create a warm classroom environment by affirming the successes of all students in addition to allocating time to know each student on an individual level (Meyers et al., 2019), which is rewarding for the welfare and future of those students (Cartee, 2021).

Consequently, online instructors need to use strategies to humanize online courses identifying the most effective strategies which engage learners in meaningful learning so that teachers can bridge the physical distance between students and themselves (Singh, et al., 2021). It is the teachers' task to make intensive efforts to reduce the social distance developing trust and respect between learners and instructors in online educational settings. Undoubtedly, achieving an in-depth understanding of engaging strategies will facilitate educators not only to maximise learners' academic achievements and social connections, but to build empathy, adapt learning to students' specific needs, and boost student motivation (Martin et al., 2020).

Empathetic practices within a distance education context influence the learning process positively especially when students are addressed directly (Holmberg, 2003). Conversation and direct contact socialize students fostering positive relationships. A key principle for effective online instruction is when educators develop a realistic understanding of students' needs tailoring Curricula to student abilities. In online learning environments, students and teachers often co-determine the pace of learning. Hence, students tend to be autonomous, taking control of their own learning and seeking advice and guidance from the instructor or peers when concepts or instructions are unclear (Fuller, 2012).

Teacher empathy is an educational skill of vital importance and research has shown that social-emotional competencies can be taught, and that schools play a significant role in nurturing empathy (Durlak et al., 2011). With reference to the underlying rationale for empathy education, researchers and educators contend that schools constitute major settings where socialisation can take place (Silke et al., 2021). Presumably, the Online School of Attica can be considered as such as long as there were empathetic practices among vulnerable teachers and students.

Nonetheless, this skill has not been explored implementing distance learning during the COVID-19 pandemic in online classrooms where vulnerable teachers delivered learning to vulnerable students. Additionally, little research has been reported on the impact of online teaching and learning on empathy in Primary and Secondary Education whereas fostering empathetic practices has been studied mainly in university online programmes (Fuller, 2012). Therefore, the aim of this paper is to study teachers' digital empathy and its impact in an online learning environment.

3. The Study

This research presents qualitative findings and aims to investigate the experience of social subjects (Fraenkel et al., 2016; Kyriazi, 1998). The methodology is mixed and the qualitative methods used are: a) the semi-structured interview and b) qualitative content analysis (Creswell & Poth, 2016; Cohen et al., 2017; Bryman, 2017).

3.1 Purpose of the research

This study aims to shed light on the perceptions of vulnerable teachers and students through the impact of the pedagogy of empathy on the learning achievements and academic performance of vulnerable students as well as identify the causal factors which contributed to empowering them in the context of synchronous and asynchronous distance learning at the Online School of the R.D.P.S.E.A.

In addition, the ultimate goal was to describe the wide range of experiences through genuine empathy of the appointed teachers, who made a conscious effort to sense their students' emotional state. The latter coupled with the ability to imagine and understand what and how someone else might be thinking or feeling constitutes a strong argument for making the decision to appoint vulnerable teachers as teaching staff at the Online School.



3.2 The research questions

This research paper aspires to investigate the perceptions of vulnerable teachers and students of the impact of empathy pedagogy at the Online School while implementing distance education during the academic year 2020-21. In this vein, the research questions of the study were articulated as follows:

- To what extent did the pedagogy of empathy contribute to students' learning achievements in the synchronous and asynchronous distance learning environment?
- Which components of the pedagogy of empathy contributed to the empowerment of teachers and students in online teaching and learning?

3.3 Participants – Sampling

For the purposes of this study, a total sample of fifty (50) randomly chosen vulnerable teachers out of 551 appointed at this school, and a number of fifteen (15) vulnerable students participated in the research (Cohen et al., 2017). In order to document data and information two online meetings through Webex were implemented purposefully with the participation of both teachers and learners.

The main selection criteria of the sample were belonging in a vulnerable group, experience with distance learning, availability to participate when conducting the survey. Participants had been informed about the process and had consented participating in the study, which was performed anonymously, using pseudonyms owing to personal data privacy and protection.

3.4 Research tools and procedure

The semi-structured interview constitutes a widespread practice in qualitative research (Ruslin et al., 2022). It is an open-ended and flexible form of interview, which allows immediacy and interaction, ensures control of the process and guidance of the participants, encourages free expression of thoughts and leads to rich and authentic data (Creswell & Poth, 2016). For the needs of the research, two protocols were developed for teachers (a) and students (b) respectively with appropriately worded "open-ended" questions (Ruslin et al., 2022; Tasker & Cisneroz, 2019) as follows:

- **a.** How did you experience your involvement as a teacher in the Online School during the pandemic? Can you describe the relationships with your students in the context of distance education, both synchronous and asynchronous? How do you evaluate the learning outcomes and academic achievements of your students?
- b. What is your opinion and feelings about the Online School? What were your emotions when communicating with your teachers and peers through the digital platforms? Did you do well in the lessons? Did you learn as much as you expected?

The semi-structured teachers' interviews were conducted by the researchers on June 9, 2021 for Secondary Education and on June 23, 2021 for Primary Education through teleconferences. The students' interviews were carried out by their teachers during June 2021 recording the content of the teleconferences and then the researchers deciphered its content. The interviews were transcribed into texts forming the database of the study.

3.5 Analysis of the research findings

Qualitative content analysis is a basic method of coding, analyzing and interpreting spoken or written language (Creswell & Poth, 2016; Elo & Kyngas, 2008) and contributes to the focused recording, analysis and interpretation of participants' attitudes and perceptions (Kyriazi, 1998). A constant comparative method was used in the analysis, which facilitated identifying common themes, organizing them into categories with key concepts coded for each focus group, i.e. teachers and students, according to the research questions (Creswell & Poth, 2016; Fraenkel et al., 2016). Going through the transcribed texts thoroughly, teachers' and students' responses were grouped into two categories providing answers to the study.

4. Research findings

Empathy and its impact on students' learning achievements in the online distance learning environment

The role of empathy as a critical contributing factor in promoting learning and educational achievements has been identified in the existing literature (Jennings & Greenberg, 2009; Cooper, 2011; Fuller, 2012), a fact drawn from the following teachers' responds.

- "Empathy means to be able to understand how our students think and feel. Without empathy, we do not care about our students, their efforts to learn, their difficulties and their progress."
- T2 "There was an emotional connection with students. Our warm relationship had a positive effect on student learning and performance."



- T4 "The power of empathy that existed between us strengthened the students' desire for learning and motivated them to put greater effort to succeed."
- "I felt frustrated when some students did not perform well. I gave them additional opportunities to overcome difficulties. As students realised that I cared about them, they responded more to the lesson content."

The interest, support and empathy of the Online School teachers were important factors facilitating student learning. The main concern of the teachers was to support students and closely monitor the learning process. Educators believed that empathy can be used effectively to facilitate vulnerable students' learning process through the creation of a supportive digital environment. The frequent absence of some students from the Online School due to hospitalization affected their academic performance. Empathetic teachers organized remedial lessons for absent students or posted supplementary supporting activities paying special attention to enhance the efficiency of their teaching. The relationship of teacher empathy with high student academic achievement is recognized by students as well:

- "With her thoughtfulness and kindness, my teacher helped me learn the lesson content."
- S 2 "Digital courses and our teachers supported us in every way, which made me improve and raise my grades."
- "I had perfect relations with all the teachers. They greatly contributed to maximising my performance during the school year. The digital school gave me the strength to complete preparation for the National Panhellenic Examinations."

The students' learning achievements were enhanced by the pedagogical dimensions of empathy. Their high academic achievements are mainly attributed to the compassion and empathy of the teachers towards their students. Many researchers argue that students with higher levels of empathy get outstanding grades (Mwangi et al., 2015; Kumi-Yeboah, 2020; Hammermeister et al., 2020). Teachers had to support their students in order to effectively promote autonomous learning and meet students' academic goals regulating their own emotions, however, setting personal and professional boundaries in order to avoid stress and burnout (Kosyvas, 2023).

b) Pedagogical dimensions of teacher empathy during online learning

The empathy observed in the synchronous and asynchronous online learning environment is multifaceted involving numerous dimensions, which, in fact, are intertwined with each other. Based on the research data we identify four components: i) cognitive, ii) emotional, iii) communicative, iv) sociocultural.

i) Cognitive empathy and adaptation to students' needs in distance learning

The Online School for vulnerable students contributed to avoiding the disruption of the teaching and learning process owing to the pandemic outbreak. The teachers planned and managed the learning with empathy, organized the digital environment, monitored the progress of the learning, gave feedback and assessed the students (Kosyvas, 2023). The teachers' main concern was to respond to each student's diverse needs, cognitive skills and abilities. During the online meetings, the teachers were engaged in in-depth discussions expressing their opinions as follows:

- T3 "Under the difficult conditions of the pandemic, I had to provide effective solutions dealing with education inadequacies during the online courses."
- "We communicated effectively with the students and that's what helped them get the knowledge easier. Using digital tools I supported their learning process as much as I could"
- T 7 "I gave students striking teaching material with examples to arouse their interest designing tasks and activities suitable to their abilities."

The Online School teachers were asked to cope with the responsibilities of a challenging and difficult role. They managed to establish a climate conducive to mutual understanding, collaboration and acceptance in the online classrooms. They also launched major teaching initiatives familiarizing students with the course content in a stimulating way and making appropriate adjustments to Curricula based on students' needs and abilities. In addition, an important characteristic of the teachers was their good mood, the appreciation they had for their students, their high expectations, support and encouragement. The students were aware of the fact that their teachers were approachable, but demanding to a certain extent due to their health condition.

T8 "During distance education I tried to communicate with students constantly. I was giving detailed and personalized feedback on students' work. My aim was to motivate students to work harder, improve and succeed."



- T3 "I had to additionally support vulnerable students, who had learning difficulties, designing extra activities online."
- T9 "I prepared the online courses according to the Curriculum but adapted it to students' own difficulties, way of learning and needs putting a "personal touch" for each student."

Taking the aforementioned into consideration, it becomes obvious that the teachers showed high levels of empathy adapting teaching to each student's particular needs. They also identified their learning process and characteristics and proceeded to organizing individualized teaching to achieve each student's learning goals. Teachers intended to address vulnerable students' individual learning difficulties and meet their needs (Ramana, 2013). The interactions throughout the learning activities demonstrate teachers' supportive attitude and digital empathy to help vulnerable students with immediacy and efficiency.

"In physical classrooms checking new concepts comprehension was considered important.

It was even more significant in distance learning especially when vulnerable students did not understand specific concepts."

Teachers regularly ensured students' understanding of concepts taught during the online courses by asking relevant questions in the context of alternative formative assessment, which was conducted through synchronous discussions. Teachers used alternative ways of assessing students in order to identify strengths and weaknesses and target content areas that needed additional emphasis and remedial teaching. The Online School students accepted the synchronous and asynchronous distance learning online classes with relief owing to their medical condition.

- S 5 "When I was absent, my teacher devoted time putting effort into safely attending lessons and get very good grades."
- "In our digital classes, we got knowledge through problem-solving activities often while playing. I will attend next class without having knowledge gaps."
- S 8 "The lessons were organized on the digital platforms. I posted online work regularly and when I had difficulties, the teachers always helped me."
- "I completed the digital assignments and sent them to teachers. They knew what knowledge we needed asking us to watch video lessons and answer questions. They answered our questions during the online classes solving the most difficult exercises in class."

The pedagogy of empathy had beneficial effects on the teaching and learning process (Cooper, 2011; Damianidou & Phtiaka, 2016; Gribble & Oliver, 1973). Students were eager to learn and responded positively to teachers' interest for communication and broadening their cognitive horizons. During distance education, teachers faced daunting tasks assuming the role of pedagogical consultant of the educational process as well as facilitator of the online learning experience. Empathetic teachers tried to understand the students' cognitive state interpreting their reactions in order to subsequently adapt the curriculum to the students' needs and abilities resulting in effective teaching practices, greater student engagement and success during the digital learning process.

ii) Emotional empathy and resilience

Teachers' emotional empathy and their ability to perceive the students' mental state (Preston & de Waal, 2002) created healthy emotional bonds being able to recognize and understand students' positive and negative emotions, expressing compassion for them thus responding appropriately to their needs.

The Online School ensured the continuation of education during the pandemic offering vulnerable students the opportunity to meet friends and new teachers online. Educators did not just limit themselves to the achievement of cognitive goals, but attempted to approach each student by observing their behavior particularities closely (Hamre & Pianta, 2005). They obtained the necessary pedagogical information from School Principals students and pupils attended before the pandemic. Accordingly, the parents informed teachers about the severity of their child's health condition and its evolution, their emotional state and potential difficulties.

- "We managed to feel as if we were in physical classrooms. Every digital online classroom embraced all students."
- T12 "We organized online meetings with psychologists for some children who needed to overcome difficulties with parents participating as well."
- T 13 "I listened to the emotions each student was experiencing and recognized their different physical and mental state."



The majority of teachers showed high empathy towards their vulnerable students by offering support ensuring the emotional well-being of those who were at risk due to serious illnesses. The teachers with the support of the Educational Coordinators and psychologists placed a strong emphasis on a holistic understanding of the needs of school communities. They laid the foundations for the development of a genuine pedagogical relationship by establishing a pleasant and constructive collaboration with students acknowledging their fears and sharing their concerns and worries. It proved that empathy training acted proactively and soothingly on negative mood and anxiety disorders. Empathetic teachers encouraged the acceptance of diversity and the development of solidarity, which became important virtues.

Teachers' pedagogical actions reduced the competitive spirit thus strengthening resilience, which is the ability to overcome and positively adapt to the adversities encountered in life (Sanderson & Brewer, 2017); this motivated learning and contributed to increased student performance (Janusik, 2002; Fontana et al., 2015). The Online School teachers and students showed remarkable resilience to personal problems and the threat of the novel coronavirus disease (Kosyvas, 2022b; Papazis et al., 2022) with teachers' encouragement being constant.

- T 2 "The students empowered me to be healthy and stay alive. I was asking my students not to give up"
- T 14 "At the Online School I felt safe and this gave me strength to face difficulties during the pandemic."
- T 15 "I think it's hard to empathize if you don't experience similar health issues to your students."

Empathetic teachers were aware of their online students' emotional state creating a climate of safety, acceptance and trust. They believed that the impact of distance education was very significant on students; they commented on their moral debt for applying a pedagogy contributing to students' well-being. They were proud of their students' learning outcomes and their participation in a great educational endeavor.

- "I was absolutely satisfied with my pedagogical contribution, relationships with students and their emotional empowerment. It was a moral obligation and my own need to offer students as much as I could."
- T3 "The children acted as the judges of the teaching process but that was the real recognition of my ongoing efforts despite health problems."

In their responds, the students emphasized the feeling of belonging to a group and strength of friendly bonds amongst them. An online learning environment was created in which students felt safe and expressed their feelings freely. Students and teachers strengthened their contact, developed relationships with each other creating an online learning community. Students recognized teachers' valuable help and psychological support in online lessons.

- "This year I had a unique experience at school. At first we were all strangers but very quickly we became a nice strong group."
- S 5 "My teacher was warm and patient. When I was in the hospital I looked forward to meeting her and my classmates."
- S 2 "There was compassion with our teachers We were motivated and supported by them and that helped me greatly increase my performance."

Teachers' and students' ability for emotional empathy improved through training and practice, and contributed to the development of successful relationships amongst them as well as to the promotion of well-being.

The two-way pedagogical relationship which developed within an appropriate psychosocial framework contributed to creating a positive pedagogical climate and good interpersonal relationships. The emotional state students experienced during online classes was supportive and productive. There was support and empathy between members of the school community, which led to the climate of safety allowing for a sense of calm in the school in order to maximize students' concentration and confidence.

Students experienced a range of emotions while interacting with their teachers, from joy and excitement to anger and anxiety, which influenced their participation in lessons and their learning experiences. Often the acceptance of failure, and avoiding stigmatizing mistakes led to positive emotions. Manifestation of emotional empathy flourished as much in online learning environment as in face-to-face teaching. Both positive and negative emotions were evoked in students such as willingness to participate in online dialogue or reluctance of emotion sharing. The counselling role of the teacher was very important, as students were supported in every way to develop as individuals and were progressively led to emotional 'literacy' understanding others' emotions as well as their own.



In conclusion, teachers' and students' ability for emotional empathy was improved through training and practice contributing to the development of successful relationships amongst them and their well-being.

iii) Communicative empathy and students' online engagement

The communicative dimension of empathy is closely related to the other dimensions and has a crucial pedagogical importance for the development of students' potential, self-awareness and self-regulation. Communication, information exchange, interpersonal interaction and dialogue between the teacher and the student lead to mutual understanding. The use of social media and mobile phones in everyday life has changed the ways of interacting and communicating affecting the expression of empathy. With digital technology the ability to instantly share thoughts and feelings can take place within seconds. These changes are a challenge for distance education and have brought to the fore 'digital empathy', i.e. the concern and care for others mediated by digital media.

- **S 10** "In this different school, I met new classmates and became online friends to communicate. I also had teachers who helped me not to fall behind in school."
- S 3 "During the first online classes, communication was not easy. Sometimes we were slow to connect to Webex and e-class but soon this improved."

In fact, the need to familiarize students with e-learning, low internet speed and the lack of electronic equipment are also confirmed by the literature review (Dimopoulos et al., 2021; Jimoyiannis et al., 2020). In cases of lack of equipment laptops were borrowed from students' home schools.

The teachers and students were involved in the Online School digital environment, each having specific health problems and having their own way of displaying empathy, (Humphry & Hampden-Thompson, 2019). The ability to communicate was a dynamic relationship that led to knowledge production and the success of synchronous online teaching. The pedagogical relationship was bidirectional and students co-constructed knowledge with the teachers' support. Digital technology contributed to the development of digital empathy between teachers and students. From the first online lessons, teachers tried to set clear rules for everyone in order to be able to collaborate onwards.

- "During the first Webex courses, I gave instructions on how to use the e-class platform, how to find the teaching material and how to post their assignments giving advice for the success of
- the online courses. From the introductory lesson, I encouraged students to communicate both with me and their peers. I planned weekly discussions on students' concerns and an atmosphere of trust and interpersonal communication quickly developed amongst us."
- "Students were satisfied with distance education and welcomed communication via Webex and e-class. They liked working in small groups and the process of looking for the solution to various questions on their own."
- T17 "With empathy and genuine communication I care about students' needs. They know that I am there for them regularly interacting with students."

Basic skills characterizing a teacher while counselling and guiding are active listening, honesty, friendliness and empathy (Hornby et al, 2003). The Online School empathetic teachers facilitated building trust with students early on in the online learning environment. Autonomy, responsibility and collaboration were achieved by the social presence of the shareholders and their reciprocal action (Durlak, 2015; Humphry & Hampden-Thompson, 2019).

Teachers reported that a vital component of empathy in promoting successful interpersonal interaction and learning was the increased frequency of communication with students. Organizing real-time, synchronous discussions enhanced empathy, deeper understanding of students' needs, and trust. This promoted learning through a variety of interactions with the teacher and the online learning community. Feedback was both individual and for the whole classroom. Providing feedback outside the classroom context proved of vital importance using text messages on mobile phones or social media.

- "I am in regular contact with students in online lessons and give personalized feedback, to each student on their work. Using WhatsApp or Viber on my mobile phone allows me to increase the speed of responding."
- T 19 "The Online School teachers are available even beyond school timetable. Students and parents communicated by email and by phone whenever they felt it was necessary."



As students studied during asynchronous learning phase, teachers found a variety of ways to keep in touch with them thus showing digital empathy. Teachers were eager to communicate with their students, using email and *eclass* platforms responding directly with text messages or social media platforms, a fact which promoted a deeper understanding of students' needs. The use of multiple channels of communication seemed essential to maintain student and teacher interest and motivation.

The online learning model improved student engagement making learning meaningful and active participation of all students in learning was a challenge for teachers. Despite the difficulties, the empathetic teachers aroused the vulnerable students' interest, created opportunities for action and managed to motivate them as much as possible in a digital environment of creative online learning. Interactive, communicative, experiential, exploratory and collaborative learning was a key concern for the majority of teachers.

- "There were difficulties in achieving meaningful participation of all students in the synchronous online learning. I tried to arouse the students' interest in a playful way so that they focused on the lesson. To prevent being passive, I posed questions or problems for collaborative exploration in small groups or as a whole class."
- "Often I called students by name at regular intervals to answer questions or confirm their attendance, e.g. to make notes in the chat to ensure their active participation."
- "Distance education led to innovative teaching practices, student participation in decision making and the development of a meaningful relationship with online students, which is as important as in face-to-face classroom teaching."
- T 21 "While preparing the lesson I try to imagine how students will receive knowledge from either posted written texts or videos."

Our observations show that the online learning model, both synchronous and asynchronous, contributed to students' cognitive development (Halverson & Graham, 2019). During synchronous discussions, students engaged in two-way interactive communication, while asynchronous interactions focused mainly on students' tasks, using mostly one-way communication with less interactive exchanges. In contrast to the first phase of distance education implementation in which the technological dimension of digital media and tools was prioritized, the online approaches adopted highlight the fundamental importance of their pedagogical utilization.

- **S 6** "We all became friends and keep talking and communicating with each other. I realized that it is nice to work with friends."
- S 1 "The lesson was easy to participate in. I liked cooperating with classmates and try finding the answer. The lessons had pictures, images and videos."
- S 7 "We didn't have any arguments. There was respect and understanding. Teachers asked us to express our own opinion and make decisions together."
- S 4 "Although communication took place through digital tools, teachers were always by my side talking even after the end of the lesson."

As students were involved in decision making during the educational process, they had increased opportunities for active participation in the learning process, collaboration and the cultivation of empathy. The teachers' ability to reduce social distance by developing trust and respect between themselves and students was important in the online learning environment. Videoconferencing provided the opportunity for high social presence that benefited both the communicative and pedagogical experiences of students since participants could see each other in real time and hear each other's voices during synchronous communication (Kear, 2010; Humphry & Hampden-Thompson, 2019).

iv) Social and cultural empathy

Sociocultural empathy contributes to developing students' multiple perspectives, mitigating cultural conflicts and aims to break stereotypes and prejudices as well as enhance social cohesion (Garcia et al., 2012). The Online School empathetic teachers collaborated on a common basis through the platform on which the interactions with students took place. The learning activities were inclusive in nature and were based on factual situations from students' social environment being tightly connected to their everyday life.

- "I tried to understand each student and pay attention to their behavior, to know their chronic
- T1 illnesses, to listen to their needs and support them in any way.'
 - "Both students and teachers understand that life is not only happy moments, that pain and
- T 6 suffering is part of life. We were united by regular visits to hospitals, our health problems and our common desire to overcome them."



"I had students with serious medical conditions. Since I also belong to high-risk groups, I felt an urge to help them. We tried together and managed to stand up and stay safe during the pandemic."

The approval of the Online School from the majority of vulnerable teachers was heartfelt mainly because it provided them with safety regarding their health under the pandemic conditions. The teachers regularly informed parents, who motivated their child to participate in online classes since they knew the school timetable. Teachers regularly communicated with vulnerable students' parents discussing issues of pedagogical support inasmuch as acquiring further Knowledge of students' characteristics was a prerequisite for effective teaching.

- "I got useful information from parents and School Principals the students had enrolled in the beginning of the school year. I also had the Educational Coordinator's support regarding pedagogical and scientific matters always participating in in-service training seminars."
- "Trying to better understand the students' social background, I contacted their families I dentifying family problems in order to give proper advice."

Parents, on the other hand, supported their children using technology and played an important role in monitoring learning at home based on the teacher's instructions. Above and beyond all, the parents' constant support was necessary for the majority of the children due to their serious health condition. The parents' active involvement in the online learning process changed family life and they were faced with new situations (Canning & Robinson, 2021; Carlson et al., 2020). Some expressed a lack of expertise on digital platforms and were unable to help their children. Others felt discouraged and frustrated at the misfortune of their child's vulnerability and their long, hopeless efforts. For most, the hope for improvement of chronic health problems was alive. The harmonious collaboration between teachers and parents was necessary for students' school progress and proved pivotal for their safety and mental health.

Students developed their own emotional and social empathy towards their peers for the health problems they had to cope with acknowledging their feelings.

- S 6 "I realised that there are other children as well having health problems. Communicating with them made me feel stronger."
- S 10 "When I was in the hospital I missed my classmates. I was looking forward to meeting them again on the platform."
- S8 "The teachers were aware of our needs and personal health problems. They knew our weaknesses and gaps in lessons and helped us to cope with them."

The acceptance of diversity by the students participating in the study had a positive impact on promoting intercultural understanding and inclusion in online classrooms. The lessons were enriched with the principles of intercultural education supporting students who experienced marginalisation and learning difficulties. Teachers adopted inclusive practices that helped students to express their cultural identity hence enabling culture interaction.

- "We continue to talk and communicate with new friends teaching them some words from my mother tongue and they really liked it."
- **S** 7 "I became close friends with one of my online classmates and I like to get knowledge about customs and traditions of her country."
- "I have refugee friends and have learned a lot about their culture. Fortunately, our teachers do not consider being different a problem treating everyone the same. Our classmates are kind and show respect for everyone's rights."

In an inclusive digital environment offering equal opportunities in teaching and learning, online students developed cultural empathy and trust towards their culturally diverse peers. Students' existing knowledge and experiences were a source of learning and a challenge for improvement. Teachers developed a variety of pedagogical approaches, teaching methods and learning materials in order to successfully handle multicultural online classes. As modern societies are characterised by the coexistence of different ethnic, racial, linguistic, religious and other sociocultural groups, there is a strong need for mutual understanding and acceptance to overcome barriers that prevent all students from participating in learning. The development of cultural empathy may be the best hope for fulfilling these aspirations (Garcia et al., 2012; Malikiosi-Louizou, 2008; McAllister & Irvine, 2002), which constitutes a great challenge for empathetic teachers.



In conclusion, empathy of vulnerable teachers refers to their multidimensional ability to see the world from students' perspective, to understand and perceive their thoughts, feelings and experiences (Howe, 2013). According to what was reported, the teachers' degree of empathy regarding the four pedagogical components was considerable. Empathy was an important teachers' competence, which enabled fostering robust relationships with their vulnerable students. Empathy facilitated establishing a climate of emotional safety, concern, acceptance and trust in online classrooms, supporting learning, and developing student self-confidence. Thus, students developed the skills necessary for success both in school and life.

5. Discussion

The Online School of the R.D.P.S.E.A. was a collaborative distance education venture that did not consider vulnerable students marginalised leaving them on the sidelines of society. It was based on the combination of technical, digital, administrative and pedagogical support embracing both teachers and students (Kosyvas, 2023).

The disruptive period of the coronavirus pandemic has posed significant challenges to mental state and well-being of school communities, while the impact on vulnerable students has been more intense, overshadowing many aspects of their personal lives (Hatzichristou et al., 2022). The imposed strict restrictive measures affected people's lifestyles (Tran et al., 2020). In addition, school suspension and the lack of direct contact with friends and classmates caused stress to many students changing their behavior.

Contrary to the adverse effects of the existing situation, however, the Online School accomplished the aim of building strong connecting links and relationships amongst its educational community. The vulnerable teachers focused on emotional, cognitive and behavioral aspects of empathy aiming at maximizing the students' learning outcomes and academic performance. The Online School vulnerable students and teachers were able to form tight-knit, resilient online learning communities in which everyone was considered an equal member. The synchronous mode of communication positively influenced the sense of belongingness, the feeling of safety and self-protection, online collaboration, thus improving social skills. Although the serious illnesses of many students prevented regular contact with their peers, they were able to connect to the Online School learning communities and strengthen their skills of adaptation to difficulties. Consequently, resilient communities greatly alleviated the pressure imposed on these vulnerable students.

As far as students are concerned, it is worth mentioning that the majority of them stressed the importance of high-quality interpersonal relationships amongst the whole school community underlining the beneficial mutual empathy both with their teachers and their classmates. Moreover, students pointed out the effectiveness of distance learning and the subsequent impact of synchronous and asynchronous collaboration models. Last but not least, they identified the advantageous creation of a human network during the pandemic, which triggered their motivation resulting in improved learning outcomes.

Inevitably, the world pandemic era called for a sharper focus on providing quality distance education to ensure learning outcomes and school attendance, thus, supporting students in every possible way to develop cognitively. Online learning contributed to safeguarding the health of the vulnerable groups of teachers and students. Teachers regularly contacted students' parents discussing various pedagogical issues to support learners. Both vulnerable students and teachers had to deal with physical and psychological difficulties, requiring further support. The aforementioned circumstances, inexorably, were the starting point for the Online School adopting the pedagogy of empathy, which focuses on the compassion for social justice and humanistic approach in education (Freire, 2021). The latter apart from being student-centred is also human-centred as long as empathy was the main trait of the most effective teachers' and learners' relationships.

The students' emotional involvement was interrelated with the cognitive interactions (Hamre & Pianta, 2005) that took place during the implementation of distance learning at the Online School and is inextricably intertwined both with communicative and socio-emotional empathy. The teachers implemented their subject teaching objectives, encouraging the emotional involvement of the learners, strengthening self-confidence (Hatzichristou et al., 2022). Some activities were replaced with others that were better adapted to the social-emotional conditions of each online classroom and vulnerable students' particular needs.

One of the important findings of this research is that the degree of empathy of the Online School teachers towards their students was multidimensional, i.e. cognitive, emotional, communicative, sociocultural, contributing as key factors to teachers and students' empowerment. Participants' empathy influenced the effectiveness of online teaching and learning. The correlation between digital empathy and improved learning outcomes and high academic performance has been highlighted in research findings both for vulnerable and



non-vulnerable students as well (Artino & Jones, 2012; Fontana et al., 2015; Kumi-Yeboah, 2020; Zorza et al., 2013).

Empathy promoted the flourishing of teachers' close relationships with students due to health problems and medical issues through constant communication. Empathic teachers recognized students' emotional and mental state and with appropriate pedagogical actions supported them accordingly. Active listening and teacher encouragement were appreciated factors in supporting vulnerable students, digital interactions stimulating online participation (Hastie et al., 2007; 2010; Roorda et al., 2017; Testa, 2022).

During the pandemic, students lost insouciance, joyfulness, genuine communication and were deprived of dreams and hope. Online School educators placed particular emphasis on an all-inclusive understanding of online communities needs, enhancing students' social-emotional skills such as emotional empowerment, enhanced preparedness, self-esteem, self-awareness, and self-regulation rather than exclusively focusing on cognitive goals. Comparable findings have been reported in similar pedagogical approaches to developing social skills in children and adolescents from non-vulnerable groups (Carlson & Dobson, 2020; Hodges & Barbour, 2021; Scorgie, 2010; Wilce & Fenigsen, 2016).

In the context of empathy-based pedagogy, teachers really connected with students, sharing feelings and experiences in dealing with their health problems, thus leading to student resilience. The benefits of developing authentic relationships with students are also highlighted in the existing literature (Cranton, 2006; Stipek, 2006). Teachers acted as counsellors encouraging students, promoting knowledge acquisition, ensuring their psychological safety relieving them from personal fears and the worries of the coronavirus outbreak.

Empathy contributed to success of distance online learning at the Online School. It was the basis of interaction among the teaching and learning process fundamentally facilitating the vulnerable students' motivation for further learning. Empathy was beneficial on students' involvement in online learning affecting their academic performance. Empathetic teachers set not only cognitive but social-emotional goals as well, depending on students' grade, class and subject (Cojocaru, 2023; Hamre & Pianta, 2005; Jones et al., 2019), such as to establish a safe environment in online classes so that students are able to recognize, express and manage their emotions. Hence, empathy was attributed with creating a genuine empathic connection during the online learning process enhancing motivation for further engagement and commitment to learning being responsible for taking decisions. Definitely, it had a positive effect on students' engagement and success in digital learning maximising academic performance (Kosyvas, 2022b). At the same time, the students' resilience led to an increase in their commitment, which subsequently resulted in high academic achievements, since many students were admitted to university. Some studies link student resilience to increased academic achievements (Cooper, 2011; Fuller, 2012; Jennings & Greenberg, 2009; Meyers et al., 2019; Mwangi et al., 2015; Sarwar et al., 2010).

6. Concluding remarks

The Online School was an innovative and collaborative project, which provided a protective environment of mutual support ensuring the increase of equal opportunities and the full development of vulnerable students' abilities, putting into practice the inclusive vision of a quality and inclusive education. It became a digital school that was successfully crowned thanks to the hard work of all participants (Kosyvas, 2023). The research questions of the study lead to the following conclusions:

The first conclusion of this research is that the degree of empathy of the Online School vulnerable teachers towards their vulnerable students was high and the empathy pedagogy adopted had a positive impact on students' academic performance. Empathetic teachers, noting the extensive atrophy of social relationships, the deficit of genuine interpersonal relationships, and the internalization of fears and anxieties amplified during the pandemic, have made dramatic efforts to holistically understand the needs of vulnerable students. While at first, there was emotional distance amongst them, they were soon united through their shared participation in digital learning communities, although they had never met before, thus having the chance to make new online friends.

These communities formed resilient social cells that empowered members to connect with other participants fostering online collaboration, the sense of belonging and safety. They also acted as stable reference points for the development of trusting relationships and a source of support for teachers and students. The Online School had multiple and significant benefits for vulnerable students contributing to maintaining their emotional balance and their interest in the learning process, but also to establishing relationships of mutual understanding and respect to their classmates and especially with their teachers. The pedagogy of empathy implemented by vulnerable teachers was a transformative force in education satisfying their psychological needs, and improving their social and academic skills. It provided a solution to the existing risk of isolation and marginalization of



vulnerable students while reducing, at the same time, their families stress on their cognitive and social-emotional development. The teachers' empathy and understanding of their students' health problems maximised their school progress. Empathy-based pedagogy boosted students' resilience and positive emotions enhancing engagement in online learning increasing academic performance.

The second conclusion drawn from the discussion of the qualitative results of this study is that the holistic educational approach to the pedagogy of empathy during synchronous and asynchronous distance education led to multifaceted enhancement of empathy. Students improved their understanding of another's thoughts and feelings and developed collaborative attitudes. The results of this research converge with the theoretical framework of this paper thus confirming the four dimensions of empathy, which contributed to the empowerment of teachers and students.

Another important finding that is consistent with the sphere of interests of this research is that distance education gave students the opportunity to experience the pedagogical characteristic of empathy during school suspension. Teachers' genuine interest for their students and everyday interaction with them promoted personal affirmation during online learning. Teachers recognized the potential of digital tools and redefined the value of their pedagogical role in physical classrooms. The Online School managed to benefit students empowering them to overcome fear, build trust, boost collaboration, and genuine relationships and communication, undoubtedly, with the teachers' continuous support. Based on this finding, ultimately, aiming at improving the quality of classroom-based education, the issue of quality pedagogical relationships in traditional classrooms becomes of paramount importance for both students' academic success and their personal and social development. Hence, the establishment of strong pedagogical relationships is a prerequisite for the "normality" of the post-pandemic

7. Limitations of the research

This research reflects the views of a small sample of students, who enrolled at the Online School. Furthermore, there are no quantitative results that fully indicate the positive impact of empathy pedagogy on students' academic success. It is also essential to underline that the Online School was evaluated as a whole both in Primary and Secondary Education whereas these two educational levels differ in terms of many educational aspects. Based on these limitations, the results of this research are amenable to further scrutiny meaning that they are not suitable for generalizations to the wider teacher and student population. However, the aforementioned findings provide important indications and offer useful clues for future scientific research.

8. Suggestions

As far as students with serious illnesses are concerned, distance education highlighted the need to adopt appropriate supportive online teaching approaches as a response to possible future crises as well as blended learning programmes, i.e. a combination of face-to-face teaching and e-learning in conditions of "normality". In this light, the initiative to promote empathy needs to be fostered in Curricula. In addition to vulnerable pupils with health problems, 'home-schooled' pupils could be included in blended learning programmes. Similar cases include children with special needs and pupils with a refugee or migrant background that society must accept without any form of discrimination, while preserving social cohesion. Access to education to an ever wider range of pupils should be accompanied by the existence of additional supporting structures. In this sense, further research should be implemented to study the inclusive school of the future focusing on the quality of pedagogical relationships through the eyes and experiences of students.

References

- Anastasiades, P. (2022). Distance Education in the COVID-19 era: The example of Greece and the international opportunity to transition to the Open School of Inquiry Based Learning, Collaborative Creativity, and Social Solidarity. *The Journal for Open and Distance Education and Educational Technology*, 18(1), 6-18. https://ejournals.epublishing.ekt.gr/index.php/openjournal/article/view/28909/23146
- Aldrup, K., Carstensen, B., Klusmann, U. (2021). Is Empathy the Key to Effective Teaching? A Systematic Review of Its Association with Teacher-Student Interactions and Student Outcomes. *Educational Psychology Review (2022) 34:1177–1216*. https://doi.org/10.1007/s10648-021-09649-y
- Arghode, V., Yalvac, B. & Liew, J. (2013). Teacher Empathy and Science Education: A Collective Case Study. *Eurasia Journal of Mathematics, Science & Technology Education*, 9(2), 89-99. https://www.ejmste.com/download/teacher-empathy-and-scienceeducation-a-collective-case-study-4265.pdf
- Artino, A. (2012). Emotions in online learning environments: Introduction to the special issue. *The Internet and Higher Education*, 15(3), 137–140. https://doi.org/10.1016/j.iheduc.2012.04.001



- Artino, A., & Jones, K. D. (2012). Exploring the complex relations between achievement emotions and self-regulated learning behaviors in online learning. *The Internet and Higher Education*, 15(3), 170–175. https://doi.org/10.1016/j.iheduc.2012.01.006
- Azorín, C. (2020). Beyond COVID-19 supernova. Is another education coming? *Journal of Professional Capital and Community*, 5(3/4), 381-390. https://doi.org/10.1108/JPCC-05-2020-0019
- Baldner, C., & McGinley, J. J. (2014). Correlational and exploratory factor analyses (EFA) of commonly used empathy questionnaires: New insights. Motiv. Emot. 38, 727–744. https://doi.org/10.1007/s11031-014-9417-2
- Barile, J.P., Donohue, D.K., Anthony, E.R., Baker, A. M., Weaver, S. R., & Henrich, C. C. (2012). Teacher-student relationship climate and school outcomes: Implications for educational policy initiatives. *Journal of Youth and Adolescence*, 41(3), 256–267. https://repository.up.ac.za/bitstream/handle/2263/18781/Barile Teacher(2012).pdf
- Batson, C. D. (2009). These things called empathy: Eight related but distinct phenomena. In J. Decety & W. Ickes (Eds.), *The social neuroscience of empathy* (pp. 3–15). MIT Press. https://doi.org/10.7551/mitpress/9780262012973.003.0002
- Berardi, M. K., White, A. M., Winters, D., Thorn, K., Brennan, M. & Dolan, P. (2020) Rebuilding communities with empathy, Local Development & Society, (1), 57-67. https://doi.org/10.1080/26883597.2020.1794761
- Borup, J., West, R. E., & Graham, C. R. (2012). Improving online social presence through asynchronous video. *The Internet and Higher Education*, 15(3), 195–203. http://dx.doi.org/10.1016/j.iheduc.2011.11.001
- Bouton, B. (2016). Empathy research and teacher preparation: Benefits and obstacles. *Srate Journal*, 25(2), 16-25. https://files.eric.ed.gov/fulltext/EJ1113829.pdf
- Boyer, W. (2010). Empathy development in teacher candidates. *Early Childhood Education Journal*, 38(4), 313–321. https://doi.org/10.1007/s10643-010-0419-8
- Bozkurt, T., & Ozden, M. S. (2010). The relationship between empathetic classroom climate and students' success. *Procedia Social and Behavioral Sciences*, 5, 231–234. https://doi.org/10.1016/j.sbspro.2010.07.078
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *The Lancet*, 395(10227), 912–920. https://doi.org/10.1016/S0140-6736(20)30460-8
- Brunelle, K., Abdulle, S., & Gorey, K. M. (2020). Anxiety and depression among socioeconomically vulnerable students with learning disabilities: Exploratory meta-analysis. *Child and Adolescent Social Work Journal*, 37(4),

 359-367. https://www.uwindsor.ca/people/gorey/sites/uwindsor.ca.people.gorey/files/childadolescsocialworkj2019 .pdf
- Bryde, B. R. (2001). Online tutoring: Networking preservice teachers and K-12 students. ERIC document. *Resources in education* (pp. ED 453205). Washington DC: Teacher Clearinghouse.
- Bryman, A. (2017). Quantitative and qualitative research: further reflections on their integration. In *Mixing methods: Qualitative and quantitative research* (pp. 57-78). Routledge.
- Bubb, S., & Jones, M.-A. (2020). Learning from the COVID-19 home-schooling experience: Listening to pupils, parents/carers and teachers. *Improving Schools*, 23(3), 209-222. https://doi.org/10.1177/1365480220958797
- Buonsenso, D., Roland, D., De Rose, C., Vásquez-Hoyos, P., Ramly, B., Chakakala-Chaziya, J. N., & González-Dambrauskas, S. (2021). Schools closures during the COVID-19 pandemic: a catastrophic global situation. *The Pediatric Infectious Disease Journal*, 40(4), e146-e150. doi: 10.1097/INF.0000000000000003052
- Cachia, R., Velicu, A., Chaudron, S., Di Gioia, R. and Vuorikari R., 2021. Emergency remote schooling during COVID-19. A closer look at European families. Luxembourg: Publications Office of the European Union. https://publications.jrc.ec.europa.eu/repository/handle/JRC125787
- Canning, N. & Robinson, B. (2021). Blurring boundaries: the invasion of home as a safe space for families and children with SEND during COVID-19 lockdown in England. *European Journal of Special Needs Education*. https://doi.org/10.1080/08856257.2021.1872846
- Carlson, D. J., & Dobson, T. (2020). Fostering empathy through an inclusive pedagogy for career creatives. *International Journal of Art & Design Education*, 39(2), 430-444. https://doi.org/10.1111/jade.12289
- Carlson, D. L., Petts, R., & Pepin, J. R. (2020). Changes in Parents' Domestic Labor During the COVID-19 Pandemic. https://doi.org/10.31235/osf.io/jy8fn
- Cartee, J. (2021). Strategic Empathy in Virtual Learning and instruction: a contemplative essay about teacher-student rapport during times of crisis. Journal of Instructional Research, 10, 12-19. https://files.eric.ed.gov/fulltext/EJ1314158.pdf



- Clark, A. (2010). Empathy and sympathy: Therapeutic distinctions in counseling. *Journal of Mental Health Counseling*, 32(2), 95–101. https://doi.org/10.17744/mehc.32.2.228n116thw397504
- Cojocaru, S. (2023). Transformative Social and Emotional Learning (T-SEL): The Experiences of Teenagers Participating in Volunteer Club Activities in the Community. *International Journal of Environmental Research and Public Health*, 20(6), 4976. https://doi.org/10.3390/ijerph20064976
- Cohen, L., Manion, L., & Morrison, K. (2017). Observation. In *Research methods in education* (pp. 542-562). Routledge.
- Cooper, B. (2004). Empathy, interaction and caring: Teachers' roles in a constrained environment. *Pastoral Care in Education*, 22(3), 12–21. https://doi.org/10.1111/j.0264-3944.2004.00299.x
- Cooper, B. (2011). Empathy in education: Engagement, values and achievement. Bloomsbury Publishing.
- Cornelius-White, J. (2007). Learner-centered teacher-student relationships are effective: A meta-analysis. *Review of Educational Research*, 77(1). https://doi.org/10.3102/003465430298563
- Coutinho, J. F., Silva, P. O., & Decety, J. (2014). Neurosciences, empathy, and healthy interpersonal relationships: Recent findings and implications for counseling psychology. *Journal of Counseling Psychology*, 61(4), 541–548. https://doi.org/10.1037/cou00000021
- Cranton, P. (2006). Fostering authentic relationships in the transformative classroom. *New directions for adult and continuing education*, 109, 5-13. https://doi.org/10.1002/ace.203
- Creswell, J. W., & Poth, C. N. (2016). Qualitative inquiry and research design: Choosing among five approaches. Sage publications.
- Cuff, B., Brown, S. J., Taylor, L., & Howat, D. (2016). Empathy: A review of the concept. *Emotion Review*, 8(2), 144-153. https://doi.org/10.1177/1754073914558466
- Damianidou, E., & Phtiaka, H. (2016). A critical pedagogy of empathy: making a better world achievable. Pedagogies: An International Journal, 11(3), 235-248. https://www.scopus.com/record/display.uri?eid=2-s2.0-84975134250&doi=10.1080%2f1554480X.2016.1195741&origin=inward&txGid=bc55a1f798b2446dbf e76c31ec215c62
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of personality and social psychology*, 44(1), 113. http://dx.doi.org/10.1037/0022-3514.44.1.113
- Decety & W. Ickes (2009). (Eds.), The social neuroscience of empathy. MIT Press.
- Decety, J., & Jackson, P. L. (2004). The functional architecture of human empathy. *Behavioural and Cognitive Neuroscience Reviews*, 3(2), 71–100. https://doi.org/10.1177/15345823042671
- Decety, J., & Svetlova, M. (2012). Putting together phylogenetic and ontogenetic perspectives on empathy. *Developmental Cognitive Neuroscience*, 2, 1–24. doi: 10.1016/j.dcn.2011.05.003
- Dimopoulos, K., Koutsampelas, C., & Tsatsaroni, A. (2021). Home schooling through online teaching in the era of COVID-19: Exploring the role of home-related factors that deepen educational inequalities across European societies. *European Educational Research Journal*, 20(4), 479-497. https://doi.org/10.1177/14749041211023331
- Dolan, P., Boylan, C., & Berardi, M. K. (2017). Activating empathy: Facilitator guide, U.S. revisions (Vol. 1). State College, PA: King's Printing.
- Durlak, J. A. (Ed.). (2015). Handbook of social and emotional learning: Research and practice. Guilford Publications.
- Durlak, J., Weissberg, R., Dymnicki, A., Taylor, R.D. & Schellinger, K. (2011). Enhancing students' social and emotional development promotes success in school: Results of a meta-analysis. *Child Development*. 82(1), 474-501.
 - https://doi.org/10.1111/j.1467-8624.2010.01564.x
- Dyche, L. & Zayas, L. H. (2001). Cross-cultural empathy and training the contemporary psychotherapist. Clinical Social Work Journal, 29,245-258. https://media.smith.edu/media/assistivetech/atlibrary/dyche_crosscultural.pdf
- Eisenberg, N., & Strayer, J. (1987). *Empathy and its Development*. Cambridge, UK: Cambridge University Press.
- Elo, S. & Kyngas, H. (2008). The qualitative content analysis process, *Journal of Advanced Nursing*, 62(1), 107-115. https://doi.org/10.1111/j.1365-2648.2007.04569.x
- Eslinger, P. J. (1998). Neurological and neuropsychological bases of empathy. *European Neurology*, 39(4), 193–199. https://doi.org/10.1159/000007933
- Eurydice Brief. (2022). Teaching and learning in schools in Europe during the COVID-19 pandemic. https://op.europa.eu/en/publication-detail/-/publication/0e12d118-3eda-11ed-92ed-01aa75ed71a1/language-en/format-PDF/source-268594053
- Feng, J., Lazar, J., & Preece, J. (2003). Empathy and online interpersonal trust: A fragile relationship. *Behaviour & Information Technology*, 23, 718-719. https://doi.org/10.1080/01449290310001659240



- Feshbach, N. D., & Feshbach, S. (2009). Empathy and education. In J. Decety & W. Ickes (Eds.) *The Social Neuroscience of Empathy* (pp.85–97). Cambridge MA: MIT Press.
- Fianko, S. K., & Afrifa Jnr, S., & Dzogbewu, T. (2020). Goleman's Intrapersonal Dimension of Emotional Intelligence: Does it Predict Effective Leadership?. *Organizational Cultures: An International Journal*. 21(2):35-50. https://doi.org/10.18848/2327-8013/CGP/v21i02/35-50
- Fontana, P. C., Cohen, S. D., & Wolvin, A. D. (2015). Understanding Listening Competency: A Systematic Review of Research Scales, *International Journal of Listening*, 29, 148-176. https://doi.org/10.1080/10904018.2015.1015226
- Fraenkel, J.R., Wallen, N. E., & Hyun, H. H. (2016). How to design and evaluate research in education (9th ed.). Boston: McGraw Hill.
- Freire, P. (2021). Pedagogy of hope: Reliving pedagogy of the oppressed. Bloomsbury Publishing.
- Friesem E (2016) Empathy for the digital age: using video production to enhance social, emotional, and cognitive skills. In Tettegah SY, Espelage DL (eds) *Emotions, Technology, and Behaviors*. London: Academic Press, 21–45.
- Fuller, R. G. (2012). Building empathy in online courses: Effective practical approaches. *International Journal of Information and Communication Technology Education* (IJICTE), 8(4), 38-48. https://go.gale.com/ps/i.do?p=AONE&u=googlescholar&id=GALE|A305370164&v=2.1&it=r&sid=googleScholar&asid=117e9c9e
- Garcia, B., Lu, Y. E., & Maurer, K. (2012). Cultural empathy. *Field Educator*, 2(2). https://fieldeducator.simmons.edu/article/cultural-empathy/
- Goldberg, H. (2021). From Passive to Active Empathy A New Paradigm for Studying Empathy. Scholarly *Journal of Psychology and Behavioral Sciences*. 635-638. https://lupinepublishers.com/psychology-behavioral-science-journal/pdf/SJPBS.MS.ID.000227.pdf
- Goleman, D. (1996). Emotional Intelligence: Why It Can Matter More than IQ. New York: Bantam Books.
- Gribble, J., & Oliver, G. (1973). Empathy and education. *Studies in Philosophy and Education*, 8(1), 3-29. https://doi.org/10.1007/BF00375766
- Halverson, L. R., & Graham, C. R. (2019). Learner engagement in blended learning environments: A conceptual framework. *Online Learning*, 23(2), 145-178. https://files.eric.ed.gov/fulltext/EJ1218398.pdf
- Hammermeister, J., Mount, S. E., Jordan, C., Briggs, L., & Galm, R. (2020). The relationship between mental fitness skills, psychological resilience, and academic achievement among first generation college students. *College Student Journal*, 54(1), 13-24. https://www.ingentaconnect.com/contentone/prin/csj/2020/00000054/00000001/art00003
- Hamre, B. K., & Pianta, R. C. (2005). Can instructional and emotional support in the first-grade classroom make a difference for children at risk of school failure? *Child Development*, 76(5), 949-967. https://doi.org/10.1111/j.1467-8624.2005.00889.x
- Hancock, J. T., Gee, K., Ciaccio, K., & Lin, J. M. (2008). I'm Sad You're Sad: Emotional Contagion in Computer Mediated Communication. Conference: Proceedings of the 2008 ACM Conference on Computer Supported Cooperative Work, CSCW 2008, San Diego, CA, USA. https://collablab.northwestern.edu/CollabolabDistro/nucmc/p295-hancock.pdf
- Hartling, L. M. (2020). Moving beyond humiliation: A relational conceptualization of human rights. In C. Chowdhury, M. Britton, and L. Hartling (Eds.), *Human Dignity: Practices, Discourses, and Transformations* (pp. 287–322). Lake Oswego, OR: Dignity Press.
- Hastie, M., Chen, N., & Kuo, Y. (2007). Instructional design for best practice in the synchronous cyber classroom. *Educational Technology* & *Society*, 10(4), 281–294. http://www.jstor.org/stable/jeductechsoci.10.4.281
- Hatfield, E., Rapson, R. L., & Le, Y.-C. L. (2009). Emotional contagion and empathy. In J. Decety, & W. Ickes (Eds.). *The social neuroscience of empathy* (pp. 19–30). Cambridge, MA: MIT Press.
- Hatzichristou, C., Lampropoulou, A., Georgakakou-Koutsonikou, N., & Yfanti, T. (2022). A multilevel approach for assessing needs and supporting school communities during the COVID-19 pandemic: University, schools, and community interconnections. *International Perspectives in Psychology: Research, Practice, Consultation, 11*(2), 89–97. https://doi.org/10.1027/2157-3891/a000036
- Hodges, C. & Barbour, M. (2021). Assessing learning during Emergency Remote Education. *Italian Journal of Educational Technology*, 29(2). https://ijet.itd.cnr.it/index.php/td/article/view/1208/1120
- Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). The difference between emergency remote teaching and online learning. *Educause review*, 27, 1-12. https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning
- Hogan, R. (1969). Development of an empathy scale. *Journal of consulting and clinical psychology*, 33(3), 307. Holmberg, B. (2003). A theory of distance education based on empathy. In Moore, M., & Anderson, W. G. (Eds.), *Handbook of distance education* (pp. 79-86). London, UK: Lawrence Erlbaum.



- Hornby, G., Hall, E, & Hall, C. (2003). Counselling Pupils in Schools: Skills and Strategies for Teachers. Routledge, London, UK.
- Howe, D. (2013). Empathy: What it is and why it matters. London: Palgrave Macmillan.
- Humphry, D., & Hampden-Thompson, G. (2019). Primary school pupils' emotional experiences of synchronous audio-led online communication during online one-to-one tuition. *Computers & Education*, *135*, 100-112. https://www.learntechlib.org/p/208190/.
- Iacoboni, M. (2011). Within each other: Neural mechanisms for empathy in the Primate Brain. In Coplan, A., & Goldie, P. (Eds). *Empathy. Philosophical and Psychological Perspectives*. Oxford: Oxford University Press.
- Ikiz, F. E. (2009). Investigation of counselor empathy with respect to safe schools. *Procedia Social and Behavioral Sciences*, *I*(1), 2057–2062. https://cyberleninka.org/article/n/1232857/viewer
- Janusik, L. A. (2002). Teaching listening: What do we do? What should we do? *International Journal of Listening*, 16(1), 5-39. https://doi.org/10.1080/10904018.2002.10499047
- Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of educational research*, 79(1), 491-525. https://doi.org/10.3102/0034654308325693
- Jimoyiannis, A., Koukis, N., & Tsiotakis, P. (2020). Rapid design and implementation of a teacher development MOOC about emergency remote teaching during the pandemic. In A., Reis, J. Barroso, J. B. Lopes, T. Mikropoulos & C.-W. Fan (Eds.), *Technology and Innovation in Learning, Teaching and Education*. Springer.
- Jones, S., Farrington, C. A., Jagers, R., Brackett, M., & Kahn, J. (2019). Social, emotional, and academic development: A research agenda for the next generation. National Commission on Social, Emotional, and Academic Development. Washington, DC: The Aspen Institute.
- Jordan, J. V., & Stone Center for Developmental Services and Studies. (1986). *The meaning of mutuality* (Vol. 23). Wellesley, MA: Stone Center for Developmental Services and Studies, Wellesley College.
- Kaźmierczak, M., Pastwa-Wojciechowska, B., & Błażek, M. (2013). A Multidimensional Model of empathy, and the Occurrence of Personality Disorders and stress in social Settings. ACTA, 11(2), 113-125. https://psycnet.apa.org/record/2014-03018-001
- Kear, K. (2010). Social presence in online learning communities. *Proceedings of the 7th international conference on networked learning 2010, 3–4 May 2010.* Denmark: Aalborg. http://www.networkedlearningconference.org.uk/
- König, J., Jäger-Biela, D. J., & Glutsch, N. (2020). Adapting to online teaching during COVID-19 school closure: Teacher education and teacher competence effects among early career teachers in Germany. *European Journal of Teacher Education*, 43, issue 4, 1–15. https://doi.org/10.1080/02619768.2020.1809650
- Kosyvas, G. (2022a). Outlining the Educational Achievement of a Greek Online School during the COVID-19 Pandemic. *European Journal of Engineering and Technology Research*, 43-48. https://ejeng.org/index.php/ejeng/article/view/2962/1340
- Kosyvas, G. (2022b). Mutual empathy of vulnerable students and teachers and its impact on students' personal well-being and academic performance through the online school operated by the Regional Directorate of Education of Attica, Greece during the Covid-19 pandemic. *Developmental and Adolescent Health*, 2(2), 16-21. https://dah-journal.com/index.php/dah/article/view/41
- Kosyvas, G. (2023). Synchronous and asynchronous online learning during the COVID19 pandemic: the Online School for vulnerable teachers and students of the Regional Directorate for Primary and Secondary Education of Attica, *Mentoras*, 20, 239-275, *Institute of Educational Policy*, Athens, Greece. (in Greek) http://www.iep.edu.gr/library/images/uploads/psifiako_yliko/mentoras/issue20/%CE%9C%CE%AD%CE%BD%CF%84%CE%BF%CF%81%CE%B1%CF%82%20%CE%A4-20.pdf
- Kumi-Yeboah, A. (2020). Educational resilience and academic achievement of immigrant students from Ghana in an urban school environment. *Urban Education*, 55(5), 753-782.
- Luis, E. O., Martínez, M., Akrivou, K., Scalzo, G., Aoiz, M., & Semper, J. V. O. (2023). The role of empathy in shared intentionality: Contributions from Inter-Processual Self theory. Frontiers in Psychology.Vol.14. https://www.frontiersin.org/articles/10.3389/fpsyg.2023.1079950
- Malikiosis-Loizou, M. (2008). The multicultural dimension of empathy. Psychology: *The Journal of the Hellenic Psychological Society*, 15(1), 1-15. (in Greek)
- Malti, T., Chaparro, M. P., Zuffianò, A., & Colasante, T. (2016). School-based interventions to promote empathy-related responding in children and adolescents: A developmental analysis. *Journal of Clinical Child & Adolescent Psychology*, 45(6), 718-731.
- Martin, F., Wang, C., & Sadaf, A. (2020). Facilitation matters: Instructor perception of helpfulness of facilitation strategies in online courses. *Online Learning*, 24(1), 28–49. https://files.eric.ed.gov/fulltext/EJ1249262.pdf



- Masten, A. S., & Motti-Stefanidi, F. (2020). Multisystem Resilience for Children and Youth in Disaster: Reflections in the Context of COVID-19. *Adversity and Resilience Science*, *1*(2), 95–106. https://doi.org/10.1007/s42844-020-00010-w
- McAllister, G., & Irvine, J. J. (2002). The role of empathy in teaching culturally diverse students: A qualitative study of teachers' beliefs. *Journal of Teacher Education*, 53(5), 433–443. https://doi.org/10.1177/002248702237
- Mcdonald, N. & Messinger, D. (2011). The Development of Empathy: How, When, and Why. Moral behavior and free will: A neurobiological and philosophical approach. USA: Miami.
- Mayer, R. E. (2005). Principles of multimedia learning based on social cues: Personalization, voice and image principles. In R. E. Mayer (Ed.), *The Cambridge handbook of multimedia learning* (pp. 201–212). New York, NY: Cambridge University Press.
- Mehrabian, A., & Epstein, N. (1972). A measure of emotional empathy. *Journal of Personality*, 40(4), 525–543. https://doi.org/10.1111/j.1467-6494.1972.tb00078.x
- Meyers, S., Rowell, K., Wells, M., & Smith, B. C. (2019). Teacher Empathy: A Model of Empathy for Teaching for Student Success. *College Teaching*, 67 (3), 160–168. https://scope.bccampus.ca/pluginfile.php/70507/mod_resource/content/1/Teacher%20Empathy%20A%2 0Model%20of%20Empathy%20for%20Teaching%20for%20Student%20Success.pdf
- Miller, W. R., & Rollnick, S. (2012). *Motivational interviewing: Helping people change* (3rd ed.). Guilford Press.
- Mondi, C. F., Giovanelli, A. & Reynolds, A. J. (2021). Fostering socio-emotional learning through early childhood intervention, *International Journal of Child Care and Education Policy*, 15(6), 1-43. https://doi.org/10.1186/s40723-021-00084-8
- Mwangi, C. N., Okatcha, F. M., Kinai, T. K., & Ireri, A. M. (2015). Relationship between academic resilience and academic achievement among secondary school students in Kiambu County, Kenya. https://irlibrary.ku.ac.ke/bitstream/handle/123456789/13983/Relationship%20between%20Academic%20Resilience.....pdf?sequence=1&isAllowed=y
- Narinasamy, I., & Hasmah, W. (2013). Caring teacher in developing empathy in moral education. *Malaysian Online Journal of Educational Sciences*, *1*(1), 1–19. https://files.eric.ed.gov/fulltext/EJ1086232.pdf
- Nieto, S. (2006). Solidarity, courage and heart: What teacher educators can learn from a new generation of teachers. *Intercultural Education*, 17(5), 457–473. https://doi.org/10.1080/14675980601060443
- Nikolopoulou, K., & Kousloglou, M. (2022). Online teaching in COVID-19 pandemic: secondary school teachers' beliefs on teaching presence and school support. *Education Sciences*, 12(3), 216. https://doi.org/10.3390/educsci12030216
- OECD, (2020). Initial education policy responses to the COVID-19 pandemic: Greece https://www.oecd.org/education/policy-outlook/country-profile-Greece-2020.pdf
- Osler, L. (2020). Taking empathy online. *An Interdisciplinary Journal of Philosophy* https://doi.org/10.1080/0020174X.2021.1899045
- Papazis, F., Avramidis, E., & Bacopoulou, B. (2022). Greek teachers' resilience levels during the COVID-19 pandemic lockdown and its association with attitudes towards emergency remote teaching and perceived stress, *Psychology in the Schools*, 1-18.
 - https://doi.org/10.1002/pits.22709
- Pianta, R. C., & Hamre, B. K. (2009). Conceptualization, measurement, and improvement of classroom processes: Standardized observation can leverage capacity. *Educational Researcher*, 38(2), 109–119. https://doi.org/10.3102/0013189X09332374
- Preston, S. D., & de Waal, F. B. M. (2002). Empathy: Its ultimate and proximate bases. *Behavioral and Brain Sciences*, 25(1), 1–72. doi: 10.1017/s0140525x02000018
- Price, L., Richardson, J. T. E., & Jelfs, A. (2007). Face-to-face versus online tutoring support in distance education. *Studies in Higher Education*, 32(1), 1–20. https://doi.org/10.1080/03075070601004366
- Ramana, T. V. (2013). Emotional intelligence and teacher effectiveness: An analysis. *Voice of Research*, 2(2). 18-22. http://www.voiceofresearch.org > Sep-2013 5
- Rankin, K. P., Kramer, J. H., & Miller, B. L. (2005). Patterns of cognitive and emotional empathy in frontotemporal lobar degeneration. *Cognitive and Behavioral Neurology*, 18(1), 28–36. doi: 10.1097/01.wnn.0000152225.05377.ab
- Reinke, W. M., Herman, K. C., & Sprick, R. (2011). *Motivational interviewing for effective classroom management: The classroom check-up.* New York, NY: Guilford Press. www.guilford.com/p/reinke
- Rheingold, H. (1993). *The virtual community: Homesteading on the electronic frontier*. Reading, MA: MIT Press. https://doi.org/10.7551/mitpress/7105.001.0001
- Richardson, J. T. E. (2009). Face-to-face versus online tutoring support in humanities courses in distance education. *Arts and Humanities in Higher Education*, 8(1), 69–85. https://doi.org/10.1177/147402220809830



- Riess, H. (2017). The science of empathy. *Journal of patient experience*, 4(2), 74-77. https://doi.org/10.1177/2374373517699267
- Rogers, C. R. (1957). The necessary and sufficient conditions of therapeutic personality change. *Journal of consulting psychology*, 21(2), 95.
- Rogers, C. R. (1969). Freedom to Learn. Columbus, OH: Merrill Publishing Company.
- Rogers, D., & Webb, J. (1991). The ethic of caring in teacher education. *Journal of Teacher Education*, 42(3), 174–181. https://doi.org/10.1177/002248719104200303
- Roorda, D. L., Jak, S., Zee, M., Oort, F. J., & Koomen, H. M. (2017). Affective Teacher–Student Relationships and Students' Engagement and Achievement: A Meta-Analytic Update and Test of the Mediating Role of Engagement. *School Psychology Review*, 46(3), 239–261. https://doi.org/10.17105/SPR-2017-0035.V46-3
- Ruslin, R., Mashuri, S., Rasak, M. S. A., Alhabsyi, F., & Syam, H. (2022). Semi-structured Interview: A methodological reflection on the development of a qualitative research instrument in educational studies. *IOSR Journal of Research & Method in Education (IOSR-JRME)*, 12(1), 22-29. https://www.iosrjournals.org/iosr-jrme/papers/Vol-12%20Issue-1/Ser-5/E1201052229.pdf
- Sanderson, B, & Brewer, M. (2017). What do we know about student resilience in health professional education? A scoping review of the literature. *Nurse Education Today*, 58, 65-71. doi: 10.1016/j.nedt.2017.07.018
- Sarwar, M., Inamullah, H., Khan, N., & Anwar, N. (2010). Resilience and academic achievement of male and female secondary level students in Pakistan. *Journal of College Teaching & Learning (TLC)*, 7(8). https://clutejournals.com/index.php/TLC/article/view/140/134
- Schutz, P. A., & DeCuir, J. T. (2002). Inquiry on emotions in education. *Educational Psychologist*, *37*(2), 125–134. https://doi.org/10.1207/S15326985EP3702 7
- Scorgie, K. (2010). Fostering empathy and understanding: A longitudinal case study pedagogy. In *Teacher education for inclusion* (pp. 110-118). Routledge.
- Segal, E. A. (2011). Social Empathy: A Model Built on Empathy, Contextual Understanding, and Social Responsibility That Promotes Social Justice. *Journal of Social Service Research* 37 (3), 266–277. https://doi.org/10.1080/01488376.2011.564040
- Segal, E. A., & Wagaman, M. A. (2017). Social empathy as a framework for teaching social justice. *Journal of social work education*, 53(2), 201-211. https://doi.org/10.1080/10437797.2016.1266980
- Segal, E. A., Gerdes, K. E., Lietz, C. A., Wagaman, M. A., & Geiger, J. M. (2017). Assessing empathy. New York, NY: Columbia University Press.
- Shimizu, H. (2000). Japanese Cultural Psychology and Empathic Understanding: Implications for Academic and Cultural Psychology. *Ethos*, 28(2), 224–247. http://www.jstor.org/stable/640687
- Silke, C., Davitt, E., Flynn, N., Shaw, A. & Dolan, P. (2021). Activating Social Empathy: Findings from the 2021 School Evaluation. https://www.universityofgalway.ie/media/unescochildandfamilyresearchcentre/2021images/DCEDIY_ASE_web.pdf
- Singh, J., Steele, K., & Singh, L. (2021). Combining the Best of Online and Face-to-Face Learning: Hybrid and Blended Learning Approach for COVID-19, Post Vaccine, & Post Pandemic World. *Journal of Educational Technology Systems*, 50(2), 140–171. https://doi.org/10.1177/00472395211047865
- Smith, A. (2006). Cognitive Empathy and Emotional Empathy in Human Behavior and Evolution. The *Psychological Record*, 56, 3-21. https://doi.org/10.1007/BF03395534
- Stephan, W. G., & Finlay, K. (1999). The role of empathy in improving intergroup relations. *Journal of Social issues*, 55(4), 729-743. https://doi.org/10.1111/0022-4537.00144
- Stipek, D. (2006). Relationships matter. *Educational Leadership*, 64(1), 46-49. https://cepa.stanford.edu/content/relationships-matter
- Swan, P., & Riley, P. (2015). Social connection: Empathy and mentalization for teachers. *Pastoral Care in Education*, 33(4), 220–233. https://www.pdst.ie/sites/default/files/Social%20connection%20empathy%20and%20mentalization%20for%20teachers%202015.pdf
- Tasker, T. J., & Cisneroz, A. (2019). Open-ended questions in qualitative research. *Curriculum & Teaching Dialogue*, 21(1/2), 119-122.
- Teich, N., (1992). Teaching for and about empathy as a collaborative rhetoric. In N. Teich (Ed), *Rogerian perspectives: Collaborative rhetoric for oral and written communication* (pp. 237-248). Norwood, NJ: Ablex Publishing Group.
- Terry, C, & Cain. J. (2016). The emerging issue of digital empathy. *American Journal of Pharmaceutical Education*, 80(4): 58. https://doi.org/10.5688/ajpe80458
- Testa, D. (2022). Supporting vulnerable students: Staff and parents speak, Health *Education Journal*, 81(3) 280–292. https://doi.org/10.1177/00178969211073681



- Tettegah, S., & Anderson, C. J. (2007). Pre-service teachers' empathy and cognitions: Statistical analysis of text data by graphical models. *Contemporary Educational Psychology*, 32(1), 48-82. https://doi.org/10.1016/j.cedpsych.2006.10.010
- Tran, P.B.T., Pham, N.H.N., Nguyen, M.H., & Le, A.T. (2020). Effect of the social distancing measures on the spread of COVID-19 in 10 highly infected countries. Sci. *Total Environ.*, 742, 140430. doi: 10.1016/j.scitotenv.2020.140430
- Tzankova I, Compare C, Marzana D, Guarino A, Di Napoli I, Rochira A, Calandri E, Barbieri I, Procentese F, Gatti F, Marta E, Fedi A, Aresi G, Albanesi C. (2022). Emergency online school learning during COVID-19 lockdown: A qualitative study of adolescents' experiences in Italy. Curr Psychol 7:1-13. doi: 10.1007/s12144-021-02674-8
- UNESCO. (2020c). COVID-19 Educational disruption and response. https://en.unesco.org/covid19/educationresponse
- UNICEF, 2021. https://data.unicef.org/resources/one-year-of-covid-19-and-school-closures/
- Wang, Y., Derakhshan, A., & Zhang, L. J. (2021). Researching and Practicing Positive Psychology in Second/Foreign Language Learning and Teaching: The Past, Current Status and Future Directions. Front. Psychol., Volume 12 https://doi.org/10.3389/fpsyg.2021.731721
- Wang, X., Zhang, L., Peng, Y., Lu, J., Huang, Y., & Chen, W. (2022). Development and validation of the empathy scale for teachers (EST). *Studies in Educational Evaluation*, 72, 101112.
- Wilce, J., & Fenigsen, J. (2016). Emotion Pedagogies: What Are They, and Why Do They Matter? *Ethos*, 44(2), 81–95.
- Wondra, J. D., & Ellsworth, P. C. (2015). An Appraisal Theory of Empathy and Other Vicarious Emotional Experiences. Psychological Review, Vol. 122, No. 3, 411–428. http://dx.doi.org/10.1037/a0039252
- Xiao, W., Lin, X., Li, X., Xu, X., Guo, H., Sun, B., & Jiang, H. (2021). The Influence of Emotion and Empathy on Decisions to Help Others. *SAGE Open*, *11*(2). https://doi.org/10.1177/21582440211014513
- Zhang, Z. (2022). Toward the Role of Teacher Empathy in Students' Engagement in English Language Classes. Front. Psychol. 13:880935. https://doi.org/10.3389/fpsyg.2022.880935
- Zorza, J. P., Marino, J., de Lemus, S., & Mesas, A. A. (2013). Academic performance and social competence of adolescents: Predictions based on effortful control and empathy. *The Spanish journal of psychology*, *16*, E87. https://doi.org/10.1017/sjp.2013.87