

EXPLORING RISK AND PROTECTIVE FACTORS, AND COPING STRATEGIES FOR BUILDING RESILIENCE IN GREEK GENERAL AND SPECIAL EDUCATION TEACHERS

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Abstract

Resilience is influenced by personal and environmental risk and protective factors that are unique in each context. The constant socio-cultural changes affect the educational context and may lead to new factors associated with teachers' resilience. To this end, the present study aimed to examine the risk and protective factors of resilience in Greek general and special education teachers and how they are incorporated into the strategies they use to face adversities in their workplace. Qualitative data were collected from 15 general education and 11 special education teachers. Content Analysis was used to analyse the data. Results indicated that new risk factors have emerged, however, there were only minor differences in the prioritization of risk and protective resilience factors between general and special education teachers. The study also provided insights into the strategies used by teachers to deal with their working challenges and enhance their resilience.

Introduction

The role of the schools has begun to differentiate from that of previous years in both international and Greek school reality (Hatzichristou et al., 2017). In Greece particularly, the severe economic crisis, the wave of migration and the social changes that led to more heterogeneous classes and demanding student problems and the urgent need to differentiate the school from an environment of steer knowledge and socialization to an environment that also places emphasis on enhancing the well-being and resilience of all its members (Botou et al., 2017).

As a result, teachers' resilience has emerged as an important area of research, especially in countries where high burnout and resignation levels have been observed in the teaching profession (Craig, 2017). Despite the fact that the Positive Psychology movement and the high burnout and attrition levels reignited researchers' interest in studying resilience, studies mainly focus on the reasons that cause teachers to leave their profession. In this context, the international literature places particular emphasis on examining the risk factors that impede teachers' well-being (e.g., Chirico et al., 2022; Kidger et al., 2016; Mafukata, & Mudau, 2016). Only recently researchers have begun to shift their focus on the protective factors that enhance teachers' resilience and help them retain

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their commitment to their profession (e.g., Daniilidou & Platsidou, 2018; Peixoto et al., 2019; Schussler et al., 2018). However, the fast-growing literature on the protective factors of resilience includes limited studies addressing specifically special education teachers (e.g., Belknap & Taymans, 2015; Konstantopoulou et al., 2022). In addition, both in international and Greek literature, only a few studies examine the strategies employed to preserve and/or enhance teachers' resilience in general (GE) and special (SE) education (e.g., Castro et al., 2010; Fan et al., 2021).

As a multidimensional social construct, resilience is influenced by factors that are unique in each cultural context and are often not being evaluated in the already existing instruments (Arslan & Wong, 2023; Daniilidou & Platsidou, 2022; Yıldırım & Ashraf, 2023). In other words, socioeconomic changes may affect the type and/or importance of the protective and risk factors of teachers' resilience. It requires access to the subjective experience of the teachers in order to investigate the multiple manifestations of the protective and risk resilience factors. Taking the above into consideration the present study was designed to address these limitations through a qualitative approach.

Specifically, it aims to examine the risk and protective factors and the strategies of resilience in GE and SE teachers and to elaborate on how they differ from the ones reported in the international literature.

Risk and protective resilience factors

Kumpfer's resilience framework (Kumpfer, 1999) aimed to describe the processes of resilience with a framework that included risk and protective factors and highlighted the interaction between the environment and the personal factors in building resilience (Kumpfer & Summerhays, 2006). The model was built based on earlier models of social ecology, to create a metatheory and/or a comprehensive framework of the characteristics and processes that influence an individual's resilience.

The model begins with an initial event, which may be a stressor or a challenge that causes an interruption in the homeostasis of the individuals, and requires a response in order to maintain their equilibrium (Kumpfer, 1999). The initial event marks the beginning of the reintegration that results in an outcome, which may be either positive or negative. This transactional model includes four main areas of influence and two dynamic processes that form six major predictors of resilience (Kumpfer, 1999): The four areas of influence are, (a) the stressors or challenges, (b) the environmental context (external risk and protective factors such as community, family, peers, etc.), (c) the internal risk and protective resilience factors (cognitive, emotional, spiritual, physical, behavioural), and (d) adaptation (resilient versus maladaptive reintegration). The process includes (a) the individual-environment interaction process and (b) the individual-outcome interaction process.

Risk factors of teachers' resilience

The risk factors of teachers' resilience can be categorized into three main areas: a) those related to the students' and classroom management, b) those related to the organizational structure and the working conditions and, c) the relationships with or lack of support from colleagues.

More specifically, classroom and/or student behaviour management is one of the major risk factors for general and special teachers' well-being that impedes teachers from coping with challenges (Belknap & Taymans, 2015; Flower et al., 2017). Students' lack of motivation and effort, lack of respect, and in many cases their violent behaviours cause teachers to spend considerable time on behaviour management issues (Buchanan et al., 2013). In the Greek educational context, a large number of students and the heterogeneity of classrooms, student's behaviour and progress and the differentiation of teaching methods based on the educational needs of each student are factors that cause additional pressure on general and special education teachers (Kourkoutas et al., 2019; Antoniou et al., 2023).

International studies found that not being involved in school decisions and not having sufficient support from the school administration (Ainsworth & Oldfield, 2019; Gu, 2018) are among the most important challenges that teachers face in their working environment. More specifically, in the special education context, studies have found that role conflicts, emotional requirements, complexity in implementing the curriculum, and working hours have the potential to notably predict stress and emotional exhaustion among special education teachers (Onuibo et al., 2018; Zhang et al., 2020). Similarly, studies in the Greek educational context have found that among the major sources of stress for Greek general and special teachers are the organization and implementation of the school program, encompassing favouritism from government and school administration, time constraints, and availability of resources and equipment (Antoniou et al., 2023; Platsidou & Agaliotis, 2008).

Finally, competitive attitudes between colleagues and managing difficult relationships with peers have been reported among the risk factors of teachers' resilience. Benjamin and Black (2012) found that teachers report to a high degree the lack of cooperation and support from their peers as a risk factor for their resilience. The same factors have been identified in studies in the Greek educational context. In Platsidou and Agaliotis's (2008) study, collaboration with other special education experts was cited as one of the factors that created moderate stress for teachers, while Antoniou and his colleagues (2023) found that the level of support received from parents and society may cause additional stress to general and special education teachers.

Protective factors of teachers' resilience

Many teachers are affected by the same factors and conditions that lead some of their colleagues to leave teaching, but, instead, they choose to stay in the profession. These teachers exhibit characteristics of resilience. According to Mansfield and her colleagues (Mansfield et al., 2016), internal protective factors of teachers' resilience consist of two pillars: (a) personal resources and motives and (b) strategies used to deploy personal resources. Personality characteristics and motives, such as managing negative emotions and stress, high emotional intelligence, the feeling of humour, optimism and extroversion have been found to be positively related to high levels of resilience (Beltman, 2021; Peixoto et al., 2018). It has been also found that incentive motives, such as enjoying teaching and interaction with students, commitment to continuous vocational training, career decision making and setting realistic expectations and goals, facilitate the maintenance and/or enhancement of teachers' resilience (Mansfield et al., 2012). The second pillar of internal protective factors refers to the adaptive strategies and behaviours that teachers use to recover the balance in front of challenging situations and may involve the use of different teaching strategies, problem-solving strategies, seeking help in their social environment, as well as emotionally distancing from the problem (Bowles & Arnup, 2016; Mansfield et al., 2012).

However, according to Ungar (2012), to better understand the concept of resilience we must first explore the framework in which it manifests. As a social construction, resilience is also influenced by environmental factors that are unique in each context (Mansfield et al., 2018; Schwarze & Wosnitza, 2018). Gu (2018) suggested that there are three sets of relationships that are at the center of teachers' professional life: The teacher-student relationship, the teacher-colleague relationship and the teachers' relationship with the school administrator. In addition to relationships within a school framework, studies have found that unofficial support networks such as friends, family and/or spiritual networks can also be protective factors of teachers' resilience (Papatraianou & Le Cornu, 2014; Schussler et al., 2018).

In the international literature, studies on special education teachers have found that, among educators, special education teachers exhibit lower levels of resilience, likely due to their exposure to various challenging situations (Flores-Buils et al., 2022). In the Greek context, Botou and her colleagues (2017) found that Greek teacher's resilience is very highly correlated to their relationships with family and colleagues. However, less than 9.4% of her sample was constituted of SE teachers. Nevertheless, findings on identifying the protective resilience factors

in SE teachers specifically are rather limited. Zhang and colleagues (2022) found that acceptability, relationship ability, personality preference and optimism (dimensions of resilience) had the most significant predictive effects on mental health symptoms in SE teachers, while Nuri and Tezer (2018) suggested that there is a negative relationship between family cohesion (a sub-dimension of resilience) and emotional burnout and depersonalization.

Resilience strategies

There is a conceptual overlap between coping and resilience. This means that strategies used by individuals to cope with stressors may also contribute to their overall resilience levels. However, as mentioned before, the relevant literature does not make extensive reference to the strategies that teachers employ to maintain or develop their resilience levels specifically.

Castro and his colleagues (2010) examined teachers working in general and special education and found that strategies such as seeking help in their social environment, using problem-solving skills, managing dysfunctional relationships with students' parents and colleagues and taking care of their mental and physical health facilitate coping with the challenges at school. Patterson and his colleagues (2004) suggested resilience strategies such as acting through a set of values that guide professional decision-making, seeking out-of-school help and ways to overcome challenges, remaining focused on their teaching and students, and taking initiative to resolve problems that arise in the school environment. Two more recent studies provided a more detailed insight into strategies employed by teachers as responses to the challenges of their profession. Fan and colleagues (2021) found four strategies that teachers use in the face of adversities: perceiving risks as opportunities, taking initiatives to motivate students, seeking help from social networks, and keeping professional learning. Beltman (2020) provided examples of strategies employed by early career teachers for each dimension of resilience: emotional (e.g., managing emotions), motivational (e.g., having realistic expectations), professional (e.g., getting organized), and social (e.g., seeking counselling).

Aim and hypotheses of the study

The study aims to highlight the risk and protective factors of resilience in GE and SE teachers and the strategies they employ in order to preserve and/or enhance their resilience. Given that any progress on how to help teachers strengthen themselves against potential job-related threats is valuable, it is important to deepen our comprehension of the role of resilience in preventing or mitigating their potential stress and burnout. Based on the literature summarized above, we aimed at: a) investigating potential new emerging risk factors of resilience related to the Greek cultural context and/or the economic situation of the country, b) highlighting protective factors that are not mentioned in the international literature and c) highlighting the ways and strategies teachers employ to enhance their resilience and deal with stressful situations in their workplace.

Method

Selection of the research method

Content Analysis was used to analyse the data obtained from the qualitative study. In the present study, the concept of resilience was approached through a multidimensional perspective, which argues that the construct is better defined through the interaction between personal characteristics and environmental factors. For this reason, the thematic axes of the interview were formed based on Kumpfers' resilience framework. This model was chosen because it approaches resilience as a multidimensional construct, which is better understood as a dynamic process within a social system of interactions rather than simply identifying stable risk and protective factors.

Participants

The sample emerged from a study conducted by the author in 2018, in which a total of 636 teachers of general and special education participated (Daniilidou, 2018). Thus, participants were selected by purposive sampling. Teachers who scored the highest and lowest scores on resilience were selected for the interviews. In particular, after calculating the mean scores of resilience with the Multidimensional Teachers Resilience Scale (Mansfield & Wosnitza, 2015) which was used in the previous study, 14 teachers who reported high scores and 12 teachers with lower scores than the mean of the sample were selected. In total, 26 teachers participated; 15 from general education and 11 from special education. Their demographic and professional characteristics are presented in Table 1.

Table 1. Demographic and professional characteristics of the sample

Characteristics	GE Teachers		SE Teachers		Total	
	N	%	N	%	N	%
Sex						
Males	6	60	4	36.4	10	38.5
Females	9	40	7	63.6	16	61.5
Marital Status						
Married	9	60	10	90.9	19	73.1
Single	6	40	1	9.1	7	26.9
Position in Education						
Permanent	13	86.7	6	54.5	19	73.1
Substitutes	12	13.3	5	45.5	7	26.9
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Age	44.87	8.99	35.18	10.79	40.02	9.87
Years of experience	18.20	8.283	10.55	7.258	14.96	8.622

Measures

The semi-structured interview was chosen to collect the data. Kumpfer's resilience framework served as the foundation, and an examination of qualitative research on adults' resilience informed the development of an interview guide which comprised open-ended questions that aimed at eliciting participants' opinions and explanations. In the next phase, a pilot study was performed to check the questions and the effectiveness and functionality of the instrument. Three interviews were conducted with primary education teachers in conditions similar to those of the main study interviews. Based on the pilot implementation, the final interview guide was created which included eight questions covering the thematic axes of the study.

Procedure

In the first phase, the required permission was obtained from the Greek Ministry of Education, Research and Religious Affairs for conducting the interviews (Φ15/906/144825/Δ1). During the first study (Daniilidou, 2018), teachers willing to participate in the second phase of the study were asked to leave their contact information after being informed that they would be interviewed individually at the place and time of their choice. A total of 137 teachers agreed to participate in the second phase of the study. After selecting the participants who reported the highest and the lowest resilience scores in the first study ($N = 49$), and before initiating the recruitment process, we ensured that ethical approvals and informed consent procedures were in place. At the next step, we personally contacted the potential participants and asked if they would be willing to take part in the interviews, emphasizing the voluntary nature of participation and the participant's right to decline without consequences. 26 teachers

responded to our call and agreed to participate in the interviews (response rate 53.1%). The 26 interviews were conducted over a period of 3 months. The interviews lasted 20 - 30 minutes each and were conducted either in person (11 interviews) or via Skype (10 interviews). In cases where none of the above methods were possible, they were conducted by telephone (5 interviews). As the literature suggests, data collection continued until saturation was reached, evidenced by the repetition of themes and no substantial new information arising from subsequent interviews. Then, the transcript of the interviews and the data processing followed. The first step was to create codes for the participants to ensure their anonymity. Specifically, for general education teachers, the GE code was used (e.g., GE1, GE2, etc.) and for special education teachers the SE code (e.g., SE1, SE, etc.). The transcripts of the interviews were collected and a careful analysis of all the texts was conducted. To generate the codes and the themes/subthemes based on the aims of the study we followed the step model of deductive category development, which moves from general to specific.

Trustworthiness of the study

The trustworthiness of this qualitative study was achieved through a combination of methods designed to enhance credibility, transferability, dependability, and confirmability (Stahl & King, 2020). To establish credibility, a prolonged engagement and meticulous literature review of resilience were employed. This extended engagement allowed us to build rapport, gain deeper insights, and capture the nuances of teachers' experiences. In addition, the various processes of triangulation we employed to increase credibility (Stahl & King, 2020). More specifically, data triangulation (data were collected from multiple resource tests and interviews), and environmental triangulation (data were collected from both general and special education teachers) were used to establish findings. In addition, descriptions and verbatim quotes were incorporated into the analysis, allowing readers a comprehensive understanding of the participants' perspectives. Detailed descriptions of the research context, participant characteristics, and data collection methods were provided to allow readers to assess the transferability of our findings to other similar settings. The dependability of our research process was ensured through rigorous documentation. A detailed research journal and field notes were maintained throughout the study. In addition, regular meetings with the study supervisor were held to discuss emerging themes and potential biases, contributing to the stability and consistency of our findings. Finally, to enhance the confirmability of our study, we engaged in ongoing reflexivity. The individual biases and assumptions at the outset (see Limitations for a detailed review) were acknowledged and were consistently revisited during data collection and analysis. Additionally, an audit trail of decisions and coding processes was kept, allowing for an independent evaluation of the research process. Even though the data were analysed by one researcher, and, thus, investigator triangulation was not established, during the analysing procedure multiple colleagues familiar with qualitative research methods were engaged and provided an external perspective and insights into potential biases or interpretations.

Results

New resilience risk factors

The first aim of the study was to examine whether and how the present social and economic situation of the country has affected the teaching profession. The questions addressed to teachers aimed at identifying new risk factors that emerged as a result of the social and economic changes in Greece. 44 references to new risk factors were recorded, 25 by GE teachers and 19 by SE teachers. GE teachers (33.33%) and SE teachers (54.54%) indicated that, at a personal level, they face more challenges compared to previous years. Decreased salaries, coupled with constant shifts for substitute teachers and uncertainty about whether they will keep their position at work, constitute new risk factors that affect their disposition and performance. Participant GE6 (age 54) stated

“The financial situation has created problems. A few years ago, I had the financial convenience of putting my hand in my pocket [spending my own money] in cases when the school wasn’t able to cover some of the expenses; for example, expenses for extra books or resources; and I didn’t mind at all. This is a problem that annoys me; it has constrained me a lot in terms of making something more than the usual for my students.” [Translated from Greek]

New risk factors have been also reported by teachers at the student level, and more specifically, about their behaviour at school. 53.33% of GE teachers and 42.30% of SE teachers reported that they have observed changes in the behaviour of their students attributing them to socio-economic changes in recent years. These changes were related to their aggressive behaviour or their inability to concentrate in class. Participant GE4 (age 59) stated, “The students don’t have the same enthusiasm and the same kindness and courtesy that children showed a couple of years ago. Maybe because of this situation we are experiencing, this nervousness, transfers from family to children.” [Translated from Greek], while participant GE1 (age 36) mentioned, “When students experience problems at home, this is also transferred in the classroom. Children are stressed. They get aggressive many times, they cry, they complain, they are distracted, they don’t want to work, they don’t want to do their exercises.” [Translated from Greek].

Changes have been also reported in classroom composition, with the majority of teachers commenting on the increase in the number of children in the classroom as well as the increase in the number of children with learning difficulties. A general education teacher (GE4, age 59) marked that “The number of children coming in first grade and having a lot of learning difficulties has increased dramatically, and this has never been the case before. I have to face so many students with learning disabilities.” [Translated from Greek]. Lack of infrastructure and resources was reported as a new risk factor that teachers face (reported by 13.33% of GE teachers, and 36.36% of SE teachers). Teachers reported that the shortages have become even greater on essential issues, such as heating. Participant SE1

(age 27) mentioned, “The technical shortages in special education are very important. We do not have the basic equipment that a school should have, e.g., projectors that could make the course interesting. But these are inferior if you imagine that some months in winter, we have a problem even with heating the classrooms.” [Translated from Greek].

In addition, 13.33% of GE teachers and 18.18% of SE teachers reported changes in the relationships between colleagues within the school environment. As they mentioned, many of their colleagues have become more distant, and the number of conflicts at school has increased. This shift in the relationships between peers was marked by participant GE4 (age 59), who mentioned, “The school has changed. In my early years, we had a different level of communication with colleagues; a strong one. We were together every day. This year I work in a school where not all teachers are present every day; there are teachers who move from one school to another to cover their working hours. Many of these colleagues do not even understand what is going on at school. But they have an opinion regarding the issues concerning the school. And this creates tension between us.” [Translated from Greek]

Finally, 33.33% of GE teachers reported having increased problems with students’ parents in the last years. Teachers pointed out that the financial problems that families face, as a result of the financial crisis, do not allow parents to devote the necessary time to their children and cover their basic needs. This has also influenced parents’ attitudes towards teachers. Participant GE3 (age 54) stated, “We are experiencing a detachment; an apathy for their children that may have to do with the fact that parents have become indifferent to their children’s education. Those who are not indifferent come with a hostile attitude towards the whole educational process by blaming the teachers, blaming their child for not wanting to study or blaming the whole situation.” [Translated from Greek].

Protective factors of resilience in GE and SE teachers

The second aim of the study was to identify the personal and environmental protective factors that contribute to overcoming challenges in the workplace. A total of 156 references of resilience protective factors were recorded, 75 (48.08%) for personal protective factors (42 from GE teachers and 33 from SE teachers) and 81 (51.92%) for environmental protective factors (44 from GE teachers and 37 from SE teachers). Overall, GE and SE teachers reported similar personal protective factors to those referenced in the relevant literature (see Table 2).

Table 2. Teachers' responses on personal protective factor

Personal protective factor	GE Teachers (N=15)		SE Teachers (N=11)		Total (N=26)	
	N	%	N	%	%	N
Teachers' values/beliefs	13	86.66%	10	90.90%	23	88.46%
Communication Skills/ Empathy	8	60%	5	45.45%	13	50%
Sense of humor	6	40%	5	45.45%	11	42.31%
Patience/Realism	6	40%	5	45.45%	11	42.31%
Organization of classroom	5	33.33%	3	27.27%	8	30.77%
Persistence	1	6.66%	4	36.36%	5	19.23%
Flexibility	2	13.33%	2	18.18%	4	15.38%
Previous experience	2	13.33%	1	9.09%	3	11.54%
Creativity	3	20%	0	0%	3	11.54%

In order to assess the protective factors of teachers' resilience more thoroughly, factors related to external support networks were also examined. Table 3 presents the environmental factors that teachers turn to for help are presented. The majority of the above factors have been identified in previous studies as protective factors of resilience with the exception of the interaction with students and the legislation.

Table 3. Teachers' responses to environmental protective factors

Environmental protective factors	GE Teachers (N=15)		SE Teachers (N=11)		Total (N=26)	
	N	%	%	N	N	%
Colleagues	10	66.66%	8	72.72%	18	69.23%
Friends	9	60%	7	63.63%	16	61.54%
Family	6	40%	4	36.36%	10	38.46%
School administration	5	33.33%	3	27.27%	8	30.77%
Relationships with students	3	20%	4	36.36%	7	26.92%
Legislative framework	3	20%	1	9.09%	4	15.38%

One factor, which is not often mentioned in the literature, but in the present study was found to support teachers to maintain their resilience, is the role of students. 20% of GE and 36.36% of SE teachers reported the feeling of support they received through their interaction with students. Teacher-student interaction within and outside the

school context, as highlighted in the following passages, provides strength and support to teachers. Finally, the legislative framework has been found to be protective when dealing with adversities, to a larger extent for GE teachers (20%) than for SE teachers (9.09%). Teachers reported that the knowledge of the legal framework reduces stress as it sets out their obligations and supports them in asserting their rights. Participant GE11 (age 32), mentioned, “The students and nothing else [help me]. What you get from the students is priceless; the fun in the classroom, their laughs. They make you feel better; in a way, they probably don’t understand they give you the biggest support. They raise my spirits.” [Translated from Greek], and participant GE3 (age 53) stated, “Now [that I am more experienced] I know the mechanism of education much better; maybe the past difficulties wouldn’t have bothered me so much if I experienced them now and not years ago. Now I know how education works, so I have more solutions to the problems I face.” [Translated from Greek].

Resilience Strategies

The final aim of the study was to investigate the strategies that teachers employ to deal with stressful situations in their workplace. The questions addressed to teachers intended to examine which factors (personal or environmental) they employ the most when they face challenges in the school environment. In total, 37 reports of strategies for enhancing teacher resilience were identified, 21 from GE teachers and 16 from SE teachers. Teachers' responses were categorized into four main strategies.

The first strategy mentioned by teachers was personal effort. 66.66% of GE and 90.90% of SE teachers reported that, when they deal with a stressful situation or problem at school, they first try to solve the problem on their own, referencing their individual characteristics and their previous experience. Participant GE4 (age 59) mentioned,

“After so many years of experiencing problems with students and parents, I think that most of the time I can solve them myself. Or at least, at first, I try to find the solution to the problem by myself.” [Translated from Greek]

In the second phase, if they do not manage to solve the problem on their own, then they turn for help to people within the school environment, such as their colleagues and the school administrator. In this context, 66.66% of GE and 54.54% of SE teachers reported that they would seek help from the school administrator, while 46.66% of GE teachers and 54.54% of SE teachers reported seeking help from their colleagues. As participant GE2 (age 26) mentioned, “When it comes to problems, not directly educational, but more like functional, such as the relationships with parents or organizing the school events, I ask help from the school administrator. Because he/she is the only one who can handle a situation like this. For any other problem, I have my colleagues (laughs)” [Translated from Greek].

A third approach that teachers mentioned is to seek help from individuals and experts outside the school environment. A high percentage of SE teachers (63.63%), but only 13.33% of GE teachers, stated that when it comes to student-related problems, they often seek help from school psychologists and/or child counsellors, to handle the situation in a more effective way. Participant SE7 (age 34) stated, “Outside the school context [I can get advice], from people who are involved in the field of psychology or social workers. When you work in special education, you need spherical knowledge, because what we have learned in university is often not enough. In most cases our education is poor; we have not prepared to face cases like these in school reality. You have to be a psychologist and a teacher and a parent at the same time.” [Translated from Greek].

Finally, 33.33% of GE and 18.18% of SE teachers reported that in some circumstances they could not find a way to deal with the problem. In those cases, they had to accept the situation at school, reconcile with it or, in rare cases, even give up trying to solve the problem. Participant GE2 (age 62) said, “What has helped me to cope with the whole educational system is that I have accepted the situation; I have accepted the whole system as it is. I stopped pushing myself and being stressed. I've said [to myself] this is it, it is the same for everyone and, so, I

should learn how to work in it. After the crisis, I had to find new ways to cope with difficulties; and that was definitely the acceptance of the situation. To accept the fact that I can't change it.” [Translated from Greek].

Discussion

New risk factors for GE and SE teachers

The economic and social changes that take place in one country affect, *inter alia*, its education system (Lipman, 2013). Literature suggests that a financial crisis may intensify competition and conflicts, mental disorders, violence and problematic behaviours within the workplace. The economic turmoil in Greece, coupled with the resulting shifts in societal norms, directly influenced the education system (Vergeti & Giouroglou, 2018). In Greece particularly, according to E.T.U.C.E. (European Trade Union Committee for Education, 2013), from 2008 to 2012, government expenses on education decreased by 20%, and Greek teachers suffered the biggest pay cuts (40% salary decrease) from all civil servants not only in Greece but also in Europe. In addition, during the period 2009/10-2012/13 elementary school units decreased by 13.5% (ELSTAT, 2015). School units, educational services, and health and welfare services have been discontinued or merged, thus, burdening not only the poor working conditions of teachers but also the living conditions of students and their families. Access to education has become more difficult for students living in geographically isolated areas or in areas with low population density. Finally, the development of flexible forms of work was favoured, as permanent teacher hiring was decreased and the recruitment of substitute and hourly waged teachers was increased (Stagia & Iordanidis, 2014). These changes resulted in the modification of teachers' working conditions and the restructuring of their teaching so as to correspond to the student's needs. Examining the newly emerged risk factors of resilience is of particular importance, as it reveals the range of challenges that compromise teachers' resilience.

In the present study, a large percentage of teachers reported significant changes at a personal level. The literature proposes two main effects of the financial crisis on individuals and, consequently, on teachers, which are the difficulties in meeting their financial needs and changes in their way of living and everyday life (O'Neill & Xiao, 2012). In the Greek educational context, the reduction of teachers' salaries resulted in making their everyday life more difficult. Lack of financial resources, in turn, resulted in increased levels of stress (Botou et al., 2017). As teachers reported, focusing on their personal problems discourages them from devoting more time and energy to their profession. Regarding SE teachers, a large percentage of those who participated in the study were working as substitute teachers. Among the personal risk factors reported were the continuous movements in different school environments and the uncertainty of whether they would have a job the following school year, which caused them intense stress. These findings have also been identified in the international literature. Studies have suggested that teachers who work as substitutes or are hourly paid exhibit higher levels of stress and lower levels of job satisfaction compared to those who have a permanent job (Glaveli et al., 2022; Quinn et al., 2022).

Significant changes were also reported at the classroom and student level as a result of merging classrooms and schools. Teachers reported that the number of students in the classroom has increased, while at the same time, the number of students with learning disabilities who need personalized tuition is ever-growing. Planning teaching for students with special needs combined with insufficient preparation has been found to be an important stressor for teachers (Antonioni et al., 2023; Billingsley & Bettini, 2019). Research highlighted that SE teachers who teach students with high heterogeneity and require individualized attention as well as teachers who work with multiple children at the same time are less likely to respond to students' needs and experience higher levels of stress related to their students' progress, safety and social development (Conley & You, 2017; Wu et al., 2020). In addition,

teachers noticed changes in the behaviour of students who, as they reported, have become more bad-tempered, aggressive and/or have lost their enthusiasm for learning.

Changes and deficiencies have also been highlighted by teachers in terms of material resources and technical equipment. Lack of funding, resources and inadequate infrastructures are factors frequently cited by teachers as sources of stress and have often been identified in Greek literature (Antoniou et al., 2013; Nikolopoulou, 2022; Nikolopoulou & Gialamas, 2016). These challenges can impact both the quality of education provided and the overall well-being of teachers. Limited funding and resources might restrict teachers' professional development and/or disturb them from delivering engaging and effective lessons. However, what we conclude from the teachers' statements is that the shortcomings are nowadays even more substantial and concern basic needs such as heating. Poorly maintained classrooms, inadequate seating, uncomfortable temperatures, and outdated facilities have created a suboptimal learning environment for both students and teachers.

New challenges have been also identified by teachers in their relationships with their colleagues. Although peer support has been consistently identified as an important protective factor of GE and SE teachers' resilience (Botou et al., 2017; Langer et al., 2017), a small percentage of teachers reported that they have observed changes in the relationships between colleagues in school. In particular, they noted that teachers have become more isolated and they do not care about the school community, resulting in more tension between them. International studies have shown that the financial crisis affects relationships with others (Passini, 2015). Decreased incomes, people's difficulty in meeting their financial obligations, and, in general, occupational and economic instability affect people's psychological well-being and family relationships. People feel insecure, frustrated, impatient, angry, and stressed, all of which are reflected in their interpersonal relationships and therefore in the workplace.

Finally, GE teachers reported the relationships and interactions with students' parents as a new challenge. In some cases, they stated that they observed parental indifference, hostility, or even suspicion. The problems that families face transfer to students, who find the school as a place to express their negative emotions and the teacher as a source of support. Teachers noted that they are expected to find ways to support not only the child but the whole family as well. Challenges and problems in teachers' relationships with parents such as maintaining relationships and communication, lack of trust, responding to parents' expectations, and addressing behavioral issues are often identified in both Greek and international literature (Anastasiou & Papagianni, 2020; Grace & Gerdes, 2019; Santiago et al., 2016). Parental suspicion towards teachers and lack of involvement and collaboration between parents and teachers may affect not only students' motivation and academic performance (Green, 2022), but can create a complex and demanding environment for educators as well.

Protective factors of resilience in GE and SE teachers

The second aim of the study was to identify the specific personal and environmental protective factors that help teachers overcome the challenges in their workplace. Regarding the personal protective factors, the teachers in GE and SE reported their beliefs about teaching and the feeling of giving to the community, their communicative skills and empathy, having a sense of humour with students and colleagues, patience and being realistic about the difficult situation, the organization of classroom and teaching process, persistence, being able to adjust to changes, their previous teaching experience, creativity and self-efficacy.

The majority of the personal factors reported have already been identified in previous studies as protective factors of resilience (Yildirim & Aziz, 2023). However, it is worth noting that most teachers reported that their love for the profession and the children, the feeling they provide through their work, and the belief that they can help improve their students' quality of life provide motivation to continue despite the difficulties. Teachers who respect and believe in their students and aim to help them on both academic and personal levels are more likely to make greater efforts to successfully overcome the risk factors (Gul et al., 2021). The study highlighted the importance

of altruistic motives, as it was found that the values and beliefs of the majority of teachers stem from intrinsic motives and, therefore, can act as a protective factor against adversities. Teachers who are dedicated to helping their students both academically and personally are more likely to develop resilience and less likely to leave their profession (Chiong et al., 2017). The percentage of SE teachers who reported values and beliefs as important protective factors was even higher. In SE, the achievement of academic and social goals is less prominent than in general education. Thus, the slightest progress of a student may possibly provide even more satisfaction and motivation to a SE teacher.

General and special education teachers prioritized the internal protective factors of resilience in similar ways. Small differences were found only in *Creativity* and *Persistence*. In terms of creativity, the context of GE may be more flexible and allow teachers more freedom in the teaching methods they use. On the other hand, SE teachers may be more restrained in adopting new techniques because of the special educational needs of their students. On the contrary, persistence was reported higher by SE teachers. However, SE teachers were, on average, 10 years younger (and therefore professionally more experienced) than GE teachers. It is likely that teachers' ability to adapt to new conditions in the school context, keep up with the changes occurring, and find alternative ways of approaching and managing stressful situations are related to age. It may be that younger teachers are more willing to try, as the fatigue of many years of work has yet to come. Literature suggests that the individual's ability to be resilient to different adverse conditions can be enhanced not only by personal characteristics but also by the policies and practices of the context in which they work, as well as by the people with whom they associate (Beltman, 2020). Particular emphasis has been placed on the importance of interpersonal relationships (Papatrianou & Le Cornu, 2014). Some researchers (e.g., Gu, 2014; Le Cornu, 2013) have discussed the importance of "relational resilience". The term implies that resilience is characterized not as a purely individual trait, but as a process influenced by relationships with students, colleagues, peers, family, principals and parents. In the present study, the most important external factors reported by teachers were colleagues, family and friends, the principal and the school counsellor, the relationship with students and the legislative framework. Similar to the personal protective factors of resilience, the majority of the environmental factors reported by teachers have been identified in the international and Greek literature (e.g., Beltman, 2020; Botou et al., 2017; Papatraianou & Le Cornu, 2014). Papatraianou and Le Cornu (2014) argue that informal support networks, such as friends and family, contribute to teacher education by providing emotional support, advice, and professional knowledge, as well as providing a context in which teachers can easily express themselves.

An important finding of the present study was teachers' relationship with their students was found to be an external protective factor of resilience. This factor is differentiated from the personal factor of beliefs about teaching and the feeling of giving to the community. In this case, we do not refer to the ethical values of the teachers and/or the feeling of providing to students, but to students as a protective factor; as a parameter that could help teachers maintain their resilience. Teacher-student interaction within and outside the classroom can reduce the stress experienced by teachers while at the same time can strengthen their commitment in the profession (Corbin et al., 2019). According to Cui and colleagues (2022), strong teacher-student relationships of high value serve as a buffer against emotional exhaustion among educators. This is achieved by amplifying levels of enthusiasm and concurrently reducing feelings of exhaustion. At the same time, good relationships with students are likely to enhance the individual characteristics of teachers (e.g., humour, creativity), in other words, the internal protective factors of resilience.

In addition, a small percentage of teachers reported that the legislative framework of education can be protective in some cases. Educational policy and legislation are usually cited by teachers as one of the most important stressors (e.g., Flores, 2018; Matsopoulos et al., 2018), as ongoing reforms by governments may increase teachers'

uncertainty, pressure and workload. However, in the present study, good knowledge of the legal framework was found to be able to support a small number of teachers, a finding that is rarely mentioned in the literature. According to teachers, knowing their rights and obligations can reduce the stress they are experiencing and contribute to resolving crises more effectively.

To summarize, there were no significant differences in the views of general and SE teachers as they seem to agree on how external factors are prioritized. Minor differences were found only in the *Relationships with Students* and the *Legislation Framework* factors. The first factor was found to be more important for SE teachers. It is possible that the smaller number of students in special education and the personalized learning program help create stronger interpersonal relationships between teachers and students. Another explanation of this finding could be that special education teachers have chosen to work in such a context. Thus, the factor of interaction with students could have a greater impact on maintaining or even enhancing their resilience.

Resilience strategies

The final aim of the study was to highlight the strategies teachers employ to address challenges in the school environment and enhance their resilience. Teachers' responses were categorized into three groups of strategies: (a) individual effort, (b) seeking help within and outside the school context, and (c) compromise, acceptance and/or resignation. The first way of managing the challenges mentioned by the teachers was to try to solve the problem individually. The majority of GE and SE teachers reported that when facing a challenge, they first try to manage and solve the problem on their own, by deploying their individual characteristics and personal strengths. International studies on teachers' resilience have found that problem-solving strategies are the ones most frequently used by teachers to deal with student or classroom-related challenges (e.g., Beltman & Poulton, 2019; Mansfield et al., 2016a). Such techniques include the trial-and-error method, decision-making, exploring alternatives, and effective time management (Patterson et al., 2004). The personal protective factors that help teachers cope with stressful situations have already been described. Factors such as organization, creativity, flexibility and having a sense of humour could be included in problem-solving strategies. At the same time, their personality traits, such as persistence, empathy, and self-efficacy beliefs, could contribute to developing their own strategies to respond effectively to challenges and minimize the impact of future challenges. In conclusion, personal protective factors could be a source of developing strategies focusing on teachers' abilities and individual characteristics.

The second strategy reported by GE and SE teachers was seeking help. Seeking help as a strategy of resilience refers to the initiative of teachers to ask for support. This category can be allocated in two subcategories: seeking help within the school environment and seeking help outside the school context. In the first category, seeking help from individuals within the school environment refers to "searching for allies in the face of the school administrator and their colleagues" (Castro et al., 2010, p. 625). Teachers who do not manage to resolve a crisis on their own seem to be seeking both practical and psychological support from their colleagues and the school administrator. This strategy has been found to be particularly effective, especially for teachers with less experience in the profession. Colleagues and school administrators often get lost in the frenzied demands of the workplace and forget to offer help or assume that novice teachers already know how to deal with a challenge.

In addition, some teachers reported that they seek help from individuals outside the school environment, such as in students' parents or other experts. Seeking help from psychologists, social workers, or even more specialized scientists (e.g., doctors) can help teachers cope with specific demands for which they do not acquire the knowledge and the means to manage by themselves (Beltman et al., 2016; Skovholt & Trotter-Mathison, 2014). Parental involvement in solving troubled situations with students has also been found to reduce the levels of stress experienced by teachers (Santiago et al., 2016). Parents can support teachers' efforts through personal involvement

and frequent communication, as teachers can receive useful information, advice and constructive feedback on how to manage a 'difficult' student (Đurišić & Bunijevac, 2017). The strategy of seeking help from individuals outside the school environment was reported to a much greater extent by SE teachers compared to GE teachers. SE teachers have to manage difficult situations much more often since their students have special educational needs and often behavioural problems. However, it must be noted that the average age and years of service of the SE teachers who participated in the study were lower compared to those of GE teachers, and, thus, less experienced in managing critical situations.

Given that the profession of teacher presupposes interaction with students, colleagues and parents, it is not surprising that the social aspects of educational context are often referred to as factors and strategies of teachers' resilience (e.g., Daniilidou et al., 2020; Peixoto et al., 2019). However, while family and friends are being reported by a high percentage of teachers as important environmental protective factors, they are not included in strategies for seeking help from individuals outside the school environment. It seems that when teachers face a challenge at school, they choose to seek help from people who have the knowledge and are more experienced in managing similar situations. Family and friends can act as a supportive factor, as mentioned above, but more in a decompression and relief level rather than a practical one.

The last strategy reported by the teachers was compromise, acceptance and/or resignation. In difficult situations, where neither the individual effort nor the support from other individuals resulted in resolving the challenging situation, teachers reported that they had to accept the situation or even give up further efforts to improve it. It is worth noting that the strategy of emotionally and physically distancing from the problem was mentioned only by teachers over 37 years. The ability of individuals to set boundaries and understand their strengths is a valuable skill to maintain well-being and resilience. Setting boundaries in the workplace (in terms of workload, teacher role, tasks, and time) and learning to say 'no' is a strategy used by some teachers (Burke & O'Brien, 2021; Louws et al., 2017). Disengagement is one of the stress management strategies in which teachers reduce the effort they make and/or give up on the goals they had set (Waters & Higgins, 2022; Wang & Hall, 2021). Teachers distancing from the problem and choosing to accept the current situation has emerged as an important strategy that can protect teachers from work stress and burnout (Kepalaite, 2013). This passive way of dealing with the problem is usually referred to by older teachers as a strategy for adapting to stressful situations. Therefore, it may also be a strategy used by more experienced teachers to maintain their resilience.

Limitations, implications and future research

While qualitative research methods are valuable for exploring complex phenomena and gaining deep insights, they are also susceptible to various types of bias that can affect the validity and credibility of the study (Galdas, 2017). The first limitation of the study stems from the semi-structured interview method used to collect the data. Semistructured interviews provide some level of flexibility in question formulation, which can lead to variability in the way questions are asked across different participants or interviews (Salkind, 2010). In addition, in semi-structured interviews, participants may provide answers that they believe the interviewer wants to hear or that align with social norms, rather than expressing their true opinions or experiences. This is known as social desirability bias and could have impacted the validity of the present study (Salkind, 2010).

In addition, some other limitations of the present study stem from the sampling bias and the composition of the sample. Due to the difficulty of finding teachers working exclusively in special education schools, the sample also included substitute teachers working in parallel support in general schools. There might have been a difference in the results of the study if the sample of special education teachers consisted only of teachers working in special education schools. Another weakness of the study concerns the age difference between GE and SE teachers. Due to the composition of the SE teacher sector which in recent years has consisted mostly of substitute

teachers, the difference in age and years of service between the two groups could not be equated. Finally, the Greek educational context differs from that of other countries. Researchers from other cultures may misunderstand the perspectives and behaviours of the participants of the present study, and this can lead to misrepresentations. As a result, the findings of the present study which was conducted in a particular educational and cultural setting cannot be generalized and applied to other contexts without adequate consideration.

Despite the limitations, the findings of the study could have important implications for teachers' initial and continuing education and professional development. The increased attrition rates in the teaching profession suggest that there is an urgent need to find ways to mitigate teachers' maladaptive coping of stress and protect them from burnout. The answer to high attrition rates may be resilience. Reporting high levels of protective factors does not necessarily mean that someone is resilient or that they will automatically function in enhancing resilience. However, the results of the present study highlight the need to place particular emphasis on enhancing resilience protective factors, as they are being incorporated into the strategies used to maintain and/or enhance teachers' resilience. It is important for teachers to strengthen their abilities and skills and continuously enrich their repertoire of ways to cope with job-related stressors and challenges. The enhancement of protective resilience factors should constitute a significant part of programs and interventions designed to strengthen teachers' resilience.

Compliance with Ethical Standards

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