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School Crisis Management: Attitudes and Perceptions of Primary School Teachers

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Abstract: Despite the fact that crisis management is essential for school's smooth operation and crises occur at schools and education institutions around the world, Greek school is characterized by limited readiness to manage its potential crises. This study investigates the attitudes and perceptions of teachers concerning crisis events in school units bearing in mind that such events occur in a unique context in every school and every situation. The study's findings are based on data collected through an empirical, qualitative research. The results show that that school premises in Greece are not considered safe sites not only due to students' aggressive behaviour but also to the feebly support provided by the Ministry of Education and the Local Authorities as well as teachers' feelings of inadequacy and inappropriateness. Since the problem of school safety is proved to be multifaceted, it requires collectivity and a dedication to strong collaboration in order to be solved.

Keywords: *School safety, school crisis, crisis management, school accidents, teachers' attitudes, teachers' perceptions.*

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Introduction

In the context of the predominantly uncertain environment of modern organizations, both in the public and private sector, a crisis is an unavoidable phenomenon and therefore constitutes one of the parameters that administrations are expected to take seriously into consideration (Drennan, McConnel & Stark, 2015; Mitroff, 2001; Robert & Lajtha, 2002). Schools, as open systems (Lunenburg, 2010), are no exception (Fidan & Balci, 2017; Peterson, 2001; Saitis & Saiti, 2018). Critical events such as accidents, acts of violence and racism occur all too often and, to a greater extent and intensity, are present in the school environment, thus increasing uncertainty (Adamson & Peacock, 2007; Seldak, 2010). They bear a negative effect on the physical and mental health of the school community members, thus deregulating the learning and edification process (Brock, Sandoval & Lewis, 2005; Felix et al., 2010; Hatzichristiou et al., 2011; Heath & Sheen, 2005; Robers, Zhang, Truman & Snyder, 2012; Starr, 2012). In addition, they make teachers experience increased uncertainty about their work environment and this unavoidably bears a negative effect on their teaching and school-based extracurricular activities, as well as on the school climate (Cornell & Mayer 2010; Heath & Sheen, 2005) - the importance of which has been repeatedly established in pertinent literature (e.g. Green, 2015; Halpin & Croft, 1963; Saiti & Saitis, 2012).

In contrast, a safe environment has been consistently recognized as a factor which contributes to a school's provision of quality teaching and learning (Brock et al, 2005; European Agency for Safety and Health at Work, 2013; Lunenburg & Ornstein 2010; Saitis & Saiti, 2018; Unesco, 2007). Inevitably, the school principal and deputy as well as the school unit's teaching staff are expected to know how to prevent any such dangers. But even when a dangerous incident occurs, they should be apt at managing it promptly and effectively, utilizing both their knowledge and the aptitudes of the school community, the school's material/technical infrastructure as well as external support structures, such as the police, fire brigade, city authorities or even volunteer groups (Coombs, 2014; Saiti & Saiti, 2012). However, it is equally important to plan a long-term policy for managing school crises, to draft action plans at each school and to continually inform/educate the school community.

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However, despite the recognized importance of effective and prompt crisis management by education organizations and the increasing occurrence of critical events internationally (Bobyleva & Sidorova, 2015; Bouloutza 2006; Brock et al, 2005; Katsaros, 2008; Saitis & Saiti, 2018; Zdiarski, Dunkel & Rollo, 2007), pertinent research has indicated that Greek schools and the Greek State have not dealt with it systematically. There are several reasons for this: school units' material infrastructure and buildings (especially the school yards) have been found to be unsatisfactory (Gouvra, Kiridis & Mavrikaki, 2005; Saiti, Rapti & Mitsagas, 2018) there are no organized or updated plans for managing critical events, apart from usual disasters such as earthquakes; and crisis management groups, if any, are underperforming. Also, the Ministry of Education so far has had no plans for providing a complete school crisis management system (Mitsagas, 2018; Savelidis, 2011) and teachers declare themselves unprepared to deal with the variety of critical events that could pose a threat in their schools since any practical training they have received thus far has either been erratic or non-existent (Fotou 2017; Moulelis, 2015).

In sum, it could be sustained that Greek schools are lacking clear/updated contingency plans as well as preparation measures and long-term planning while there are also shortfalls regarding the preparedness of material infrastructure and human resources, thus resulting in a limited readiness to manage potential crises.

Objective and hypotheses of the study

In this framework, the objective of the present study is to investigate the attitudes and perceptions of teachers concerning crisis events in school units, the type and cause of school crises, the degree to which they consider themselves prepared to handle such incidences efficiently and promptly as well as the practices utilized for the comprehensive management thereof.

The necessity to investigate such attitudes and perceptions in managing school crises arises from: (a) the importance of human resources in managing school units, (b) the fact that in our days crises have been a recurrent phenomenon in school units, and (c) the fact that, in order for children to get over a crisis, guidance ought to be provided by an adult in authority whom they can trust (such as a teacher). Additionally, compared to former studies, this one concentrates on the attitudes and perceptions of the educational community members as regards the endorsement of substantial and long-term changes in strategic management at school units by the school leadership. This, bearing in mind that each event of school crisis occurs in a unique context in every institution and every situation.

For a comprehensive investigation of the present study's objectives, the following research goals were established:

- Highlight the importance and dangers that crises can pose to school management.
- Investigate the readiness level of school units to manage a crisis (take preventive action, draw up an action plan, have the proper equipment on school premises, educate teachers and provide them with opportunities for practical training).
- Determine whether schools constitute safe sites for students and teachers.
- Look for factors/causes that might give rise to accidents on school premises.
- Investigate the causes of accidents in schools.
- Recommend simple guidelines for crisis management.

The research hypotheses that the present study shall attempt to examine are:

- H1. Schools constitute sites where accidents occur par excellence.
- H2. Teachers at school units have been educated and received practical training to a high extent in order to handle critical situations and draw contingency plans.
- H3. Teachers at school units are particularly stressed in view of parents' reactions as regards accidents and bullying in the school environment.
- H4. The teachers' association takes preventive action so as to identify potential dangers/crises.
- H5. A school, as a workplace, is a safe and healthy environment.
- H6. The poor condition of overcrowded school yard areas as well as aggressive student behaviour are considered to be major factors that lead to accidents at school.

In order to meet the above objective and goals, the present study shall be based on the following outline: initially, the theoretical framework shall comprise a literature review of crisis management in schools as regards its forms as well as the prerequisites for its effective implementation. Next, pertinent information on the sample, the methodology and major research findings shall be provided. In its final part, research findings shall be discussed in an attempt to reach

conclusions and put forward recommendations for the creation of a safe and healthy environment, together with suggestions for further research.

Crisis management in schools. Theory and literature review

Material and human resources in school units constantly face an element of danger, that is, the chance of encountering an unfavourable situation/crisis. A school crisis could be defined as anything that adversely influences the school community members concerning their physical health, social and psycho-emotional well-being, teaching and learning (Brock et al., 2005; Johnson 2000; Sandoval, 2002; Tokel, 2018). Accidents (e.g. injuries from students falling or accidental damage to the school's laboratory equipment), vandalism, natural disasters, violence, intrusion by out-of-school individuals, contagious diseases, the use of substances as well as threats (natural or virtual) may be identified as the most common causes of dangers/crises.

As school dangers and adverse events/crises associated with them constitute a threat to the quality of school life as well as a financial burden upon the State (Giannikas & Alexopoulos, 2016; Saiti & Saitis, 2018; Saitis, 2007), it is evident that their prompt and effective management is a pressing necessity. It is worth mentioning, though, that this necessity also arises from the school's need to consider such critical incidents as an invaluable experience for the future. That is, a crisis should not only be seen from a negative perspective as it can also have a positive bearing (Allen et al., 2002; Pepper, London, Dishman & Lewis 2010) since it can serve as a trigger for improvements in existing protocols but also because it can induce greater cohesion, communication and cooperation among the members of an organisation.

As regards the types of crisis, in pertinent literature there is a prevailing distinction between developmental/evolving and situational crises (Brock et al., 2005; Erikson, 1963; Ruff & Azziz, 2003; Saitis & Saiti, 2018). In the context of a school, the first category refers to foreseeable and anticipated incidents related to the transition of a person from one life stage to another (e.g. first induction of a student in the school system, transition from one class to another, beginning of adolescence, beginning of adult life). The emergence of such critical incidents depends on various factors, such as the timing of circumstances as well as the availability/extent of personal, social and financial sources of support. The second category, situational crises, refers to unexpected and sudden events whose management is of an urgent nature. Those crises do not relate to the person's developmental age but to unexpected events that can occur at any moment and influence the school community to a lesser or greater extent (e.g. students of one class or one grade). Situational crises can comprise incidents such as natural disasters (earthquake), serious accidents and terrorist attacks.

Every school, as an organisation, ought to manifest its readiness for crisis management by placing special emphasis on (i) analyzing the work environment to assess potential dangers, (ii) developing a safety plan for the school with contingencies, and finally (iii) implementing the chosen plan as well as evaluating and assessing its outcomes. This may be achieved by designing a complete Management Crisis Plan (MCP) (Brock et al., 2005; Coombs, 2015; Giannikas & Alexopoulos, 2015; Katsaros, 2008; MacNeil & Topping, 2007; Savelidis, 2011). This is an officially documented and structured protocol of fundamental actions that must be taken with the initiative of, and under the responsibility of, the school administration in order to eliminate any sense of uncertainty among the school community and thus foster confidence and safety among its members (Fink, 1986). The key features of an MCP are: (a) a clear goal (aims to be achieved), (b) measures for the prevention of dangers and potential crises, (c) measures to minimize and alleviate the impact of a crisis, as well as (d) recovery-remediation provisions through which the school can return to its former pre-crisis status, can learn from any successes or failures and better prepare for future potential crises (Homeland Security and Emergency Management [HSEM], 2011; Paraskevas, 2006). Furthermore, an MCP should stipulate the designation of a small-sized crisis management group, the delegation of responsibilities to pertinent school community members (teachers, administrative staff, parents) and their role in critical events as well as their continual training in crisis management (Saiti & Saitis, 2018). For an MCP to be successful, cooperation with parents, local community and pertinent authorities (police, fire brigade, hospitals, Press, psychologists, city services, volunteers) must first be ensured (Brock, 2000; Katsaros, 2008).

In addition to drawing up an MCP, effective crisis management in schools also depends on other factors (Hatzihristou, 2012; Katsaros, 2008; Saitis & Saiti, 2018), the most significant of which are:

- Competent school leadership:** The role of school principals is to inspire, guide and provide motivation. They need to help prevent conflicts and handle disputes by endorsing effective communication.
- Coordination of all actions:** In order to manage crises effectively, the roles of all group members delegated with handling contingency events must be properly coordinated and accurately determined.
- Training of the teaching staff:** Teachers are all too often "in the front line", when school units encounter a crisis and so their support is crucial. Therefore, training teachers on crisis management issues is of absolute importance. As illustrated by Brock et al. (2005:64), a contingency plan could even be considered of no value if there are no competent staff members to manage a crisis.

- Positive school climate: A school climate that fosters ethical behaviour, cooperation and communication among school principals and teachers (see Savas, 2018) also promotes the development of an effective culture in crisis management. A positive climate developed in a school unit is indicative of the spirit of cooperation that exists among school members, which eventually leads to the smooth operation of schools.
- Adequacy of material resources: The effective implementation of a contingency plan also depends upon the sufficiency of resources, that is, all means necessary for handling a critical situation. Here, resources include both material means as well as experienced and competent human resources.

A common element of crucial importance in all those factors related to successful crisis management in schools, as identified by pertinent literature, seems to be the role of the staff. Within this framework, countries such as the USA, New Zealand, Sweden and Scotland have actually focused and developed a coherent strategy and culture for crisis prevention, mainly relating to issues of aggression and criminal behaviour on the part of students (FEMA, as cited in Ozmen, 2006, p.385; OEPEK, 2008; Renwick, 2012; Weyman & Shearn 2005). On the other hand, other countries such as Turkey (Ozmen, 2006) and Greece, although often faced with natural disasters, have not placed any emphasis on designing contingency plans or on training their staff. According to Saiti and Saitis (2018), Greek schools are not prepared for the handling of critical situations in a prompt and effective manner (with the exception of earthquakes) because a) there is no pertinent legislative framework, b) the central Administration support is feeble, but also because c) there is a prevailing mentality that “it won’t happen to us”.

For that reason, Katsaros (2008) and Savelidis (2011) put special emphasis on the fact that, apart from provisions for pertinent equipment and improvements in building infrastructure, there is also a great need for teacher training, for a crisis management group in each school unit as well as for legislative interventions that would allow the school principal and the teachers’ association to take initiatives concerning student and staff safety. Recognizing the value of the human factor in crisis management, Saiti and Saitis (2012) state that it is also necessary for a culture of readiness to be theoretically and practically fostered in school communities and among their members in order for them to be in a position to promptly and effectively manage crises that are recurrently occurring in schools around the country.

Methodology

Data collection tool

The study’s findings are based on data collected from responses to a written questionnaire which was anonymously completed by teachers in the region of Central Macedonia upon its distribution. The questionnaire was drafted after perusing existing literature (e.g. Brock et al., 2005; Giannikas & Alexopoulos, 2015; Hatzichristiou et al., 2011; Katsaros, 2008; Saitis & Saiti, 2018) and pertinent relative studies (e.g. Liou, 2015; Perkins, 2018; Saiti et al., 2018; Saiti, Saitis & Gournaropoulos, 2008; Savelides & Mihiotis, 2015; Starr, 2012) and by exchanging views with teachers and academics.

It consists of 25 closed questions (yes/no, multiple choice, rating questions and five-point Likert scale questions) divided into three sections: general data concerning the school unit (e.g. number of teachers), sample demographics (e.g. age, years of experience) and school crisis management information (e.g. features of accidents at school, the adequacy of school equipment in dealing with critical events, the establishment of a crisis management group, the level of teacher training received on school crisis issues). It also incorporated an open question that invited teachers to provide their recommendations for preventing, managing and being trained for crises at school.

The questions were solidified and outlined after a pilot survey (Cronbach’s alpha consistency analysis) was applied to a small sample of 32 teachers who were subsequently removed from the main research body.

The main questionnaire’s internal consistency was also examined, with the results showing that *Cronbach’s alpha* coefficient of consistency was high, over 0.801, thus the research findings were valid and useful.

Sample

The main research was conducted in spring of 2018 utilizing a convenience sample consisting of 249 teachers, the majority of whom were married women, aged 31-40, postgraduate degree holders, serving in a permanent position for over 11 years in a large capacity school.

Data analysis

The data analysis of the questionnaire was conducted using the statistics software program SPSS (v. 20), including the questionnaire’s internal consistency evaluation through Cronbach a, and the following statistical techniques: One-way frequency distribution tables for the presentation of variables, cross tabulation tables to detect correlations between two variables and Pearson’s Chi-Square Test for statistical independence. The hypotheses were tested through Pearson Chi-Square Test (χ^2 test) in order to identify their significance or p-value. The test was conducted by setting a

predetermined level of significance ($\alpha = 0.05$) to be compared with the test's results (it provided more than one degree of freedom as it compared more than two proportions).

As regards the first question of the questionnaire's third section, which aimed at recording the data related to school crisis management, participants in their majority (54.1%) initially stated that accidents such as injuries from falls, hitting etc. often occur at their school units. They also stated that the majority of first aid services for accidents at schools are provided fortuitously (83.8%), that is, by any teacher or by those on call, and much less by a specialist (11.3%). Additionally, participants stated that in the event of a serious accident, the student is transported by ambulance (71.7%), and to a much lesser extent by a teacher's/parent's vehicle or by other means (11%, 13.8% and 2.8% respectively).

Concerning the factors responsible for accidents in schools, the answers of the participants (multiple choice questions) indicated students' aggressive behaviour (80.3%), the overcrowding of children in school yard areas (63.3%), the poor condition of school yard areas (60%) and a lack of appropriate equipment (23.7%) as the most significant causes. Other causes leading to accidents, but to a lesser extent, were factors such as the school unit's fencing, inadequate flooring and limited supervision of school areas by teachers. In addition, there was a statistically significant and positive correlation between the size of schools and teachers' perceptions on whether school units are properly equipped to handle accidents $\{x^2(1,249)=3.920, p=0.048\}$.

As regards the readiness level in handling emergencies in the schools that participated in the research, teachers indicated through their answers to multiple choice questions that it mainly refers to the event of an earthquake (94.2%), organizing relevant readiness exercises (97.2%) and, to a lesser extent, the event of a fire or flood (e.g. organizing regular exercises to respond to such phenomena was noted by 20.6% of teachers). A small but significant proportion (4.6%) indicated that communication/cooperation with the school unit's external environment, e.g. the media, was a factor.

In agreement with the above, the research findings showed that groups of teachers that have been assigned to deal with emergencies at schools mainly refer to the event of an earthquake (91.7%), providing first aid (80.7%) and dealing with school aggression/bullying (62.4%).

The research findings also revealed that schools are mainly equipped with fire hoses (84.4%), fire extinguishers (77.1%) and have a first aid kit that is easily accessible (87.2%) whereas there is a serious lack of necessary equipment for critical event management, such as fireproof gloves/uniforms (89%), raincoats, blankets (88.1%) emergency exits (53.2%) etc. As for school buildings' preparedness in dealing with emergency situations, the participants' responses mainly highlighted the absence of automated fire safety systems (e.g. a fire alarm, 74.3%) and windows with safety glass (65.1%).

As for the frequency of examining the safety level of school buildings (e.g. regarding their structural soundness), the research data suggest that it is conducted upon the school principal's written request (62.4%) while the proportion of school units where regular (e.g. annual) inspections are conducted by pertinent authorities was found to be extremely low (17.4%). Also, 58.7% of teachers indicated that preventive actions aimed at detecting potential dangers/crises in the school unit environment were taken by their teachers' association.

Additionally, the research findings revealed that teacher associations' readiness was statistically and positively correlated with (a) the years of service (over 10) of school teachers $\{x^2(3,249)=8.093, p=0.044\}$ and (b) the work relationship of teacher association members at school. Furthermore, the research findings showed that permanent teachers take preventive actions to detect "potential dangers/crises" in their school to a larger degree compared to substitute and hourly-paid teachers $\{x^2(2,249)=8.552, p=0.014\}$.

With regard to the protection measures taken to prevent/detect a potential crisis in the school workplace, the research findings manifested that in order for schools to protect sensitive areas (e.g. laboratories, administration offices), iron fencing (88.7%), alarms (66.1%) and night lighting (88.7%) are employed whereas there is a distinct lack of security guards during non-operational hours at schools.

As regards the support received by schools from pertinent authorities with respect to the development of a safe work environment, teachers stated that they are moderately satisfied (see Table 1).

Table 1. Level of teacher satisfaction from services provided by authorities towards a safe school environment

Authority	Very much %	Much %	Average %	Little %	Not at all %
Ministry of Education	0.9	6.4	26.6	34.9	31.2
Health Services	1.8	9.2	29.4	39.4	20.2
Police-Fire Brigade	0.9	16.5	34.9	28.4	19.3
City-Regional Authorities	0.9	16.7	43.5	25.9	13
Volunteer organisations	2.8	14.7	18.3	29.4	34.9

Government authorities	8.3	29.4	32.1	30.3
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The majority of teachers expressed an average satisfaction (49.5%) regarding the degree to which their school satisfies preconditions for a safe work environment. A further 27.5% stated that their satisfaction rated from Very Much to Much and 22.9% from Little to Not at all.

They also stated that they experience stress in certain aspects of their work, especially when it comes to parents' attitudes towards them with regard to issues concerning aggression and accidents involving their children at school (see Table 2).

Table 2. Level of teachers' stress related to aspects of their work at school

Work aspect	Very much %	Much %	Average %	Little %	Not at all %
Workplace	7.3	21.1	41.3	18.3	11.9
Accidents involving students	17.4	39.4	24.8	14.7	3.7
A parent's attitude towards their child's accident	21.1	33	31.2	13.8	0.9
A parent's attitude towards school violence / aggression	23.9	33.9	31.2	10.1	0.9

Additionally, there was also a positive and statistically significant correlation between the teachers' level of stress about their work environment and their gender. In particular, results manifested that female teachers feel more stressed than their male counterparts about the conditions/environment prevailing in their workplace $\{x^2(4,249)=9.644, p=0.047\}$.

The research findings also revealed that almost half of the participants have not been trained, nor do they have practical experience of implementing crisis management (62.4%, and 54.7% respectively). In addition, they have not been informed about, or trained on the proper use of, the available means for handling critical events (74% and 71.3% respectively). Nevertheless, a little over half of them stated that they have received theoretical and practical training on providing their students with psychological support following an adverse event (53.8% and 51.4% respectively). There was also found to be a statistically significant and positive correlation between the level of practical exercise of teachers in dealing with emergencies and (a) the years of their experience, and (b) their permanent or long-term status as officially appointed or substitute teachers at schools $\{x^2(3,249)=7.977, p=0.046\}$ and $\{x^2(2,249)=10.693, p=0.005\}$ respectively. The research findings also revealed that younger teachers (up to 30 years old) and those with fewer years of service (0-6) tended to have more training on providing psychological support to their students $\{x^2(3,249)=14.249, p=0.003\}$ and $\{x^2(3,249)=9.745, p=0.021\}$ respectively.

The research findings further indicated that, according to 62.4% of the replies, the school administration requests the assistance of a school psychologist / social worker to deal with an unpredictable event. In 75.4% of the replies the school psychologists / social workers primarily engage with the local level of educational administration, that is, the school units.

Finally, responses to the open question, which 41% of the participants completed, revealed that the majority of teachers highlighted the necessity for theoretical and practical training on issues of crisis management (63%) by having seminars held on the school premises (62.8%). Their recommendations for the design of concise action plans (53.5%), employing psychologists and nurses at schools (20%), reducing the number of students in large schools (20%) and in-school training on first aid services (13.8%) were also noteworthy.

Discussion - Conclusions

This study has mainly aimed to examine the attitudes and perceptions of primary school teachers in the educational region of Central Macedonia, Greece, as regards crisis management, which admittedly has a negative bearing on school life.

As for the frequency of accidents taking place in the school environment, the research indicates that they occur "often". This finding confirms the research hypothesis (H1), in that a school is a site where accidents and crises, such as school violence, are ubiquitous. It also concurs with other relevant studies and research in Greek as well as international literature (Kerr & King, 2019; Liou, 2015; Papadopoulos, 2005; Petridou, 2010; Robers et al., 2012; Saiti et al., 2018; Syrou, 2015).

The finding that first aid is administered within twenty minutes of an accident taking place by teachers lacking relevant expertise demonstrates: (a) a lack of expert staff in school units around the country who would be capable of providing appropriate first aid in any eventuality. It should also be noted that first aid is of particular significance both for the immediate wellbeing of the injured person as well as for the future condition of their health (HRC, 2007) and (b) that,

similar to other relevant studies (Fotou, 2017; Saiti et al., 2008), schools fail to adopt effective preventative measures and practices for managing accidents that take place on their premises.

Concerning the transportation of seriously injured students to a hospital or health center, it was found that it is performed to a great extent by a public ambulance. However, it is noteworthy that there has been mention of transporting injured students by other means (e.g. a teacher's vehicle). Those findings are in concurrence with previous relevant studies (Fotou 2017; Moulelis, 2015), referring to teachers' initial personal contribution as the "impulsive nature of the Greek teacher" (Saiti et al., 2008, p. 348). However, this impulsiveness may further complicate the situation since the transportation of an injured student by non-professionals could complicate/aggravate existing traumas and consequently lead to formal accusations by desperate and distressed parents as well as legal prosecutions that could obstruct the school's smooth operation (Click, 2005).

With regard to factors responsible for accidents in school units, the research findings suggest that the most prevalent are students' aggressive behaviour and their clustering in open areas of the school. Those findings confirm research hypothesis (H6) which identifies aggressive behaviour and clustering in small school yard areas as the main cause of accidents. Additionally, our research indicated that there are other factors that might be involved in accidents. These are mainly related to the poor condition of school premises, such as the school yard, poor equipment, run-down staircases, improper fencing and unsatisfactory internal design as well as (to a smaller extent) limited supervision of school areas by the teaching staff.

In relation to the above findings, our results concur with those of previous studies (Bouloutza, 2006; Fotou, 2017; Petridou, 2010; Saiti et al., 2018). In their entirety, those studies have highlighted the development of tension and aggression on the part of students in small school yards and school units mainly because they do not offer opportunities for physical relaxation and venting (Bouloutza, 2006; Saiti et al., 2008). Additionally, the main causes of accidents on school unit premises bring to light deficiencies in infrastructure and equipment (Syrou, 2014).

An important finding of this study is also the fact that teachers serving in smaller schools attribute the cause of accidents occurring in their schools to improper equipment in contrast to their counterparts in larger schools. This finding could be attributed to the fact that these schools do not usually receive enough attention or funding from local authorities who are in charge of buildings and material/technical infrastructure. It also constitutes an argument in favor of the Greek Ministry of Education's decision (M.D.45723/Δ4/, Gov.Gaz, 704 vol. B', 22-4-2008) to limit the number of smaller capacity schools so that students can interact with many more peers and teachers, receiving education in adequate, comfortable and above all safe buildings, thus achieving the best possible learning results (see Goros, 2004).

As regards managing emergencies and appointing groups in charge of relevant actions, the present study manifested that schools mainly focus on managing earthquakes and student aggression. A possible explanation for this could be that the experiences of school crises in Greece so far have mainly arisen from those two sources (Katsianidis 2018; Moulelis, 2015; Saiti & Saitis, 2012; Saitis & Saiti, 2018). However, other factors are worth mentioning: firstly, the occurrences of other phenomena apart from earthquakes, e.g. flooding, fire, or intrusions from outsiders are increasing (see. Nikolopoulos, 2015). Secondly, the requirement to inform and reassure society about such incidents as well as the design of cooperation plans between schools and the media is lacking in Greece (see. Kerr & King, 2019).

In agreement with other relevant studies (e.g. Mitsagas, 2018), the current study has also reached the conclusion that the school units examined are only equipped with the basic equipment (mainly a first aid kit, fire hoses and fire extinguishers) to manage critical events while lacking special equipment (such as fire detectors, blankets, shovels, raincoats, stretchers, fireproof uniforms and gloves) which would enhance the school community's safety.

Also, the present study, similar to previous ones by Fotou (2017) and Rentzou (2014), has identified significant deficiencies in the infrastructure of school buildings that would be needed to facilitate the effective management of emergencies (windows with safety glass, fire alarms, automated fire detection and extinguishing systems). The causes of those discrepancies could lie in the lack of strategic programming for critical event management in Greek schools as well as the limited funding available for schools to perform their educational function.

As concerns the frequency of preventive inspections performed by pertinent state authorities for the safety of schools' building infrastructure (e.g. structural integrity), this research, along with a related recent work (Saiti et al., 2018), has shown that it is indeed limited and is only carried out upon the principal's written request to state authorities. In congruence with pertinent literature, this finding could be attributed to the overall culture of prevention in Greek school life (Saitis & Saiti, 2012) and to the complete lack of an organized crisis management plan at national level (Nikolopoulos, 2015; Savelidis, 2011).

This seems to be further established by the finding that a little over half of the teachers who were asked whether their teachers' association was taking preventive measures to detect "potential school dangers/crises" answered positively. This discovery verifies in part our fourth research hypothesis, namely, that teachers' associations take preventive measures in order to detect potential dangers/risks. However, upon perusal of relative studies and research (e.g.

Moulelis, 2015; Katsaros, 2008; Saiti et al., 2018) where proper planning and prevention are of particular importance, then the measures being taken cannot be considered satisfactory.

As regards the steps taken by teachers' associations to prevent dangers/crises, the present study highlighted the significant role played by a teacher's years of service at the same school. In particular, a series of statistically significant correlations indicated that the longer teachers serve in a school, the more they become involved in taking preventive actions and in identifying potential dangers. A positive correlation was also found when the teacher had permanent employee status. This could be attributed to a sense of "belongingness" which is not present in teachers who have a temporary placement in their school (either as hourly-paid or as a substitute). This finding is in congruence with existing literature (Saiti & Saitis, 2018), suggesting that teachers' mobility between schools should be kept to a minimum in order to safeguard the unobstructed operation of the country's school management system. Additionally, it further confirms the viewpoints expressed on the need to train teachers on crisis management, especially concerning their attitudes in that regard, since crises (within and outside the school unit) can occur at any time and affect all stakeholders, not just teachers with many years of service.

Research has also brought to light the feeble support provided by the Ministry of Education's central administration and other pertinent authorities, with the exception of the police and fire department, when it comes to managing school crises. This fact places an additional burden on school crisis management that further aggravates current extensive deficiencies in preventing and handling school crises and further reinforces a feeling of insecurity in both adults and adolescents who make use of the school premises (Saiti & Saitis, 2012).

In consequence, the majority of participants state, not unlike other similar studies (Fotou, 2017; Gourva et al., 2005), that school premises in Greece are not considered safe sites since there has been no emphasis placed on the safety of their infrastructure. This finding contradicts our fifth research hypothesis (H5), namely, that the school constitutes a safe workplace.

This research paper also aimed to examine the extent to which the stress that teachers experienced related to the possibility of experiencing a crisis situation in their workplace. Our findings have validated our third research hypothesis (H3) in this regard, as it has been found that teachers and principals experience great stress when dealing with the disapproving stance of parents whenever an accident occurs on school premises but also when dealing with aggression/school violence (bullying). On the one hand, this finding is in congruence with previous studies (Baytak & Altun, 2018, Fotou, 2017), while, on the other, it substantiates that schools can be a particularly stressful environment due to the fact that an unfavourable incident can occur at any time, thus interrupting their smooth operation. Moreover, similar to previous research by Filia, Papageorgiou & Stefanatou (2005), it is therein indicated that unfavourable incidents considered by teachers to be stressful also foster feelings of inadequacy and inappropriateness.

In relation to teachers' stress, research findings have shown that gender constitutes a determining factor since the majority of female teachers stated that they experience "very much", "much", and "moderate" stress in their school environment, more so than their male counterparts.

Also, the present study - similar to previous ones (e.g. Fotou, 2017; Saiti et al., 2018) - showed that not all teachers have received theoretical or practical training when it comes to providing first aid services and psychological support to their students. Lower percentages were found as regards them being trained on drafting emergency plans for incidents (such as earthquakes or bullying) and using the available means to properly manage such situations (such as fire extinguishers in case of fire). This finding seems to indicate that any training exercises they had participated in must have been of a low level and mainly referred to standardized, routine procedures that did not really help the teachers to familiarize themselves with their true essence.

The above research findings run counter to our second research hypothesis (H2) according to which teachers in school units have been trained and received hands-on practice in handling critical incidences, offering first aid, properly utilizing emergency instruments, providing psychological support to students and drawing contingency plans. In addition, those findings are also in conflict with existing literature where staff training is emphasized as a prerequisite for successful crisis management planning (Saitis & Saiti, 2018; Smith & Kline, 2010; Heath & Sheen, 2005; Trump, 2011).

As regards teacher training, it has been therein indicated that teachers' years of service as well as their employment status (permanent/substitute/hourly-paid) constitute factors that influence their training and practical execution of managing emergencies. In particular, permanent and substitute teachers with over six years of service stated that they had received more training on how to handle critical incidences compared to their hourly-paid counterparts and also compared to permanent and substitute teachers with less than five years of experience. The latter stated in their majority that they had received no training whatsoever on school crisis management.

Of particular interest is a research finding according to which teachers with fewer years of service (up to six) and of younger age (up to 30 years old) had received more training on providing students with psychological support than those who had over ten years of service and were over fifty years of age. This is an original finding that could perhaps be attributed to the redesigned curriculum of pedagogical university departments (see Hatzichristou & Polychroni,

2014) which have incorporated individual modules as well as a variety of classes related to providing psychological support to school students. Another possible explanation for this finding could be the fact that new teachers pursue more postgraduate studies and attend more training seminars compared to older teachers. This could also be explained by the fact that those studies have a positive bearing in the selection process for their placement in public schools, as they provide additional points.

Our research findings also manifested that for over half of school units that have requested the assistance of a school psychologist/social worker to handle an unexpected incident, the assistance in question was provided at a local administrative level (that is, by the school's psychologist or social worker) and to a smaller extent by other administrative levels (directorates of education at the level of the pertinent prefecture or region). These results are consistent with those of similar research (Fotou, 2017) which maintains that almost 50% of school units are in a position to offer psychological support in the event of a crisis. Taking into consideration that school crises can be detrimental to the health and safety as well as the emotional development of students, it is absolutely vital for preventive measures to be taken and for teachers to not only be more proactive in identifying individuals who might be in need of psychological support but also to promptly handle any psycho-social consequences following a critical incident in a Greek school. (Jimerson, Brock & Pletcher, 2005; Saiti & Saitis, 2018).

Given the above research conclusions, and with the aim of developing a safe and healthy school environment that promotes students' mental and emotional development, the following suggestions could be made:

- Take measures, conduct regular inspections and increase available resources for the improvement of schools' material/technical infrastructure as regards the safety of school community members (particularly in large capacity schools).
- Full incorporation of schools, as a special category of high priority, in the country's plans for civil protection.
- Draw up plans in school units for the prevention and management of all potential emergencies.
- For the Ministry of Education to pass new laws or clarify existing ones so as to eliminate omissions and ambiguities regarding the organisation, development and implementation of crisis management plans in school units across the country.
- Conduct regular obligatory practical workshops and in-school training seminars for teachers, parents and members of local authorities on issues of crisis management. Those trainings should not be of a static nature, consisting solely of standardized routine procedures (e.g. merely for earthquakes or school violence), but should aim to help participants experience the essence and embrace safety at schools as a coherent culture.

The present research is subject to limitations, especially as regards its sample. For that reason, it would be useful in the future to have attitudes and perceptions of teachers in other education levels examined, within and outside the same administrative region where this research was conducted. Additionally, future research could further investigate attitudes and perceptions of parents, the local community (neighborhood), local authorities as well as specialized authorities and services (e.g. civil protection, fire brigade, hospitals and volunteer organisations for civil protection) as regards managing crises in school units. Through a comparative consideration of the above as opposed to those expressed by teachers, in our opinion it would be feasible to reach conclusions and make suggestions so as to manage critical incidences in schools as well as formulate a framework of cooperation between schools and the community for managing crises at schools. This framework has been identified to be of crucial importance (Kerr & King, 2019, Purohit et al., 2014) because prevention as well as the prompt and effective management of school crises is a complicated and multifaceted issue that requires collectivity and a dedication to strong collaboration.

References

- Adamson, A. D., & Peacock, G. G. (2007). Crisis response in the public schools: A survey of school psychologists' experiences and perceptions. *Psychology in the Schools, 44*(8), 749-764.
- Allen M., Burt, K., Bryan E., Carter, D., Orsi, R., & Durkan, L. (2002). School counselors' preparation for and participation in crisis intervention. *Professional School Counseling, 6*(2), 96-102.
- Baytak, O., & Altun, M. (2018). The effect of the principals' perfectionism on organizational stress. *European Journal of Educational Management, 1*(1), 35-43. <https://doi.org/10.12973/eujem.1.1.35>
- Bobyleva, A., & Sidorova, A. (2015). Crisis management in higher education in Russia. *Perspectives of Innovations, Economics and Business, 15*(4), 156-168.
- Bouloutza, P. (2006, September 27). Every year 75.000 students are getting injured. *Kathimerini*. (in Greek)
- Brock, S. E. (2000). Development of a school district crisis intervention policy. *The California School Psychologist, 5*(1), 53-64.

- Brock, S. E., Sandoval, J., & Lewis, S. (2005). *Preparing for crises in the schools: A manual for building school crisis response teams* (2nd ed.). Athens, Greece: Typothito.
- Click, P. (2005). *Administration of programs for young children*. Athens, Greece: Ellin.
- Coombs, W. T. (2015). *Ongoing crisis communication: Planning, managing, and responding* (4th ed.). Thousand Oaks, CA: Sage.
- Cornell, D. G., & Mayer, M. J. (2010). Why do school order and safety matter? *Educational Researcher*, 39(1), 7-15.
- Drennan, L. T., McConnell, A. & Stark, A. (2015). *Risk and crisis management in the public sector* (2nd ed.). London, UK: Routledge
- Erickson, E.H. (1963). *Childhood and society* (2nd ed.). New York, NY: Norton.
- European Agency for Safety and Health at Work (2013). *Occupational safety and health and education: a whole school approach*. Retrieved from <https://osha.europa.eu/en/publications/reports/occupational-safety-and-health-and-education-a-whole-school-approach>
- Felix, E., Vernberg, E. M., Pfefferbaum, R. L., Gill, R. L., Schorr, J., Boudreaux, A., ... & Pfefferbaum, B. (2010). Schools in the shadow of terrorism: Psychosocial adjustment and interest in interventions following terror attacks. *Psychology in the Schools*, 47(6), 592-605.
- Fidan, T., & Balci, A. (2017). Managing schools as complex adaptive systems: A strategic perspective. *International Electronic Journal of Elementary Education*, 10(1), 11-26.
- Filolia, A., Papageorgiou, I., & Stefanatos, S. (2005). Complete system of crisis management and human factor]. Athens, Greece: Nomiki Bibliothiki. (in Greek)
- Fink, S. (1986). *Crisis management: Planning for the inevitable*. New York, NY: American Management Association.
- Fotou, P. (2017). Perceptions of primary school teachers as for their school's crisis management preparedness. (Unpublished doctoral dissertation). University of Western Macedonia, Florina, Greece. (in Greek)
- Giannikas, A., & Alexopoulos, N. (2016). The development of a framework for crisis management planning as an administrative strategy for the prevention and sustainable management of conflict in the educational environment. *ERKYNA Review of Educational - Scientific Issues*, 9, 44-53. (in Greek)
- Goros, D. (2014). Comparative evaluation of student's performance in the first grade of secondary school after attending small rural or urban primary schools in Arta (Unpublished master's thesis). University of Ioannina, Ioannina, Greece. (in Greek)
- Gouvra, M., Kiridis, A., & Mavrikaki, E. (2005). Health education and schools. Athens, Greece: Tipothito, G.Dardanos. (in Greek)
- Green, T. L. (2015). Leading for urban school reform and community development. *Educational Administration Quarterly*, 51(5), 679-711.
- Halpin, A.W., & Croft, D. B. (1963). *The organizational climate of schools*. Chicago, IL: Midwest Administration Center of the University of Chicago.
- Hatzichristiou, C., Issari, P., Lykitsakou, K., Lampropoulou, A., & Dimitropoulou, P. (2011). The development of a multi-level model for crisis preparedness and intervention in the Greek educational system. *School Psychology International*, 32(5), 464-483.
- Hatzichristou, C. (2008). Supporting children in crisis. Athens, Greece: Typothito. (in Greek)
- Hatzichristou, C. (2012). Crisis intervention in the school community. Athens, Greece: Gutenberg. (in Greek)
- Hatzichristou, C., & Polychroni, F. (2014). The preparation of school psychologists in Greece. *International Journal of School and Educational Psychology*, 2(3), 154-165.
- Heath, M. A., & Sheen, D. (2005). *School-based crisis intervention. Preparing all personnel to assist*. New York, NY: The Guilford Press
- Hellenic Red Cross (2007). *First aid*. Retrieved from <https://www.ifrc.org/en/what-we-do/health/first-aid-saves-lives/>
- Homeland Security and Emergency Management (2011). *Comprehensive School Safety Guide*. St. Paul, MN: HSEM. Retrieved from <https://dps.mn.gov/divisions/hsem/mn-school-safety-center/Documents/Comprehensive%20School%20Safety%20Guide.pdf>
- Jimerson, S.R., Brock, S.E., & Pletcher, S.W. (2005). An integrated model of school crisis preparedness and intervention. A shared foundation to facilitate international crisis intervention. *School Psychology International*, 26(3), 275-296.

- Johnson, K. (2000). *School crisis management: A hands-on guide to training crisis response teams* (2nd ed.). Alameda, CA: Hunter House.
- Katsaros, I. (2008). Organization and administration of education. Athens, Greece: Ministry of Education and Religious Affairs - Pedagogical Institute. (in Greek)
- Katsianidis, T. (2018). Secondary education teacher's perceptions on crisis prevention and management in schools and the role of headmaster (Unpublished master's thesis). Hellenic Open University, Patras, Greece. (in Greek)
- Kerr, M., & King, G. (2019). *School crisis prevention and Intervention* (2nd ed.). Long Grove, IL: Waveland Press Inc.
- Liou, Y.- H. (2015). School crisis management: A model of dynamic responsiveness to crisis life cycle. *Educational Administration Quarterly*, 51(2), 247-289.
- Lunenburg, F. C., & Ornstein, A.C. (2010). *Educational administration, concept and practice* (6th ed.). Belmont, CA: Wadsworth, Cengage Learning.
- Lunenburg, F. C. (2010). Schools as open systems. *Schooling*, 1(1), 1-5.
- MacNeil, W., & Topping, K. (2007). Crisis management in schools: Evidence-based prevention. *Journal of Educational Enquiry*, 7(1), 64-94.
- Mitroff, I. I. (2001). *Managing crises before they happen*. New York, NY: American Management Association.
- Mitsagas, A. (2018). Teacher's perceptions on crisis management at primary education schools in the Region of Crete (Unpublished master's thesis). Harokopio University, Athens, Greece. (in Greek)
- Moulelis, H. (2015). Attitudes and perceptions of teachers, concerning crisis management in secondary education school units of Western Macedonia] (Unpublished master's thesis). University of the Aegean, Rhodes, Greece. (in Greek)
- Nikolopoulos, V. I. (2015). Crisis management of natural hazards in the school environment: Evaluation of training courses (Unpublished doctoral dissertation). National and Kapodistrian University of Athens, Athens, Greece. (in Greek)
- Ozmen, F. (2006). The level of preparedness of the schools for disasters from the aspect of the schools principals. *Disaster Prevention and Management*, 15(3), 383-395.
- Papadopoulos, I. (2005). *Driving safely. Knowledge of survival and mutual protection*. Athens, Greece: Parisianou S.A. (in Greek)
- Paraskevas, A. (2006). Crisis management or crisis response system? *Management Decision*, 44(7), 892 – 907.
- Pepper, M. J., London, T. D., Dishman, M. L., & Lewis, J. L. (2010). *Leading schools during crisis: What school administrators must know*. Lanham, MD: Rowman and Littlefield Education.
- Perkins, J. C. (2018). Preparing teachers for school tragedy: Reading, writing, and lockdown. *Journal of Higher Education Theory*, 8(1), 70-81.
- Peterson, K. D. (2001). The roar of complexity: A principal's day is built on fragments of tasks and decisions. *Journal of Staff Development*, 22(1), 18-21.
- Petridou, E. (2010). Prevention and management of school accidents: Simple advice for students, parents and teachers. Retrieved from <http://www.in.gr/2010/09/10/health/health-news/prolipsi-kai-antimetwpsi-atyximatwn-sto-sxoleio-aples-symboyles-gia-mathites-goneis-kai-ekpaideytikoys/> (in Greek)
- Purohit, H., Hampton, A., Bhatt, S., Shalin, V. L., Sheth, A. P., & Flack, J. M. (2014). Identifying Seekers and Suppliers in Social Media Communities to Support Crisis Coordination. *Computer Supported Cooperative Work*, 23(4-6), 513-545.
- Renwick, J. (2012). *Report of the 2012 "What's the Plan, Stan?" survey of New Zealand primary schools*. Research and Evaluation Services, Strategy and Governance Branch of the Department of Internal Affairs, Wellington. Retrieved from: <https://www.civildefence.govt.nz/assets/Uploads/publications/wtps-survey-results-2012.doc>
- Rentzou, K. (2014). The quality of the physical environment in private and public infant/toddler and preschool Greek day-care programmes. *Early Child Development and Care*, 184(12), 1861-1883.
- Robers, S, Zhang, J., Truman, J., & Snyder, T. D. (2012). Indicators of school crime and safety: 2011 (NCES 2012-002/NCJ 236021). Washington, DC: National Center for Education Statistics, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice. Retrieved from <https://www.bjs.gov/content/pub/pdf/iscs11.pdf>

- Robert, B., & Lajtha, C. (2002). A new approach to crisis management. *Journal of Contingencies and Crisis Management*, 10(4), 181-191.
- Ruff, P., & Aziz, K. (2003). *Managing communications in a crisis*. Aldershot, UK: Gower.
- Saiti, A., & Saitis, C. (2012). The head teacher in a modern school. From theory to practice. Athens, Greece: Own Publication. (in Greek)
- Saiti, A., & Saitis, C. (2018). Organization and management of education. From theory to practice. Athens, Greece: Ad Libitum. (in Greek)
- Saiti, A., Rapti, A., & Mitsagas, A. (2018). Views of teachers on crisis management at primary schools in the Region of Crete. *Nea Paideia*, 170, 125-149. (in Greek)
- Saiti, A., Saitis, C., & Gournaropoulos, G. (2008, December). [Attitudes and perceptions of teachers on crisis management in primary education schools. In *Proceedings of the 6th Panhellenic Pedagogical Conference of Greece* (vol. B, pp. 344-354). Athens, Greece: Atrapos. (in Greek)
- Saitis, C. (2007). The school head of public schools. Athens, Greece: Ministry of Education and Religious Affairs – Pedagogical Institute. (in Greek)
- Saitis, C., & Saiti, A. (2018). *Initiation of educators into educational management secrets*. Basel, Switzerland: Springer International Publishing.
- Sandoval, J. H. (2002). Conceptualizations and general principles of crisis counselling intervention, and prevention. In J.H. Sandoval (Ed.), *Handbook of crisis counseling, intervention, and prevention in the schools* (2nd ed.) (pp. 3-24). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Savas, A. C. (2018). The moderating effect of organizational culture on the relationship between bullying and machiavellianism. *European Journal of Educational Management*, 1(1), 17-25.
- Savelides, S., Mihiotis, A., & Koutsoukis, N.S. (2015). Crisis management for secondary education: a survey of secondary education directors in Greece. *International Journal of Educational Management*, 29(1), 18-43.
- Savelidis, S. (2011). *Crisis management in the Greek secondary educational system* [Unpublished doctoral dissertation]. Hellenic Open University, Patras, Greece. (in Greek)
- Sedlak, A. J., Mettenburg, J., Basena, M., Petta, I., McPherson, K., Greene, A., & Li, S. (2010). *Fourth national incidence study of child abuse and neglect (NIS-4): Report to Congress*. Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families. Retrieved from https://www.acf.hhs.gov/sites/default/files/opre/nis4_report_congress_full_pdf_jan2010.pdf
- Smith, S. L., & Kline, S. F. (2010). Crisis preparedness and meeting planners' perceptions. *Journal of Convention and Event Tourism*, 11(1), 62-78.
- Starr, K. (2012). Problematizing "risk" and the principalship: the risky business of managing risk in schools. *Educational Management Administration and Leadership*, 40(4), 464-479.
- Syrou, N. (2014). Development, implementation and evaluation of a health education programme in modification of risk factors for the health and safety in schools [Unpublished doctoral dissertation]. National and Kapodistrian University of Athens, Athens, Greece. (in Greek)
- Teacher Training Organization (OEPEK). Crisis management at schools. Prot. No.647/02-10-2006]. Thessaloniki: University of Macedonia Economic and Social Sciences, Department of Educational and Social Policy. Retrieved from <http://repository.edulll.gr/edulll/retrieve/3792/1132.pdf> (in Greek)
- Tokel, A. (2018). Assessment of crisis management skills of secondary school administrators. *Quality and Quantity*, 52(S1), 901-912.
- Trump, K. S. (2011). *Proactive school security and emergency preparedness planning*. Thousand Oaks, CA: Corwin Press.
- Unesco (2007). *Human Rights-Based Approach to Education for all*. New York, NY: United Nations Children's Fund.
- Weyman, A., & Shearn, P. (2005). Teaching practice in risk education for 5-16 year olds. In England, Scotland and Wales. Health and Safety Laboratory. Retrieved from: http://www.hse.gov.uk/research/hsl_pdf/2005/hsl0523.pdf
- Zdiarski E. L., Dunkel, N. W., & Rollo, J. M. (Eds.). (2007). *Campus Crisis Management*. San Francisco, CA: John Wiley and Sons.