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The association between school staff's coping strategies following a student's suicide, school climate, and previous experience with suicide

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Abstract

This article examines whether and to what extent school climate and previous experience of attempted suicide or suicide of someone close, affect the strategies adopted by Israeli school staff members in coping with a student's suicide. Participants included 84 homeroom teachers, principals, counselors, and psychologists who work at schools where a student had died by suicide during the five preceding years. Our findings show that optimal school climate predicts elevated levels of overall coping strategies and higher problem-focused strategies. Additionally, staff members who previously experienced suicide or attempted suicide of a close person exhibit lower levels of coping strategies, in general, and of emotion-focused strategies in particular. Thus, they can be considered a risk group for less adaptive adjustment following a student's suicide. Finally, previous incidents of suicide or attempted suicide of a close person do not moderate the link between optimal school climate and coping strategies. Thus, optimal school climate has a robust and positive effect on school staff's coping abilities and hence may be considered a protective factor for the risk group we identified, namely school staff who had previous experience of someone close who attempted suicide or died by suicide.

Noa Tiech Fire and Sarit Alkalay have equal contributions.

1 | INTRODUCTION

Each suicide affects a large circle of people to various degrees (Cerel et al., 2018) with some people exposed, some affected, and some bereaved (Cerel et al., 2014). The continuum defines individuals exposed to suicide as "anyone who knows or identifies with someone who dies by suicide" (Cerel et al., 2014; p. 4), thus the definition of "exposed to suicide" includes not only kin or those who were exposed to the trauma of the death itself. In fact, each suicide results in 135 people exposed (knew the person) (Cerel et al., 2018). It is estimated that approximately half of those exposed to suicide, experience the event as having a significant impact on their lives (Cerel et al., 2013). Of those, a smaller group is even more affected, defined as "suicide survivors", and includes family members, friends, co-workers, and others whose world has been turned upside down by the suicide (Cerel et al., 2016; McLoughlin et al., 2015). Levi-Belz (2015) and Levi et al. (2011) estimate that every suicide leaves 25 bereaved "suicide survivors." In cases of suicide among children and adolescents, the school staff constitutes a significant group of grievers, albeit "forgotten grievers" (Tiech Fire et al., 2022).

Only a few studies have discussed how school staff members cope emotionally in the wake of a student's suicide (e.g., Swihart et al., 1992). The current study attempts to fill this gap, and stems from the experience of the authors, which worked with educational and therapeutic staff in Israeli schools and witnessed the effects of a student's suicide. Many experienced emotional turmoil and some also exhibited symptoms of depression or posttraumatic stress disorder (PTSD). Moreover, few expressed their intentions to leave the profession altogether since the event was so difficult for them. Previous research highlights two factors that are likely to influence staff coping strategies following such an incident: school climate and previous experience with someone close who attempted suicide or died by suicide, which shall be discussed in the following sections.

When a student died as a result of suicide, the school's educational staff, counselors, and psychologists must provide urgent support to students in the form of intervention programs to help them return to their normal routine. At the same time, the staff members themselves must also cope with the loss (Munson & Hunt, 2005). Professionals are expected to suppress their own personal grief (Rowling, 1995). Yet, school staff members are not immune to grief and may be at risk of developing adverse emotional symptoms and mental illness following a student's suicide (Daniels et al., 2007; Lazenby, 2006). Suicide survivors, as defined above, are at higher risk of developing depression and anxiety than those who have not had such an experience (Cerel et al., 2016).

Only a few studies have investigated the effect of a patient's suicide on therapeutic professionals. As far as we know, no other studies examined the impact of a student suicide on therapeutic professionals working at schools. However, we may cautiously contemplate the effects of a student's suicide on school staff based on studies about other therapeutic professionals. For example, Wurst et al. (2011) investigated psychiatrists who lost a patient to suicide. Their findings showed that 91% reported feelings of shock, sorrow, depression, and anger following the incident, while 43.5% experienced prolonged stress for at least six months and had second thoughts about their professional choice. Three percent were diagnosed with depression or PTSD. In view of these findings, the educational staff, counselors, and psychologists at school must be given support following a student's suicide (Christianson & Everall, 2008; Daniels et al., 2007). Support to the school staff may be considered a component of school climate.

1.1 | Optimal school climate

School climate has often been described as the "quality and character of school life" (Hoy & Miskal, 1982; pp. 209). Most definitions of school climate include both social and physical aspects of the school that can promote positive behavior, school achievement, and students' social and emotional development (Hoy & Miskal, 1982; Lester & Cross, 2015).

For example, the school climate model of the US Department of Education includes three domains with 13 subtopics. These domains include a) safety (i.e., emotional safety, physical safety, substance use, bullying/cyberbullying, and emergency readiness/management), b) engagement (i.e., cultural and linguistic competence, relationships, and participation), and c) the environment (i.e., physical and instructional environments, physical and mental health, and discipline) (US Department of Education, 2014).

School climate can be measured from the perspective of students (e.g., O'Brennan & Furlong, 2010), parents (e.g., Goldkind & Farmer, 2013), and school staff. In the context of the school administration, the dimensions of an optimal school climate include the principal's leadership and ability to generate a school vision and exert influence in the school (Gülşen & Gülenay, 2014). Teachers perceive school climate from two distinct and complementary angles, namely a personal and a professional angle. The personal angle refers to the teachers' perceived relationship with the principal, relationships among the staff members, and the general social climate at the school. The professional angle focuses on the perceived quality of teaching, teachers' openness to innovations, level of teachers' autonomy, professional interrelationships among the staff, and the extent to which school staff is included in decision-making at school (Thapa et al., 2013). When teachers report high scores on school climate dimensions, the school climate is considered optimal (Lester & Cross, 2015).

Although school climate includes both physical and relational aspects, our study focused on relational aspects only since most studies in this field concentrate on the nature of interpersonal relationships within the school. For example, Loukas et al. (2006) found that interactions between teachers that include cooperation and collaboration, sharing of resources, and mutual support contribute to feelings of connectedness and to an optimal school climate.

School climate may influence teachers' work as well as the nature of the interactions between teachers, principal, and students. A positive and healthy school climate contributes to positive outcomes for teachers and staff (VanLone et al., 2019) and influences the productivity of the school staff (Gedikoğlu & Tahaoğlu, 2010). School climate may also influence teachers' efficacy and level of stress at work, which in turn may affect staff burn-out (Lavian, 2012). School staff members usually point to the following three support factors that contribute to optimal school climate: warm and friendly relationships within the group, collaboration and teamwork, and reciprocal relationships of trust and support with the principal (Marsh et al., 2014). In addition, Lavian (2012) reported that when school staff members feel comfortable and supported at school their coping ability improves. Furthermore, Cockshaw et al. (2014) found that teachers who feel they are "part of the team" report less anxiety and depression.

School climate is a major factor in the ability of staff members to cope with the educational and therapeutic aspects of a student's suicide (Hatzenbuehler et al., 2014). Suicide survivors need emotional support, possibly through self-help groups made up of other suicide survivors as well as through professional help (De Groot et al., 2006; Dyregrov, 2011). The universality of their experiences confirms that they are not alone in their coping and shows them that others who experienced a similar loss were able to overcome and even be strengthened by the experience. When the school climate is supportive and nurturing and has a strong team spirit, the whole staff may constitute a self-help group for its members, helping them cope with the loss (Tal Young et al., 2012).

Furthermore, various studies found that school climate buffers the negative effects of stressful life events and crises (Hatzichristou et al., 2020). For example, Hatzichristou et al. (2018) found that during an ongoing economic recession, the way students perceived the school climate served as a protective factor. Specifically, positive peer relations at school moderated the influence of economic recession (as manifested in difficulties in everyday life) on adolescents' subjective well-being (as measured by a positive attitude towards life). This finding highlights that being connected with one's peers is one of the most important elements in fostering greater connection to school and psychosocial well-being (Thapa et al., 2013). Similarly, in the current study, we hypothesize that optimal school climate will have an impact on how members of the school staff cope in the wake of an adverse life event, in this case, the suicide of a student. Hence, school climate may be considered a protective factor.

One factor that may influence school staff's coping in the wake of a student's death by suicide, is previous experience with suicide of a close person.

1.2 | Previous experience of attempted suicide or death by suicide of someone close

Repeated traumatic experiences increase the life-long risk for PTSD and other mood disorders such as depression and anxiety (Chopra et al., 2014). People who experience repeated loss of someone close to them are more likely to develop PTSD symptoms (Bonanno & Kaltman, 2001; Tal Young et al., 2012). In a meta-analysis of 25 studies that investigated adult suicide survivors, the strongest statistical relation was found between depressive episodes and a number of negative life events, while negative life events occurring suddenly and unexpectedly did not predict depression (Kraaij et al., 2002). Thus, it seems that the accumulation of stressful life events is a better predictor of depression than one sudden and unexpected incident.

Of specific relevance to the question of the impact of previous experience of suicide events, is the finding of Cerel et al. (2009, 2016) indicating that individuals who were previously exposed to suicide incidents exhibited more symptoms of depression, including suicidal ideation and higher risk of developing PTSD and complex grief, than those who had no experience with suicide. To the best of our knowledge, only one other study specifically focused on school staff while considering previous experiences of suicide events. Chen-Gal et al. (2007), found that school counselors who were exposed to suicide events (in their personal lives and in their professional capacities), exhibited lower perceptions of competence compared to counselors without such previously experienced events. These studies suggest that school staff who must cope with the aftermath of a student's suicide may be affected by previous traumatic experiences, such as the suicide or attempted suicide of someone close to them.

People cope with stressful life events (such as the death by suicide of a student, as in our study) in various ways, some of which are more adaptive than others and are linked to lower symptoms of psychopathology.

1.3 | Coping strategies

To deal with stressful life events such as loss or other traumas, people employ various cognitive and behavioral strategies. Lazarus and Folkman's (1984) model (Cognitive Phenomenological Analysis) is one of the most commonly used models for studying coping strategies following stressful life events. According to this model, the stress experienced during such situations is related primarily to the individual's subjective assessment of the situation (Lazarus et al., 1980). Moreover, dealing with the source of stress includes perceiving the threat, envisioning a possible response, and executing it (Carver et al., 1989).

The model defines two coping strategy styles: problem-focused coping (PFC) and emotion-focused coping (EFC). PFC includes strategies that focus on the problem and on possible solutions. This strategy involves defining the problem, searching for various solutions, and evaluating each one's advantages and disadvantages. EFC focuses on managing the emotions aroused by the situation rather than dealing with the source of stress. This strategy requires distancing oneself emotionally from the problem, shifting attention away from it, and changing the emotional meaning of the situation. This strategy can be further divided into active EFC (e.g., regulating emotional distress) and avoidant EFC (e.g., using denial to overcome distress) (Lazarus & Folkman, 1984).

PFC and active EFC strategies are considered healthy and adaptive, while avoidant EFC is considered less beneficial and may even be harmful (Nahlen Bose et al., 2015; Lazarus & Folkman, 1984). Several studies support this claim. For example, PFC has been linked to reduced feelings of stress, while avoidant EFC increases such feelings (Ben-Zur, 2005). Additionally, schizophrenic patients who reported using PFC also reported better quality of life, as expressed in relationship quality and health status (Moslehi et al., 2015). In grief studies, PFC has been linked to better coping (e.g., Schnider et al., 2007).

According to Christianson and Everall (2008), preparedness, support resources, and self-care are critical for coping and continued good professional functioning after a student's suicide. Despite the importance of identifying protective factors that may influence how members of the school staff cope in the wake of a student's suicide, research on this topic is sparse. We attempt to shed light on this topic and explore how optimal school climate and

previous experience of suicide are linked, separately and jointly, to school staff's coping following a student's death by suicide.

1.4 | Previous experience of suicide or attempted suicide of a close person may moderate the link between school climate and coping strategies

Cumulative trauma has an effect on everyday functioning and on the development of psychopathology (Chopra et al., 2014). For example, Davidson et al. (1991) reported that compared to individuals without PTSD, those with PTSD tend to have a more complicated family history, including a history of psychiatric issues and previous trauma. Particularly relevant to our study is the finding that individuals who experience ongoing loss due to the suicide of someone close are at a higher risk of developing PTSD symptoms (Kaltman & Bonanno, 2003; Murphy et al., 1999; Tal Young et al., 2012). Thus, stressful past events (such as the suicide of someone close, as in our study) can influence the development of psychopathology in the case of a new stressful event (such as the suicide of a student, as in our study). Nevertheless, the new event itself may not necessarily predict such an outcome, as exhibited in the case of depression (Kraaij et al., 2002).

Thus, although optimal school climate may contribute to better-coping strategies in the wake of a student's suicide, we can assume that school climate will not affect staff members who have no previous experience of someone close who died by suicide, in the same way as it affects those with such previous experience. Those with previous experience may be influenced by what happened in the past and exhibit less adaptive coping patterns in the wake of a student's suicide, regardless of school climate. Hence, we expect different patterns of results for these two groups.

Four background variables were investigated, while controlling for possible effects: age, sex, marital status, and job seniority. These variables are commonly tested in studies of the effects of stressful events. For example, Matud (2004) examined sex differences in coping strategies and found that women tended to use EFC more than men, while men tended to use PFC more than women. Also Federkeil et al. (2020) included age as a background variable while examining teachers' coping during COVID-19.

1.5 | Summary of the current study's goal and hypotheses

We investigated coping strategies among educational staff members, school counselors, and psychologists in Israel in the wake of a student's suicide. Two variables that may influence coping strategies were explored: the environmental variable of school climate and previous experience of attempted suicide or death by suicide of someone close. The hypotheses were:

1. Better school climate will predict elevated coping strategies following a student's suicide.
2. Participants with previous exposure to attempted or actual suicide of someone close will exhibit lesser coping strategies.
3. Previous exposure to attempted or actual suicide of someone close will moderate the link between school climate and coping strategies.

2 | MATERIALS AND METHODS

2.1 | Procedures

The study was conducted between 2011 and 2016. Upon receiving approval from the Israel Ministry of Education's institutional review board, we searched the Ministry of Education's database for schools at which a student had

died by suicide during the previous 5 years ($n = 29$). All the schools were junior-high and high schools. The student's age was 14–18, and most of them were boys. All the principals of the schools that were located gave their consent for their school to participate in the study. Next, all potential participants were identified, and we tried to contact the participants we could locate via every communication channel available (i.e., email, phone, and chat applications), to schedule a phone conversation. While talking to them on the phone, the study was explained to the potential participants. Those who agreed to participate received a link to sign an informed consent form and to complete a set of computerized rating scales. Those who did not fill the questionnaires (despite their initial agreement to participate) were contacted again. This process was repeated (on occasion for several times) until all those agreeing to participate filled out the questionnaires, or explicitly stated that they did not wish to participate in the study. Responses were anonymized. After participants completed the questionnaires, we again contacted them by phone, thanked them for their time and efforts, asked them how they felt, and offered emotional support if needed.

2.2 | Participants

At each of the schools that were located ($n = 29$), the school counselor, the school psychologist, the principal, and the homeroom teacher of the student who died by suicide were prospective participants ($n = 116$). In this way, we identified the entire population of potential participants and attempted to speak with all of them. Six potential participants (5.2%) refused to participate, claiming that the subject was too difficult emotionally. Twenty-six potential participants (22.4%) could not be located. They no longer worked at the school where the incident occurred and were not found in the Ministry of Education database, implying that after the incident they had left the profession altogether. Eighty-four (72.4%) agreed to participate, of whom 61 (73%) were women. This sex distribution is similar to the general distribution of educational staff in Israel (80% females) (Zarad, 2019). The participants' average age was 47.3 (standard deviation [SD] 8.8), and their average seniority was 18.8 years (SD 8.6). These demographic characteristics are compatible with data for Israeli school staff: 60% are aged 30–49, and 60% have more than 10 years of seniority (Zarad, 2019). The participants were divided into the following professions: school counselors ($n = 27$, 32%), school psychologists ($n = 26$, 31%), principals ($n = 14$, 17%), and homeroom teachers ($n = 17$, 20%). These groups of professionals did not significantly differ by sex ratio, marriage status, seniority, and other demographics (data not shown). Thus, statistical analysis was conducted for the whole sample rather than by profession.

The participants were divided into two groups based on their response to the following yes or no question: "In your personal life, have you encountered a relative or a close acquaintance who died by suicide or attempted suicide prior to the student's suicide"? Fifty-two of the respondents (64%) reported knowing someone close who had attempted suicide or died by suicide. These two groups did not differ significantly on any of the background variables. The associations between previous exposure to suicide (yes/no) and sex and previous exposure to suicide and marital status were not significant ($\chi^2(1, n = 81) = 0.343$, $p = .558$; $\chi^2(1, n = 80) = 2.790$, $p = .095$; respectively), nor were these groups differentiated by age or seniority ($t(1,76) = -0.195$, $p = .846$; $t(1,79) = -0.211$, $p = .833$; respectively).

Given the current sample size, the study had 80% power (i.e., sensitivity) to detect effect sizes of Cohen's $d \geq 0.6$ (in the independent samples t-tests) and/or $f^2 \geq 0.09$ (in regression-based analyses). These effect sizes are standard in research on the association of suicide and school-related constructs (e.g., Brann et al., 2021). Analyses were performed with G*Power (Faul et al., 2009).

2.3 | Ethical considerations

The study was approved by the institutional review board of the Israel Ministry of Education. To maintain anonymity as required, participants were not asked to specify the name of the school, where they worked. Note

that in each school only one counselor/psychologist/principal/teacher was approached, such that specification of the school was likely to reveal the participant's identity. Given the sensitive nature of the study and the potential for emotional stress, after the participants completed the questionnaires, we phoned them again to inquire how they felt and to offer emotional support if needed.

2.4 | Measures

1. **School Climate for Teachers** (Erhard, 2001). This self-report questionnaire was developed by the Israel Ministry of Education based on Furlung's school climate questionnaire (e.g., You et al., 2014). The Israeli teachers' version includes 33 items evaluating three themes: 1) perceptions of the school's administration and of violence at school; 2) feeling part of the school team and connected to the profession; 3) teaching capability feelings. Items are rated on a scale ranging from 1 (not at all) to 5 (very much), and the overall score is the average of all the items. A higher score indicates a better school climate. During the 4 years of the questionnaire's development, more than 400 schools used it as part of an intervention plan to reduce violence (Erhard & El-Dor, 2001). In the current study, internal reliability was calculated (Cronbach's α = .82).

2. **Brief-COPE: Coping Inventory to Stressful Situations** (Craver et al., 1989). The Brief-COPE is a 28-item self-report questionnaire designed to measure effective and ineffective ways to cope with a stressful life event. We used the Hebrew translation of the Brief-COPE (Zeidner & Ben-Zur, 1993), which includes 30 items describing 15 coping strategies grouped into PFC and EFC strategies. PFC strategies are further divided as follows: 1) active coping, 2) positive perspective and growth, 3) planning, 4) emotional support, 5) instrumental support, and 6) repression of competing actions. EFC strategies are divided as follows: 7) acceptance of the situation, 8) behavioral detachment, 9) emotional release, 10) cognitive detachment, 11) denial, 12) restraint, 13) embracing religion, 14) alcohol and drug abuse, and 15) use of humor. Each item is rated on a 4-point scale ranging from 1 (not at all) to 4 (very much). COPE is a well-established and accepted measure of coping strategies, and its psychometric characteristics are satisfactory. It has been widely used in stress and health research (Weinman et al., 1995) and has also been used for educational research. For example, Federkeil et al. (2020) used this questionnaire for examining teachers' stress and coping strategies during distance teaching necessitated by the restrictions imposed by COVID-19. The PFC and EFC scores are calculated by averaging the respective items, and the overall score is the average of all the items. Participants were instructed to think about the strategies they used to cope with the loss of a student to suicide. A higher score indicates better-coping strategies. In the current study internal reliability was calculated (PFC strategy—Cronbach's α = .85; EFC strategy—Cronbach's α = .62; total coping strategy score—Cronbach's α = .67).

2.5 | Statistical analysis plan

Our preliminary analysis included calculating statistical relationships between all the background variables (age, sex, seniority, and marital status) and the independent and dependent variables. To examine our first hypothesis, namely the effect of school climate on the coping strategies of school staff members (general coping strategy, EFC, and PFC), we calculated three linear regressions. Our second hypothesis explored how the coping strategies of participants who experienced the suicide or suicide attempt of someone close differed from those of participants who did not have such experiences. We calculated three independent-sample t-tests (to examine differences in general coping strategy, EFC, and PFC). Finally, we examined whether previous experience or no experience of

attempted suicide or death by suicide of someone close moderated the association between school climate and coping strategies (total score, EFC, and PFC). To do so, we conducted a series of robust regression analyses with an MM estimator[†] (Susanti et al., 2014) (given that test diagnostics identified two outliers and five participants with high leverage scores that might bias ordinary least squares regression). In these analyses, school climate served as the predictor (centered around the sample mean), previous experience of suicide of someone close (1 = had experience, 0 = no experience) served as the moderator, and coping strategy scores (total score, EFC, and PFC) served as the outcome measures (i.e., the analyses comprised the variables of previous experience and, school climate and their interaction). We used SPSS software (IBM Corp. Version 25.0). The significance level was set at $p < .01$ and all analyses were two-tailed.

Note that our research design is suitable for a multilevel model analysis, whereby one variable is nested within another broader variable (group-level variable) (Cooksey, 2020; pp. 603–614). Specifically, all the participants from a particular school are considered part of the same group and might have been affected by the same context variable. However, we could not use multilevel models (or hierarchical linear models [HLM]) analysis to explore such nesting effect due to two reasons. The first relates to the anonymity requirement of the ethical board. We could not match the participants to a specific school (see the ethical consideration section). The second reason relates to the small number of participants from each school. Our research design imposed that a maximum of four potential participants from each school would be approached—the home-room teacher, the school principal, the school counselor, and the school psychologist. Bickel (2007; pp. 272) suggests that "[t]he most commonly offered rule of thumb with regard to sample size for multilevel models is at least 20 groups and at least 30 observations per group." Thus, although 29 schools were located, which satisfies the requirement for the number of groups, each school (i.e., group) consisted of less than 30 observations as required.

3 | RESULTS

3.1 | Preliminary results

Correlations were calculated between school climate and age ($r = −.016$, $p = .894$) and school climate and seniority ($r = .011$, $p = .925$). Correlations were also calculated between seniority and coping strategies (total score, PFC, and EFC) ($r = −.083$, $p = .478$; $r = .022$, $p = .854$; $r = −.122$, $p = .327$, respectively), and between age and coping strategies (total score, PFC and EFC) ($r = .006$, $p = .956$; $r = .079$, $p = .500$; $r = −.080$, $p = .512$, respectively).

Next, sex differences were examined with regard to school climate and coping strategies (total score, PFC, EFC) ($t(1,73) = −0.012$, $p = .991$; $t(1,76) = 0.238$, $p = .812$; $t(1,73) = −0.636$, $p = .527$; $t(1,68) = 1.411$, $p = .162$; respectively). Differences between married and unmarried participants were also examined with regard to school climate and coping strategies (total score, PFC, EFC) ($t(1,72) = −0.046$, $p = .963$; $t(1,75) = 0.239$, $p = .812$; $t(1,72) = −0.579$, $p = .564$; $t(1,67) = 1.003$, $p = .319$; respectively).

To sum up our preliminary analyses, no significant associations were found between the background variables and any of the independent variables. Moreover, no significant associations were found between the background variables and the dependent variables, that is, the coping strategies scores (total, PFC, and EFC). The background variables were, therefore, not included in further analyses.

[†]MM estimation aims to obtain estimates that have a high breakdown value and more efficient. Breakdown value is a common measure of the proportion of outliers that can be addressed before these observations affect the model. For a detailed description of the MM algorithm see Susanti et al. (2014).

3.2 | Examining the study's hypotheses

3.2.1 | Hypothesis 1

Significant linear regressions support the first hypothesis, namely that better school climate predicts better-coping strategies. School climate explains 9.8% of the variance in the total coping strategies score ($F(1,69) = 7.48$, $p = .008$, $β = .313$, confidence interval [CI] = 0.084–0.541). It also explains 14.4% of the variance in PFC strategy ($F(1,66) = 11.1$, $p = .001$, $β = .38$, CI = 0.152–0.607). The results for EFC strategy were not significant ($F(1,61) = 0.031$, $p = .860$).

3.3 | Hypothesis 2

The second hypothesis posited that individuals with previous experience of attempted suicide or death by suicide of someone close would exhibit lesser coping strategies compared to participants without such an experience. This hypothesis was also corroborated, as evident from the significant t-test results. The analysis for total coping strategies scores was significant with medium effect size ($t(1,73) = 2.15$, $p = .035$, Cohen's $d = .521$). Participants without such previous experience had higher total coping strategy scores ($M = 1.47$, SD = 0.31) than participants who did have that experience ($M = 1.31$, SD = 0.19). EFC analysis also revealed significant t-test results with medium effect size ($t(1,65) = 2.02$, $p = .048$, Cohen's $d = 0.520$). Participants without such previous experience exhibited higher levels of EFC strategies ($M = 1.08$, SD = 0.40) than did participants who had such previous experience ($M = 0.89$, SD = 0.33). Results for PFC were not significant ($t(1,70) = 1.061$, $p = .292$).

3.4 | Hypothesis 3

Our third hypothesis explored whether the previous experience of attempted suicide or death by suicide of someone close (yes/no) moderated the association between school climate and school staff's coping strategies (total score, EFC, and PFC). The analyses indicated that whereas school climate was significantly associated with higher overall coping and higher PFC scores, these associations were not significantly different for people who had or had not experienced the suicide of someone close (i.e., nonsignificant interactions with values close to 0: total score $β = −0.08$; PFC $β = −0.06$; EFC $β = −0.07$). Therefore, it seems that school climate has a robust, protective, and positive effect on school staff's coping abilities, regardless of the previous suicide of someone close (see Figure 1 and Table 1).

4 | DISCUSSION

In every case of suicide, it is estimated that at least 135 people are exposed to the event, and 25 persons are defined as "suicide survivors" (Cerel et al., 2016; Levi-Belz, 2015; Levi et al., 2011; McLoughlin et al., 2015). Yet only a few studies have investigated the influence of a student's suicide on the educational and therapeutic personnel at schools. In the current study, we approached all the homeroom teachers, counselors, psychologists, and principals at every school with an incident of student suicide during the 5 years preceding the study (29 schools). Eighty-four of them agreed to participate. The demographic characteristics of our sample resemble those of the general school staff population in Israel. The participants' response pattern highlights that school climate as well as previous experience with the suicide or attempted suicide of someone close have a significant impact on staff members' coping strategies. Our results are discussed in relation to each hypothesis.
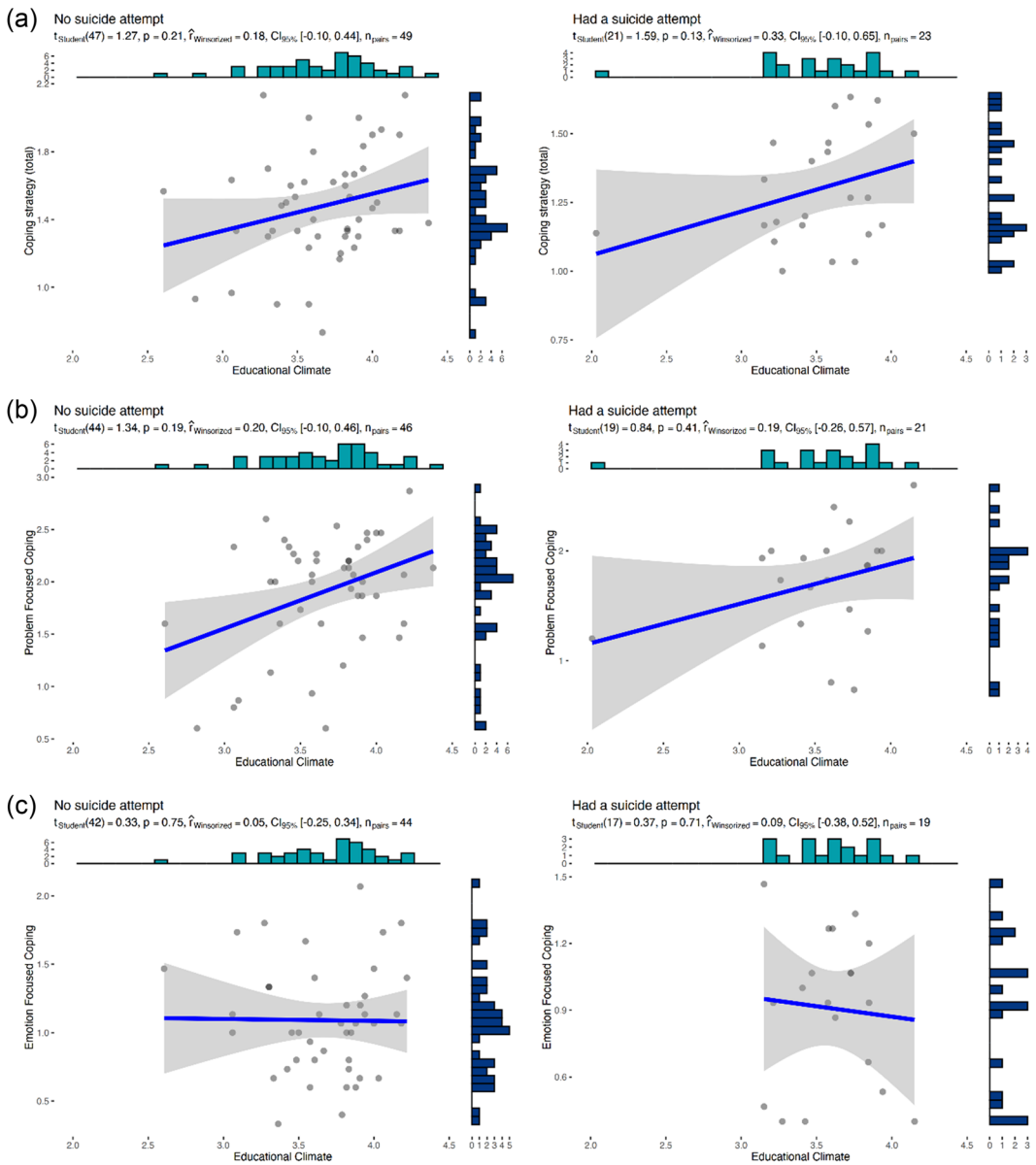
FIGURE 1   The association between school climate and teachers' coping strategies as a function of their previous experience of previous suicide or suicide attempt in close contact.

4.1 | Optimal school climate predicts elevated levels of coping strategies in general as well as higher PFC

The results support our first hypothesis and are in accordance with research on school climate, indicating that sources of support are primarily social elements (Cohen & Geier, 2010) that provide feelings of belonging, encouragement, and self-worth (Marsh et al., 2014). With respect to our findings, several studies support the association between school climate and coping with stressful events and crises at school (Ortega et al., 2011). Of specific interest are findings regarding school climate and coping in the wake of a student's suicide. For example,

TABLE 1 Robust (MM-estimator) standardized and unstandardized coefficients for assessing whether previous experience with a close person's suicide or attempted suicide moderate the association between educational climate and school staff's coping strategies.

Predictors	Coping (total)			Problem focused coping (PFC)			Emotion focused coping (EFC)		
	b	β	95% CI for β	b	β	95% CI for β	b	β	95% CI for β
Intercept	1.47***	.15	-0.12 to 0.42	1.93***	.13	-0.15 to 0.42	1.08***	.10	-0.21 to 0.42
Educational climate	0.09*	.30	0.02-0.58	0.19*	.36	0.06-0.66	-0.01	-.02	-0.31 to 0.28
Previous experience with a close persons' suicide or suicide attempt	-0.15*	-.51	-0.99 to -0.03	-0.15	-.27	-0.79 to 0.24	-0.17	-.45	-1.03 to 0.13
Educational climate x Previous experience with a close persons' suicide or suicide attempt	-0.02	-.08	-0.54 to 0.38	-0.03	-.06	-0.56 to 0.44	-0.03	-.07	-0.75 to 0.60
Observations	85			85			85		
R^2/R^2 adjusted	.160/.123			.146/.106			.040/−.009		

Abbreviations: CI, confidence interval; R^2, explained variance.

**$p < .01$; *$p < .05$; ***$p < .001$.

Cockshaw et al. (2014) found that feelings of belonging to the work group correlated negatively with self-reported depression and anxiety following the incident.

Our results and those of the aforementioned studies highlight the importance of a supportive and containing school environment for the school's educational and counseling staff. Indeed, in the aftermath of student suicide, such an environment may be an important condition for continued professional work. Moreover, school climate includes dimensions other than interpersonal relations that can also be enhanced to achieve an optimal school climate, for example, engagement (e.g., participation) (US Department of Education, 2014).

An elevated level of PFC predicts that individuals will cope better with stressful situations (e.g., Pooley et al., 2013). By using problem-focused strategies, individuals remain focused on the problem itself and on solving it, rather than on the emotional load caused by the problem (Lazarus & Folkman, 1984). This way, individuals can bring about a change for the better, both in their actual functioning and in their perception of the threatening reality (Vollman et al., 2017). Certain aspects of PFC emphasize seeking emotional and instrumental support (Bussell & Naus, 2010). Support from close persons was found to be one of the most significant factors in coping and in personal growth following a crisis (Tedeschi & Calhoun, 2004). These results are in accordance with our findings, suggesting that an optimal school climate provides a secure and supportive organizational environment for school staff members. Following a student's suicide, it is recommended that educational and therapeutic staff use PFC. Indeed, PFC is something that can be taught to help staff members overcome stressful experience.

4.2 | Participants without previous experience of suicide or attempted suicide of someone close reported higher levels of coping strategies in general as well as higher EFC

Our results are in line with our hypothesis and can be explained in terms of emotional overload in the face of repeated experience with suicide incidents. Those who had previous experience with suicidal individuals may be more emotional when facing a new case involving the suicide of a student. Those who had such previous experience may be more upset following a student's suicide, and their emotional and cognitive resources may become depleted. Thus, their use of coping strategies, and especially emotion-focused strategies, is limited.

Focusing on the evoked emotions following such a stressful event is designed to regulate or avoid them altogether (Pooley et al., 2013). Yet our findings suggest that this mechanism is less suitable for staff members who previously experienced the suicide of someone close. Indeed, such a focus may elevate their anxiety and stress (Pooley et al., 2013). Accordingly, research shows that repeated trauma impedes teachers' and counselors' adaptive coping following a student's suicide (Cerel et al., 2009). Our results suggest that school staff members who previously experienced the suicide or attempted suicide of someone close, should be considered a risk group in the wake of a student's suicide.

4.3 | Previous experience of suicide or attempted suicide of someone close, does not moderate the link between optimal school climate and coping strategies

Our results indicate that school climate has a robust and positive effect on the coping abilities of school staff members, regardless of whether or not they previously experienced the suicide or attempted suicide of someone close. Thus, school climate may be considered a protective factor for the risk group identified in the previous section (i.e., school staff members with previous experience of suicide). This result is in accordance with the findings of Goldkind and Farmer (2013) showing that optimal school climate is a protective factor for teachers in stressful situations and crises.

Various factors were found to contribute to optimal school climate, among them teachers' feelings of elevated autonomy and capability and their high morale (Gülşen & Gülenay, 2014). Teachers experience the school climate as

optimal when they feel they are part of making the decisions at the school, have a sense of high autonomy, and are very satisfied with the school's resources and their relationship with the school's administration (i.e., when the administration shows respect, caring, and support when needed) (Goldkind & Farmer, 2013). The relationship with the administration is thought to have the most influence in the context of teachers' relationship with their peers (e.g., cooperation and joint activity, sharing of resources, and mutual support) and contributes to a sense of belonging to the organization (Marsh et al., 2014).

Indeed, a strong sense of belonging predicts teachers' emotional health and well-being, which in turn contributes to students' higher academic achievements and results in diminished violence, behavioral problems, and risk-taking behaviors (Loukas et al., 2006). Given the importance of school climate as a protective factor, we recommend that school administrations work to achieve an optimal school climate.

Alongside the importance of the contextual factor of school climate, we also recommend that supporting school staff individually would be adopted as a protective factor in the aftermath of a student's suicide. Several studies found that a lack of emotional support to grieving individuals is linked to elevated levels of complex grief, PTSD, and depression (e.g., Burke et al., 2010). Furthermore, there is a wide consensus regarding the importance of supervision and guidance to therapists in general and specifically to those who deal with the consequences of traumatic events (e.g., Litz & Roemer, 1996; Pearlman & Saakvitne, 1995).

4.4 | Limitations of this study and suggestions for future studies

We collected the data using self-report questionnaires only, without any observational data to corroborate our findings and conclusions. Self-report measures are prone to various biases, such as social desirability (Schwarz, 1999) and response errors. The wording and structure of the questionnaire items and the questionnaire format have been found to affect response rate and response quality (Stapleton, 2019; pp. 469). Future studies should not rely solely on self-report questionnaires and would benefit from the inclusion of other assessment methods (e.g., personal interviews and behavioral observations).

The concurrent research design did not allow us to infer causality. We were only able to investigate the associations between the research variables. Furthermore, the study took place between 2011 and 2016 and the students' suicides occurred during the 5 preceding years. Thus, our participants' discussion of school climate may reflect the climate at the time of the study, or that at the time of the event, which might have been different. Future studies should measure school climate shortly after such an event to corroborate our results. Also, longitudinal studies could shed more light on this topic by examining personality characteristics and coping strategies of school staff before students' suicide attempts or actual suicide. Furthermore, the contribution of additional variables (e.g., emotional support) to coping with loss should be investigated (Burke et al., 2010). Moreover, we did not ask the participants about how close they felt to the student, about their reactions following the student's suicide, about the length of time since the event, and about the distinction between previous suicide attempt/death by suicide of a close person. Future studies could shed light on these issue as these diverse experiences might have a different effect on coping.

Other limitations concern the study's sample. Our sample consists mostly of women (73%), reflecting the fact that most school employees in Israel are women (Zarad, 2019). Our preliminary analysis revealed no significant differences between men and women regarding the study's variables. It is, therefore, plausible that the sex distribution of our participants did not affect the results. Nevertheless, the size of the sample of men (23 men) suggests that the analyses may have lacked sufficient power to detect statistically significant differences between the groups. Thus, further research should be conducted with a larger sample of men to examine the replicability of our results and their generalizability to the entire population.

Additionally, 27% of the potential participants did not actually participate. Most of these potential participants who did not participate could not be located since they no longer worked at the school at which the incident

occurred, and we were unable locate them in other ways. Note that we cannot assume causality since we do not know for sure that the reason for their leaving their profession was the suicide event. However, we believe that this was indeed the case. Moreover, 15 participants (18%) reported that although they did not leave the educational system, they chose to change their position to work as administrators (e.g., supervisors) or professional teachers (and not as home-room teachers or principals) since they could not bear the responsibility of their previous positions. Some potential participants refused to participate, claiming the topic was too painful for them. The low rate of this explicit refusal (5%) is lower than in other social science studies (Anastasi, 1990). Yet, those who refused to participate or who were not located may have exhibited a different pattern of responses than the pattern exhibited by our participants, and their absence may have influenced the outcomes of our study.

It should be noted that the rates of participation among school counselors and psychologists were higher than those of school principals and homeroom teachers (32% and 31% vs. 17% and 20%, respectively). Based on our expertise we believe that staff members from the therapeutic professions, namely psychologists and counselors, may be more willing to dwell on difficult emotional issues such as a student's suicide. Furthermore, staff members who were in closer contact with the deceased student, such as the homeroom teachers, were also more adversely affected by the event, and exhibited significantly elevated levels of complicated grief and PTSD symptoms compared to school counselors and psychologists (Tiech Fire et al., 2022). This finding may also explain why homeroom teachers were less willing to participate in the study. We recommend that future studies use a larger sample of homeroom teachers.

5 | CONCLUSIONS

Our research findings shed light on the importance of school climate as a significant and influential factor in how educational staff members cope in the wake of a student's suicide. Specifically, optimal school climate predicts higher levels of coping strategies in general and higher levels of PFC.

Another significant finding relates to the impact of previous suicide or attempted suicide of someone close. Staff members who previously experienced such an incident exhibit lower levels of coping strategies in general and of EFC. Thus, they can be considered a risk group for less adaptive adjustment following a student's suicide.

We did not find a significant interaction between school climate and previous experience of suicide or attempted suicide of someone close. This finding shows that optimal school climate has a robust and positive effect on the coping abilities of school staff members, regardless of their previous experience. Hence, optimal school climate may be considered a protective factor for the risk group we identified, namely school staff who previously experienced the suicide or attempted suicide of someone close to them.

6 | IMPLICATIONS OF THE STUDY

Enhancing an optimal school climate has the potential to help staff members cope better with student suicide. The school climate can be improved by enhancing staff members' interpersonal relationships and mutual emotional support. Another way to enhance coping is to teach educational and therapeutic school staff members how to use more adaptive coping strategies, such as PFC, which have been found to predict better coping for bereaved individuals (e.g., Schnider et al., 2007).

Additionally, it is imperative to support school staff in the wake of various traumatic incidents at school (Christianson & Everall, 2008; Daniels et al., 2007). Furthermore, our findings suggest that special attention and extensive personal assistance should be offered to the risk group we identified to help them overcome the tragedy of a student's suicide. This is especially important since this risk group is rather large. Our findings indicate that the majority of school staff members who participated in our study previously lost someone close to them to suicide or

know of a suicide attempt of a close person, thus making their emotional coping with a student's suicide much more complicated.

CONFLICTS OF INTEREST STATEMENT

The authors declare no conflicts of interest. This study was part of NTF's Psy.D. thesis.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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REFERENCES

Anastasi, A. (1990). *Psychological testing* (6th ed.). The Open University (Hebrew).

Ben-Zur, H. (2005). Coping, distress, and life events in a community sample. *International Journal of Stress Management*, *12*(2), 188–196. https://doi.org/10.1037/1072-5245.12.2.188

Bickel, R. (2007). *Multilevel analysis for applied research*. The Guilford Press.

Bonanno, G. A., & Kaltman, S. (2001). The varieties of grief experience. *Clinical Psychology Review*, *21*(5), 705–734. https://doi.org/10.1016/S0272-7358(00)00062-3

Nahlen Bose, C., Bjorling, G., Elfstrom, M. L., Persson, H., & Saboonchi, F. (2015). Assessment of coping strategies and their associations with health related quality of life in patients with chronic heart failure: The brief COPE restructured. *Cardiology Research*, *6*(2), 239–248. https://doi.org/10.14740/cr385w

Brann, K. L., Baker, D., Smith-Millman, M. K., Watt, S. J., & DiOrio, C. (2021). A meta-analysis of suicide prevention programs for school-aged youth. *Children and Youth Services Review*, *121*, 105826.

Burke, L. A., Neimeyer, R. A., & McDevitt-Murphy, M. E. (2010). African American homicide bereavement: Aspects of social support that predict complicated grief, PTSD, and depression. *OMEGA-Journal of Death and Dying*, *61*(1), 1–24. https://doi.org/10.2190/OM.61.1.a

Bussell, V. A., & Naus, M. J. (2010). A longitudinal investigation of coping and posttraumatic growth in breast cancer survivors. *Journal of Psychosocial Oncology*, *28*, 61–78. https://doi.org/10.1080/07347330903438958

Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, *56*(2), 267–283. https://doi.org/10.1037/0022-3514.56.2.267

Cerel, J., Brown, M. M., Maple, M., Singleton, M., van de Venne, J., Moore, M., & Flaherty, C. (2019). How many people are exposed to suicide? Not six. *Suicide & Life-Threatening Behavior*, *49*(2), 529–534. https://doi.org/10.1111/sltb.12450

Cerel, J., Maple, M., Aldrich, R., & Van De Venne, J. (2013). Exposure to suicide and identification as survivor. *Crisis*, *34*, 413–419. https://doi.org/10.1027/0227-5910/a000220

Cerel, J., Maple, M., van de Venne, J., Moore, M., Flaherty, C., & Brown, M. (2016). Exposure to suicide in the community: Prevalence and correlates in one US state. *Public Health Reports*, *131*(1), 100–107. https://doi.org/10.1177/003335491613100116

Cerel, J., Padgett, J. H., Conwell, Y., & Reed, G. A. (2009). A call for research: The need to better understand the impact of support groups for suicide survivors. *Suicide and Life-Threatening Behavior*, *39*(3), 269–281. https://doi.org/10.1521/suli.2009.39.3.269

Cerel, J., McIntosh, J. L., Neimeyer, R. A., Maple, M., & Marshall, D. (2014). The continuum of "survivorship": Definitional issues in the aftermath of suicide. *Suicide and Life-Threatening Behavior*, *44*, 591–600. https://doi.org/10.1111/sltb.12093

Chen-Gal, S., Almog, R., & Siman-Tov, Y. (2007). Links between school counselors' exposure to suicide events, their level of familiarity with suicide preventative programs, and their sense of competence. *Educational Counselling*, *14*, 177–195.

Chopra, M. P., Zhang, H., Pless Kaiser, A., Moye, J. A., Llorente, M. D., Oslin, D. W., & Spiro, A. (2014). PTSD is a chronic, fluctuating disorder affecting the mental quality of life in older adults. *The American Journal of Geriatric Psychiatry*, *22*(1), 86–97. https://doi.org/10.1016/j.jagp.2013.01.064

Christianson, C. L., & Everall, R. D. (2008). Constructing bridges of support: School counselors' experiences of student suicide. *Canadian. Journal of Counselling and Psychotherapy*, 42(3). https://cjc-rcc.ucalgary.ca/article/view/58854

Cockshaw, W. D., Shochet, I. M., & Obst, P. L. (2014). Depression and belongingness in general and workplace contexts: A cross-lagged longitudinal investigation. *Journal of Social and Clinical Psychology*, 33(5), 448–462. https://doi.org/10.1521/jscp.2014.33.5.448

Cohen, J., & Geier, V. K. (2010). School climate research summary: January 2010. https://www.schoolclimate.org/climate/schoolclimatebriefs.php

Cooksey, R. W. (2020). *Illustrating statistical procedures: Finding meaning in quantitative data*. Springer Nature. https://doi.org/10.1007/978-981-15-2537-7

Daniels, J. A., Bradley, M. C., & Hays, M. (2007). The impact of school violence on school personnel: Implications for psychologists. *Professional Psychology: Research and Practice*, 38(6), 652–659. https://doi.org/10.1037/0735-7028.38.6.652

De Groot, M. H., De Keijser, J., & Neeleman, J. (2006). Grief shortly after suicide and natural death: A comparative study among spouses and first-degree relatives. *Suicide and Life-Threatening Behavior*, 36(4), 418–431. https://doi.org/10.1521/suli.2006.36.4.418

Davidson, J. R. T., Hughes, D., Blazer, D. G., & George, L. K. (1991). Post-traumatic stress disorder in the community: An epidemiological study. *Psychological Medicine*, 21(3), 713–721. https://doi.org/10.1017/S0033291700022352

Dyregrov, K. (2011). What do we know about needs for help after suicide in different parts of the world? *Crisis*, 32(6), 310–318. https://doi.org/10.1027/0227-5910/a000098

Erhard, R. (2001). An optimal educational climate: A kit for diagnosing and intervention. *The Ministry of Education*, (Hebrew), 277.

Erhard, R., & El-Dor, Y. (2001). *Implementation of the "School Violence Scale": A study of principals*. Jerusalem: The Ministry of Education and Culture, The Psychological – Counseling Services (Hebrew).

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41, 1149–1160.

Gedikoğlu, T., & Tahaoğlu, F. (2010). İlköğretim okullarının örgüt iklimi: Gaziantep Ili şahinbey ve şehitkamil ilçesi örneği [Organizational climate of primary schools: Example from Şahinbey District of Gaziantep Province and Şehitkamil township]. *Milli Eğitim [National Education]*, 186, 39–68.

Goldkind, L., & Farmer, G. L. (2013). The enduring influence of school size and school climate on parents' engagement in the school community. *School Community Journal*, 23(1), 223–244.

Gülşen, C., & Gülenay, G. B. (2014). The principal and healthy school climate. *Social Behavior and Personality* 42(1), 93S–100S. https://doi.org/10.2224/sbp.2014.42.0.S93

Hatzenbuehler, M. L., Birkett, M., Van Wagenen, A., & Meyer, I. H. (2014). Protective school climates and reduced risk for suicide ideation in sexual minority youths. *American Journal of Public Health*, 104(2), 279–286. https://doi.org/10.2105/AJPH.2013.301508

Hatzichristou, C., Lianos, P., Lampropoulou, A., & Stasinou, V. (2020). Individual and systemic factors related to safety and relationships in schools as moderators of adolescents' subjective well-being during unsettling times. *Contemporary School Psychology*, 24(3), 252–265. https://doi.org/10.1007/s40688-020-00298-6

Hatzichristou, C., Stasinou, V., Lampropoulou, A., & Lianos, P. (2018). Adolescents' perceptions of school climate: Exploring its protective role in times of economic recession. *School Psychology International*, 39(6), 606–624. https://doi.org/10.1177/0143034318803666

Hoy, W. K., & Miskal, C. G. (1982). *Educational administration* (2nd ed.). Random House.

Kaltman, S., & Bonanno, G. A. (2003). Trauma and bereavement. *Journal of Anxiety Disorders*, 17, 131–147. https://doi.org/10.1016/S0887-6185(02)00184-6

Federkeil, L., Heinschke, F., Jungmann, T., & Klapproth, F. (2020). Teachers' experiences of stress and their coping strategies during COVID-19 induced distance teaching. *Journal of Pedagogical Research*, 4(4), 444–452. https://doi.org/10.33902/JPR.2020062805

Kraaij, V., Arensman, E., & Spinhoven, P. (2002). Negative life events and depression in elderly persons: A meta-analysis. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 57B, P87–P94. https://doi.org/10.1093/geronb/57.1.P87

Lavian, R. H. (2012). The impact of organizational climate on burnout among homeroom teachers and special education teachers (full classes/individual pupils) in mainstream schools. *Teachers and Teaching*, 18(2), 233–247. https://doi.org/10.1080/13540602.2012.632272

Lazarus, R. S., Kanner, A. D., & Folkman, S. (1980). Emotions: A cognitive phenomenological analysis. In R. Plutchik & H. Kellerman (Eds.), *Theories of emotion* (pp. 189–218). Academic Press. https://doi.org/10.1016/B978-0-12-558701-3.50014-4

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal and coping*. Springer-Verlag.

Lazarus, R. S., & Folkman, S. (1984). Coping and adaptation. *The Handbook of Behavioral Medicine*, 282–325.

Lazenby, R. B. (2006). Teachers dealing with the death of students: A qualitative analysis. *Journal of Hospice & Palliative Nursing*, 8(1), 50–56. https://doi.org/10.1097/00129191-200601000-00015

Lester, L., & Cross, D. (2015). The relationship between school climate and mental and emotional wellbeing over the transition from primary to secondary school. *Psychology of Well-being*, 5(1), 9. https://doi.org/10.1186/s13612-015-0037-8

Levi-Belz, Y. (2015). Stress-related growth among suicide survivors: The role of interpersonal and cognitive factors. *Archives of Suicide Research*, 19(3), 305–320. https://doi.org/10.1080/13811118.2014.957452

Levi, Y., Weinberg, S., & Nadjar, R. (2011). Support groups for suicide survivors: Self-regulation and social support as mediating the effect of recovery. *European Psychiatry*, 26(1), 1626. https://doi.org/10.1016/S0924-9338(11)73330-2

Litz, B. T., & Roemer, L. (1996). Post-traumatic stress disorder: An overview. *Clinical Psychology & Psychotherapy: An International Journal of Theory and Practice*, 3(3), 153–168.

Loukas, A., Suzuki, R., & Horton, K. D. (2006). Examining school connectedness as a mediator of school climate effects. *Journal of Research on Adolescence*, 16(3), 491–502.

Marsh, L., McGee, R., & Williams, S. (2014). School climate and aggression among New Zealand high school students. *New Zealand Journal of Psychology*, 43(1), 28–37.

Matud, M. P. (2004). Gender differences in stress and coping styles. *Personality and Individual Differences*, 37, 1401–1415.

McLoughlin, A. B., Gould, M. S., & Malone, K. M. (2015). Global trends in teenage suicide: 2003–2014. *QJM: Monthly Journal of the Association of Physicians*, 108(10), 765–780. https://doi.org/10.1093/qjmed/hcv026

Moslehi, S., Atefimanesh, P., & Asgharnejad Farid, A. (2015). The relationship between problem-focused coping strategies and quality of life in schizophrenic patients. *Medical Journal of the Islamic Republic of Iran*, 29, 288.

Munson, L. J., & Hunt, N. (2005). Teachers grieve! What can we do for our colleagues and ourselves when a student dies? *Teaching Exceptional Children*, 37(4), 48–51. https://doi.org/10.1177/004005990503700407

Murphy, S. A., Braun, T., Tillery, L., Cain, K. C., Johnson, L. C., & Beaton, R. D. (1999). PTSD among bereaved parents following the violent deaths of their 12- to 28-year-old children: A longitudinal prospective analysis. *Journal of Traumatic Stress*, 12, 273–291. https://doi.org/10.1023/A:1024724425597

O'Brennan, L. M., & Furlong, M. J. (2010). Relations between students' perceptions of school connectedness and peer victimization. *Journal of School Violence*, 9(4), 375–391. https://doi.org/10.1080/15388220.2010.509009

Ortega, R., Sanchez, V., & Viejo, C. (2011). La violencia sexual en las relaciones interpersonales de adolescentes [Sexual violence in teenage relationships]. *Violencia Degénero La Violencia Sexual a Debate*, 99–126.

Pearlman, L. A., & Saakvitne, K. W. (1995). *Trauma and the therapist: Countertransference and vicarious traumatization in psychotherapy with incest survivors*. WW Norton & Co.

Pooley, J. A., Cohen, L., O'Connor, M., & Taylor, M. (2013). Posttraumatic stress and posttraumatic growth and their relationship to coping and self-efficacy in Northwest Australian cyclone communities. *Psychological Trauma: Theory, Research, Practice, and Policy*, 5(4), 392–399. https://doi.org/10.1037/a0028046

Rowling, L. (1995). The disenfranchised grief of teachers. *OMEGA - Journal of Death and Dying*, 31, 317–329. https://doi.org/10.2190/3EM7-71U5-ME8V-54MP

Schnider, K. R., Elhai, J. D., & Gray, M. J. (2007). Coping style use predicts posttraumatic stress and complicated grief symptom severity among college students reporting a traumatic loss. *Journal of Counseling Psychology*, 54(3), 344–350. https://doi.org/10.1037/0022-0167.54.3.344

Schwarz, N. (1999). Self-reports – How the questions shape the answers. *American Psychologist*, 54, 93–105. https://doi.org/10.1037/0003-066X.54.2.93

Stapleton, L. M. (2019). Survey sampling, administration, and analysis. In G. R. Hancock, L. M. Stapleton & R. O. Mueller (Eds.), *The Reviewer's Guide to Quantitative Methods in the Social Sciences* (2nd ed., pp. 467–481). Routledge.

Susanti, Y., Pratiwi, H., Sulistijowati, H. S., & Liana, T. (2014). M estimation, S estimation, and MM estimation in robust regression. *International Journal of Pure and Apllied Mathematics*, 91(3), 349–360.

Swihart, J., Silliman, B., & McNeil, J. (1992). Death of a student: Implications for secondary school counselors. *The School Counselor*, 40(1), 55–60. https://www.jstor.org/stable/23900831

Tedeschi, R. G., & Calhoun, L. G. (2004). Target article: "Posttraumatic growth: Conceptual foundations and empirical evidence". *Psychological Inquiry*, 15, 1–18. https://doi.org/10.1207/s15327965pli1501_01

Tiech Fire, N., Gvion, Y., Alkalay, S., & Zalsman, G. (2022). The "forgotten grievers": The impact of pupil suicide on post-trauma and grief symptoms in school staff. *International Journal of Environmental Research and Public Health*, 19, 12160. https://doi.org/10.3390/ijerph191912160

Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2013). A review of school climate research. *Review of Educational Research*, 83(3), 357–385. https://doi.org/10.3102/0034654313483907

U.S. Department of Education. (2014). *Guiding principles: A resource guide for improving school climate and discipline*. Author.

VanLone, J., Freeman, J., LaSalle, T., Gordon, L., Polk, T., & Rocha Neves, J. (2019). A practical guide to improving school climate in high schools. *Intervention in School and Clinic*, *55*(1), 39–45. https://doi.org/10.1177/1053451219832988

Vollman, M. W., LaMontagne, L. L., & Hepworth, J. T. (2007). Coping and depressive symptoms in adults living with heart failure. *The Journal of Cardiovascular Nursing*, *22*(2), 125–130. https://doi.org/10.1097/00005082-200703000-00009

Weinman, J., Wright, S., & Johnston, M. (1995). Coping. In M. Johnston, S. Wright, & J. Weinman (Eds.), *Measures in health psychology* (pp. 3–5). NFER-Nelson.

Wurst, F. M., Kunz, I., Skipper, G., Wolfersdorf, M., Beine, K. H., & Thon, N. (2011). The therapist's reaction to a patient's suicide. *Crisis*, *32*, 99–105.

You, S., O'Malley, M. D., & Furlong, M. J. (2014). Preliminary development of the Brief–California School Climate Survey: Dimensionality and measurement invariance across teachers and administrators. *School Effectiveness and School Improvement*, *25*(1), 153–173. https://doi.org/10.1080/09243453.2013.784199

Tal Young, I., Iglewicz, A., Glorioso, D., Lanouette, N., Seay, K., Ilapakurti, M. and Zisook, S. (2012). Suicide bereavement and complicated grief. *Dialogues in Clinical Neuroscience*, *14*, 177–186. https://doi.org/10.31887/DCNS.2012.14.2/iyoung

Zarad, E. (2019). Knesset report on teachers in the Israeli educational system, June 25. https://fs.knesset.gov.il/globaldocs/MMM/fa83866a-6e5b-e911-80e9-00155d0aeebb/2_fa83866a-6e5b-e911-80e9-00155d0aeebb_11_13503.pdf

Zeidner, M., & Ben-Zur, H. (1993). Coping with a national crisis: The Israeli experience with the threat of missile attacks. *Personality and Individual Differences*, *14*(1), 209–224.

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