



A multi-component curriculum to promote teachers' mental health: Findings from the PROMEHS program

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In the last two years, a growing number of studies have focused on the promotion of students' mental health to address the negative effects of the COVID-19 pandemic. However, less studies have been conducted on sustaining teachers' mental health which has been affected by the sudden changes in online teaching and the difficulties in keeping and building relationship with students. Even before the pandemic, teaching has long been recognised as one of the most challenging occupations characterized by high levels of stress. Although the research highlighted the key role of mental health promotion among teachers, there is still a lack of programs enhancing teachers' wellbeing. This study examined the impact of the PROMEHS program, a school-based curriculum, on teachers' mental health. A total of 687 teachers participated in the study. Applying a pre-and post-training study design with experimental and waiting list groups, teachers were evaluated in social and emotional learning, resilience, and self-efficacy. The results showed that there was a significant improvement in all competences of the teachers in the experimental group compared to those in the waiting list group. The paper discusses the implications of the findings with recommendations for further studies in the area.

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Introduction

The teaching profession is recognised as one of the most challenging occupations (Lester et al., 2020). Several studies investigating the consequences of severe levels of stress on teachers' mental health reported great levels of irritability at school and home, anxiety, feelings of powerlessness and psychosomatic complaints (e.g., Chang, 2009). The recent Eurydice Report (2021) showed that almost half of the teachers in Europe display high levels of work-related stress, with one out of four teachers expressing concern about their mental health and well-being. Similarly, the previous TALIS 2018 survey (OECD, 2019) revealed that stress at work is a common issue among European teachers. In addition, due to the pandemic emergence, teachers reported increased levels of burnout, work exhaustion, cynicism, feelings of fear and loneliness from confinement, frustration due to distance learning, anxiety, and depression, as well as lower engagement (Martinsone et al., 2022a). Despite these documented issues, there is relatively less research on how to promote teachers' mental health. Responding to this need, the present study sought to examine how the implementation of the "Promoting Mental Health at Schools" (PROMEHS) program, impacted on teachers' social and emotional learning, self-efficacy and resilience.

Teachers' mental health at school: Unveiling the blind spots

The school context has been widely recognised as a critical setting for mental health promotion (eg., Weare & Nind, 2011). Consequently, considerable attention has been dedicated to the development of school-based programs for students' mental health (Durlak et al., 2015). Teachers have been identified as the most effective candidates for providing such mental health programs at school because they can incorporate them into the school curriculum and daily classroom practices (Cefai et al., 2021). The teachers' modelling role has been identified as particularly crucial in promoting the healthy development of children and adolescents (Poulou & Denham, 2022). More specifically, teachers are socialisers of emotions, fostering students' ability to manage their internal states via their own emotions and applying several mechanisms related to the knowledge, expression, and regulation of emotions (Conte et al., 2019). These aspects may include paying attention to teachers' own emotional responses, providing supportive contingent reactions to students, teaching students how to appropriately regulate emotions, and using emotion-related discussions while teaching (Martinsone & Damberg, 2017; Ornaghi et al., 2022).

Another crucial aspect is related to teachers' beliefs about the role of mental health promotion for students' success and healthy development. Teachers who have a growth mindset toward the possibility of mastering and developing their own and their students' social and emotional competences, are less likely to report emotional exhaustion and tend to perceive higher levels of control over their emotions and use proactive emotion regulation strategies (Nalipay et al., 2021). Furthermore, teachers who consider the development of

students' mental health as important as the other academic subjects, are more likely to dedicate time to embed mental health activities into their classroom practice. This is related to their expectations of their role in mental health promotion, which is often perceived as being in a borderline space between education, health care and social work (Weston et al., 2018). Some teachers for instance may decline to participate in teacher-led mental health curriculum because they think that such programs are “one more task” added to an already overloaded school curriculum.

Teachers' readiness and mental health literacy is another crucial issue in the promotion of mental health in schools. Research has shown that teachers' feelings of being ready to carry out mental health school-based activities affect the quality of the implementation and the effectiveness of such programs (Brackett et al., 2012). Feelings of inadequacy in program implementation and a lack of confidence in responding to mental health issues during implementation, have been associated with limited mental health literacy (Askill-Williams et al., 2007). Consequently, enhancing teachers' mental health literacy, namely their knowledge and strategies about how to promote students' mental health, has been considered an effective approach to address teachers' readiness. Mental health literacy helps teachers to create supportive school environments for effective program delivery, to prevent risk factors of mental health difficulties, and to sustain students in developing positive relationships (Jorm et al., 1997).

Taking care of own mental health and wellbeing

Teachers' mental health has been often considered as a private individual issue, not a matter to be openly discussed within the school context. However, Schonert-Reichl and colleagues (2017) underlined the importance of training and supporting teachers' competencies in taking care of their own mental health. For instance, a high level of teacher mental health is associated with greater students' wellbeing whilst addressing teacher burnout helps to promote their mental health and that of their students (OECD, 2019). In particular, teachers need to develop a set of social and emotional competencies, such as self-awareness, self-regulation, social awareness, relationship building, resilience and coping skills to help them engage in effective practices, build healthy relationships and overcome challenges (Cavioni et al., 2021; Cefai et al., 2018; Grazzani et al., 2022a). These competences are particularly helpful in the face of adverse and challenging situations (Höltge et al., 2021). Resilience in teachers has been viewed as a capacity to maintain and retain teacher wellbeing, serving as a protective factor for teachers' mental health (Hascher et al., 2021).

Healthy teachers have also a greater sense of self-efficacy, which has been defined as confidence in own capabilities to profitably carry out goal-oriented activities to reach desired outcomes about students' engagement and learning (Tschannen-Moran & Woolfolk Hoy, 2001). The research on the relationship between self-efficacy and mental health among teachers found that self-efficacy is a strong protective factor against stress and burnout, and it is positively related to several mental health outcomes including better work satisfaction, engagement and commitment, greater optimism and quality of life, and higher perceived social support (e.g., Stanculescu, 2014). Conversely, teachers who display poor mental health, struggle in addressing

students' academic and psychological needs, and this can, in turn, further increase their level of stress and burnout (Weston et al., 2018).

Teachers' social and emotional learning, resilience skills and self-efficacy are crucial psychological resources for the school teachers in their daily practice, helping them to engage in effective and positive practices and building healthy relationships, and consequently leading to positive mental health outcomes (Mansfield, 2020). This study examines to what extent the PROMEHS program contributes to improve teachers' social and emotional learning, resilience and self-efficacy.

Aims of the study

Building on these considerations, the purpose of this study is to evaluate the effectiveness of the PROMEHS program in enhancing teachers' mental health outcomes. PROMEHS is a schoolwide mental health curriculum designed to address students' and teachers' mental health (Grazzani et al., 2022b). It includes teachers' training workshops and handbooks for teachers, students and parents with ready-made activities that students can carry out at school with the teachers and at home with parents. The program has been designed both to enhance students' wellbeing and reduce their psychological difficulties, as well as to increase teachers' mental health by providing knowledge and practical tools on mental health promotion at school. Numerous studies have found that PROMEHS program increased students' mental health (Anthony et al., 2023; Anthony et al., 2022; Cefai et al., 2022b; Colomeischi et al., 2022; dos Santos et al., 2022); however, further research is required to evaluate its impact on teachers' mental health outcomes.

In the present study, we hypothesised that teachers trained in the PROMEHS program (experimental group) would show statistically significant improvements in social and emotional learning (Hypothesis 1), resilience (Hypothesis 2), and self-efficacy (Hypothesis 3) compared with teachers assigned to the waiting list condition. Before we discuss further the development of the study, we first provide a brief overview of the theoretical framework of the PROMEHS program, targeted to enhance both students' and teachers' mental health.

The theoretical framework of the PROMEHS program

The theoretical framework of PROMEHS is focused on three main themes, namely the promotion of social and emotional learning, resilience skills, and the prevention of social, emotional, and behavioural problems (Cavioni et al., 2020a). Here we describe such themes and we provide evidence of their association with teachers' mental health.

Promoting social and emotional learning. Social and emotional learning (SEL) is the process through which children and young people acquire and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and achieve goals, show empathy for others, establish and maintain healthy relationships, and make responsible and caring decisions (Durlak et al., 2015; Mahoney et al., 2021). Several studies have demonstrated the relationship between SEL and mental health (eg., Cavioni et al., 2020b). Understanding and managing own and others' emotions and building supportive relationships at school are a

key aspect of the teaching and learning processes, fostering several positive mental health outcomes in teachers, including higher levels of motivation, satisfaction and joy (Beatty, 2000; Oplatka, 2007). In particular, scholars have examined the presence of the five core interrelated areas of competence namely self-awareness, self-management, social awareness, relationship skills, and responsible decision-making and their association with teachers' mental health wellbeing and students' outcomes. Research has shown that participation in SEL programs aimed at increasing students' self-awareness also had positive effects on teachers' teaching efficacy and positive emotions, which underlines the significant relation between students' wellbeing and teachers' mental health (Cavioni & Zanetti, 2019). Adopting effective strategies to regulate emotions, such as cognitive reappraisal, is associated with higher teacher wellbeing and job satisfaction, whereas maladaptive strategies, such as ignoring negative emotions, are associated with teachers' psychological and physical distress (Brackett et al., 2012). Furthermore, teachers' regulation skills contribute to higher levels of work engagement, greater levels of wellbeing, better classroom climate and lower distress in students (Jennings & Greenberg, 2009).

Social awareness such as the competence to take others' perspectives, being empathic and sensitive to diversity, helps teachers adapt teaching strategies to support students' learning and provide emotional support to students and colleagues (Collie et al., 2016). Good teacher-student relationships are beneficial, not only for students but also for teachers, by improving their work engagement and mental health (Klassen et al., 2012). Finally, when teachers are capable of effectively solving problems, feel responsible for their choices and are aware of their consequences, they will make decisions that take into account both their own and others' wellbeing. For instance, they may use more autonomy-supportive teaching practices, with positive effects on students' motivation and teachers' wellbeing (Jennings & Greenberg, 2009).

Promoting resilience. Resilience has been conceptualized as the capacity, process, or outcome of successful adaptation in the context of significant threats to function or development (Cefai et al., 2018; Ungar, 2018). It moderates the impact of adverse events, reduces the risk of mental health issues and facilitates recovery. Teachers' resilience has been linked with a wide number of personal and contextual protective factors in mental health. For instance, personal resources, including having higher levels of self-efficacy, empathy, a sense of purpose, intrinsic motivation to teach, optimism and coping strategies, have been associated with resilience and mental health (Hascher et al., 2021; Mansfield, 2020). Furthermore, the quality of the relationships at school has been recognized as a crucial contextual factor for resilience. Teachers who are able to build and maintain positive relationships, with both their students and peers, and manage effectively challenging and stressful situations, are more prone to successfully achieve their goals at school, to maintain job satisfaction and commitment and are less at risk of burnout (Turner & Braine, 2016).

Preventing social and emotional problems. The most frequent psychological issues among teachers include anxiety and depression, which teachers can display as negative emotional, cognitive, and physical symptoms (Sandilos et al., 2015). Stressful situations at school can lead to physical illness, absenteeism, turnover, and burnout, with consequences even on students' wellbeing and academic achievement (Oberle & Schonert-Reichl, 2016). Personal resources such as self-efficacy, empathy, a sense of purpose, intrinsic

motivation to teach, optimism and coping strategies, as well as relational resources such as social support at school, are crucial in preventing burnout and building resilience and mental health (Mansfield, 2020).

Methodology

Participants

The sample comprised 687 teachers (94% female) from 6 European countries. Of these, 215 were from Italy, 134 from Latvia, 104 from Romania, 82 from Portugal, 76 from Croatia, and 76 from Greece. They were recruited in 124 schools – either private or public, located in urban or rural areas - via email, telephone, and social channels, based on their own interest in the project. The age distribution of the participants was as follows: 7.1% of teachers were aged 18-29 years; 25% were in the age range of 30-39; 32.5% were in the age range of 40-49; 27.7% were in the age range of 50-59; and 7.7 % were aged 60 and over. A total 33.6% of the participants worked in kindergarten, 28.5% in primary school, 20.7% in lower secondary school, 11.4% in upper secondary school, and the remaining 5.8% in two or more school levels. The schools were randomly assigned to the two research conditions: 363 teachers were in the experimental group and 324 in the waiting list group. Teachers were informed about the aims of the study and the research procedure. Informed consent and GDPR consent were obtained from all respondents. Participants were free to withdraw from the study at any time, and no monetary or other financial rewards were provided.

Procedure

The effectiveness of PROMEHS on teachers' outcomes was tested by applying a quasi-experimental research design. It consisted of a comparison between the experimental and waiting list groups and comprised three phases: pre-test, intervention (teachers' training, implementation of the program activities, supervision), and post-test. The pre- and post-test occurred at the beginning and end of the 2020/2021 school year, respectively. The experimental group received the intervention between the pre-test and the post-test, whereas the waiting list group received it after the post-test. To ensure the quality and fidelity of the implementation of the program across countries, the same methodology and contents of the training were kept (Martinsone et al., 2022b).

The training course included 25 hours of training: 16 hours were offered at the beginning of the school year while the remaining 9 hours were provided as supervision and monitoring across the school year during the delivery of the program in the classroom. Supervision consisted of three group meetings. Figure 1 summarises the topics included in the training course and the supervisions for teachers.

The experimental group teachers received theoretical and practical knowledge on how to promote mental health at school as well as the instructions to implement the activities of the PROMEHS curriculum in their classroom. The program includes seven handbooks which offer multiyear programming for students from 3 up to 18 years, and for their parents and teachers. Four handbooks (two for kindergarten and primary school teachers and students, and two for middle and upper secondary school teachers and students) include guided activities that teachers and students can carry out respectively at school, as part of the mainstream curriculum,

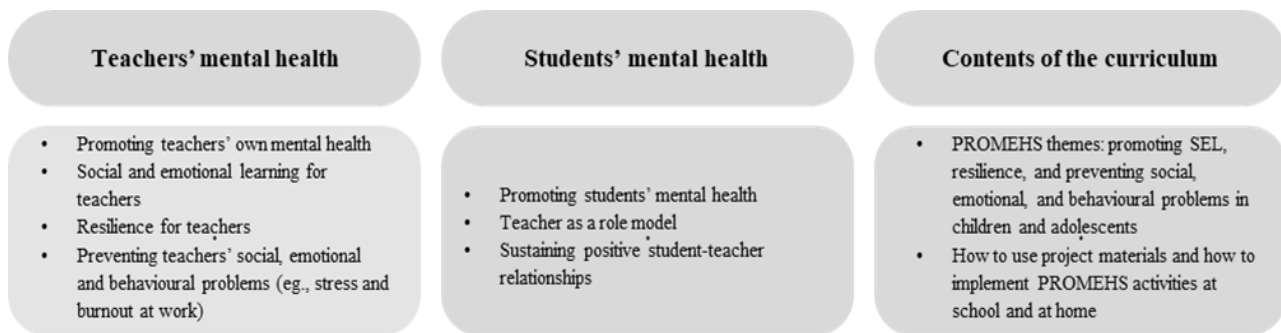


Figure 1. Topics addressed during the training course and supervision for teachers.

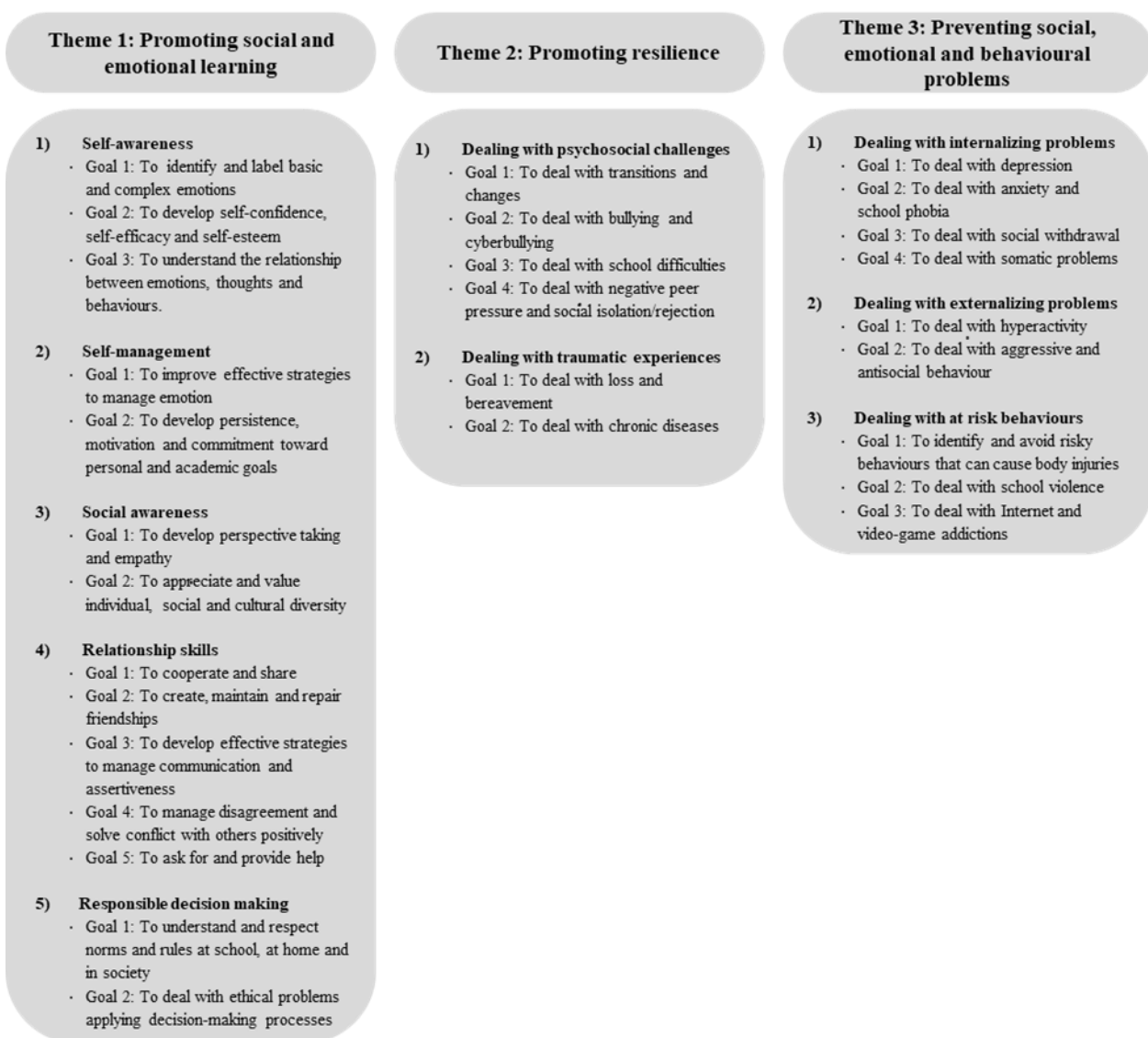


Figure 2. PROMEHS themes, topics and goals for kindergarten and primary school

and at home together with their parents. The other three volumes contain guidelines to promote mental health for teachers, parents and policy-makers (Cefai et al, 2022a; 2022b). All material has been adapted and translated into the seven languages of the countries involved in the trial. Figure 2 depicts an example of the PROMEHS themes, topics and goals of the curriculum included in the handbook for kindergarten and primary school teachers.

Measures

Participants completed three online questionnaires evaluating teachers' social and emotional learning, resilience, and self-efficacy respectively. Table I summarizes the variables assessed in this study, their names and references, as well as the sub-scales and the number of items.

Table I. Summary of study measures

Variables assessed	Scales and references	Sub-scales	n. of items
Social and emotional learning	Social and Emotional Competence of Teachers (SECTRS; Tom, 2012)	Teacher-Student Relationships	7
		Emotion Regulation	6
		Social Awareness	6
		Interpersonal Relationships	6
Resilience	Connor Davidson Resilience Scale (CD-RISC 10; Campbell-Sills & Stein, 2007; Connor & Davidson, 2003)	-	10
Self-efficacy	Ohio State Teacher Efficacy Scale (OSTES; Tschannen-Moran & Woolfolk Hoy, 2001)	Efficacy for Student Engagement	4
		Efficacy for Instructional Strategies	4
		Efficacy for Classroom Management	4

Social and emotional learning. The Social and Emotional Competence of Teachers (SECTRS; Tom, 2012) consists of 25 items measuring four areas of competence: *Teacher-Student Relationships* (positive interactions between teachers and students); *Emotion Regulation* (teachers' ability to manage their emotions in challenging situations); *Social Awareness* (teachers' sensitivity to diversity and awareness how their practice impacts students); and *Interpersonal Relationships* (teachers' relationships with parents and school staff). Teachers are asked to express their agreement or disagreement with the items on a 6-point Likert scale, from 1 (strongly disagree) to 6 (strongly agree). In the original tool, Cronbach's alpha coefficients for the four subscales ranged between .69 and .81 (Tom, 2012). In the current study, the four subscales reliability coefficients ranged between .72 and .82 at the pre-test, and between .73 and .80 at the post-test.

Resilience. The 10-item Connor Davidson Resilience Scale (CD-RISC 10; Campbell-Sills & Stein, 2007; Connor & Davidson, 2003) is a self-report questionnaire measuring the ability to cope with adversity. It

consists of 10 items on a 5-point Likert scale, from 0 (not true at all) to 4 (true nearly all the time). In the current study, Cronbach's alphas were .88 at the pre-test and .89 at the post-test, in line with the reliability coefficient of the original tool ($\alpha = .85$).

Self-efficacy. The Ohio State Teacher Efficacy Scale (OSTES; Tschannen-Moran & Woolfolk Hoy, 2001) is a self-report questionnaire consisting of three subscales of teachers' Self-Efficacy (SE): Efficacy for Student Engagement, Efficacy for Instructional Strategies, and Efficacy for Classroom Management. The short form comprises 12 items, each requiring a response on a 9-point Likert Scale. The Cronbach's alphas range between .81 and .86 for the three subscales, matching the original tool reliability coefficients (Tschannen-Moran & Woolfolk Hoy, 2001).

Overview of data analysis

All statistical analyses were conducted using IBM SPSS Version 27. Data from teachers were matched by code to combine the pre- and post-test scores, where only teachers who had scores in both tests were included in the data set. Before analyzing the data, we conducted standard data cleaning procedures. Imputation was carried out by replacing missing values by the mean test item score. Furthermore, we assessed the distribution of the data on each of the study measures, but none of the kurtosis or skewness values exceeded the recommended limits $[-1, +1]$. We then computed the main descriptive statistics and zero-order correlations. In order to ascertain the equivalence of the two groups prior to the intervention, a series of analyses of variance (ANOVAs) were computed to compare teachers' performance at pre-test as a function of group condition. Moreover, we evaluated the impact of the intervention on teachers' social and emotional learning, resilience, and self-efficacy through repeated-measures analysis of variance (ANOVA) with time (pre-test or post-test) as a within-subject factor, and group condition (experimental or waiting list group) as a between-subject factor. The dependent variables measured at two-time intervals included teachers' scores in social and emotional learning, self-efficacy, and resilience.

Results

To compare teachers' performance at the pre-test by group condition, a series of ANOVAs were run. No significant differences emerged concerning any of the administered measures: SECTRS_teacher-student relationship, $F(1,686) = 1.478, p = .225$, SECTRS_emotion regulation, $F(1,686) = .111, p = .739$, SECTRS_social awareness, $F(1,686) = 2.894, p = .090$, SECTRS_interpersonal relationships, $F(1,686) = .171, p = .679$, resilience, $F(1,686) = .063, p = .801$, SE_student engagement, $F(1,686) = .256, p = .613$, SE_instructional strategies, $F(1,686) = .142, p = .707$, and SE_classroom management, $F(1,686) = .133, p = .716$. Intercorrelations among the study variables are reported in Table II. Teachers' scores at the SECTRS showed a significant and positive correlation with both resilience and self-efficacy ($p < .001$). Table III shows the descriptive statistics for all variables by group condition at both pre-test and post-test stages, and the comparison of the average increase from pre-test to post-test between the two groups.

Table II. Intercorrelations among variables

	1	2	3	4	5	6	7	8	9
1.SECTRS_Teacher-student relationship	-								
2.SECTRS_Emotion regulation	.50**	-							
3.SECTRS_Social awareness	.64**	.37**	-						
4.SECTRS_Interpersonal relationships	.63**	.48**	.56**	-					
5.SECTRS_Total score	.83**	.72**	.75**	.81**	-				
6.Resilience	.40**	.45**	.33**	.53**	.53**	-			
7.SE_Student engagement	.52**	.41**	.43**	.43**	.55**	.33**	-		
8.SE_Instructional strategies	.48**	.43**	.42**	.51**	.57**	.39**	.73**	-	
9.SE_Classroom management	.53**	.45**	.40**	.46**	.58**	.34**	.73**	.67**	-

Note. Correlations were calculated using the pre-test data. ** p < .001

Table III. Pre- and post-test means and standard deviations for all variables by Group Condition

	Experimental group			Waiting list group			Group changes comparison
	Pre-test	Post-test	Mean changes	Pre-test	Post-test	Mean changes	<i>p</i>
SECTRS_Teacher-student relationship	4.98 (.59)	5.11 (.55)	.13 (.47)	4.92 (.60)	4.97 (.59)	.05 (.44)	.013
SECTRS_Emotion regulation	4.64 (.64)	4.74 (.57)	.10 (.50)	4.63 (.66)	4.63 (.64)	.00 (.52)	.010
SECTRS_Social awareness	5.27 (.53)	5.34 (.49)	.07 (.48)	5.20 (.52)	5.17 (.54)	-.03 (.54)	.005
SECTRS_Interpersonal relationships	4.65 (.60)	4.81 (.60)	.16 (.52)	4.63 (.62)	4.66 (.59)	.03 (.50)	<.001
SECTRS_Total score	4.85 (.45)	4.97 (.42)	.12 (.35)	4.81 (.45)	4.83 (.45)	.02 (.33)	<.001
Resilience	3.86 (.60)	4.04 (.60)	.18 (.50)	3.87 (.61)	3.93 (.59)	.06 (.42)	<.001
SE_Student engagement	7.08 (1.01)	7.51 (.87)	.44 (.87)	7.04 (1.03)	7.18 (.96)	.14 (.74)	<.001
SE_Instructional strategies	7.22 (.97)	7.68 (.82)	.45 (.86)	7.19 (1.01)	7.38 (.90)	.19 (.80)	<.001
SE_Classroom management	7.16 (.97)	7.57 (.84)	.41 (.81)	7.13 (.98)	7.29 (.95)	.15 (.72)	<.001

Note. Standard deviations are presented in parentheses.

The effectiveness of the intervention

To test the impact of the implementation of the PROMEHS program, a repeated-measures ANOVA was performed. The dependent variables at two-time points were teachers' social and emotional learning (as assessed by SECTRS), resilience (as assessed by CD-RISC 10), and self-efficacy (as assessed by OSTES). Effect sizes were calculated using partial eta-squared (η_p^2) values.

A significant effect of Time, Wilks's $\lambda = .86$, $F(1,685) = 18.14$, $p < .001$, $\eta_p^2 = .194$, and a significant Time x Group interaction, Wilks's $\lambda = .95$, $F(1,685) = 3.77$, $p < .001$, $\eta_p^2 = .048$, emerged. The interaction was significant for each of the investigated variables: SECTRS_teacher-student relationship, $F(1,685) = 6.23$, $p < .013$, $\eta_p^2 = .009$, SECTRS_emotion regulation, $F(1,685) = 6.74$, $p = .010$, $\eta_p^2 = .010$, SECTRS_social awareness, $F(1,685) = 7.94$, $p = .005$, $\eta_p^2 = .016$, SECTRS_interpersonal relationships, $F(1,685) = 11.46$, $p = .001$, $\eta_p^2 = .016$, resilience, $F(1,685) = 13.11$, $p < .001$, $\eta_p^2 = .019$, SE_student engagement, $F(1,685) = 23.00$, $p < .001$, $\eta_p^2 = .032$, SE_instructional strategies, $F(1,685) = 17.19$, $p < .001$, $\eta_p^2 = .024$, and SE_classroom management, $F(1,685) = 18.78$, $p < .001$, $\eta_p^2 = .027$. Specifically, pre- to post-test changes were significantly higher in the experimental group than in the waiting list group. Analyses of the simple main effects revealed that, for the time factor, the experimental group showed a significant pre- to post-test increase in all variables ($p < .005$), whereas in the waiting list group, pre- and post-test differences were only significant in self-efficacy and resilience ($p < .01$). In the group condition factor, there were no significant differences between the two groups at pre-test. At post-test, the experimental group outperformed the waiting list group in all administered measures ($p < .001$).

Discussion

Despite the growing interest in enhancing teachers' wellbeing, there has been a dearth of studies aimed at testing the effectiveness of school-based programs to support teachers' mental health. Thus, the current study aimed to examine the impact of PROMEHS, a comprehensive program targeted at promoting both students' and teachers' wellbeing, focusing on teachers' mental health outcomes. We found that PROMEHS was effective in improving teachers' social and emotional learning, resilience, and self-efficacy, as hypothesized. These three main findings are discussed in turn in the next sections.

Impact on teachers' social and emotional learning

According to Hypothesis 1, teachers in the experimental group showed significant improvement in their social and emotional learning compared to the waiting list group. Their participation in the PROMEHS program improved all the assessed dimensions. Teachers' scores in emotion regulation increased from pre- to post-test. Teachers face daily challenging situations (e.g., maintaining discipline in the classroom, managing the workload), so they need to connect to and regulate their emotions. There is evidence that the use of effective strategies to manage emotions and face challenging situations is associated with higher wellbeing, job satisfaction, and work commitment (Brackett et al., 2012). When teachers are aware of their internal states and

capacities, they can model students' social and emotional competencies, motivate them by adopting more effective teaching practices, and positively influence their school achievements.

Teachers who participated in the PROMEHS program obtained also a higher social awareness score. When teachers are attentive and compassionate towards students, their attitudes at work are positively influenced. In turn, positive feelings related to work engagement may impact the choice of specific teaching practices that consider students' needs and wellbeing, with effects on students' motivation. The program also supported another SEL core competence, namely relationship skills. Teachers in the experimental group obtained higher scores in teacher-student relationships and interpersonal relationships scores. There is evidence that positive teacher-student relationships are beneficial for both students' outcomes as well as teachers' work engagement and well-being (Klassen et al., 2012). Moreover, good relationships with parents and school staff enhance a better school climate. For instance, teachers who work more collaboratively at school have better performance at work while their students achieve higher academic grades (Ronfeldt et al., 2015).

Impact on teachers' resilience

The study also showed a positive impact on teachers' resilience. In particular, a main effect of time was observed in all participants, showing increased means at the post-test, but changes were significantly higher in the experimental group than in the waiting list group. The observed effect of time might be explained as a reaction to the COVID-19 outbreak and school closures, which forced teachers to cope with the sudden shift in teaching practice to provide online classes as a replacement for face-to-face lessons. Indeed, although the early phases of the pandemic have been associated with increased levels of distress, anxiety and depressive symptoms, follow-up studies showed improved levels of mental health over time which have been linked with a higher ability to recover from the initial shock of the pandemic (Manchia et al., 2022). Accordingly, studies showed that while there was a rapid decline in mental health difficulties as individuals sought to adapt to this life event, the majority of people were able to cope with the pandemic showing increased resilience. In particular, feelings of gained confidence, higher motivation, support from colleagues and engagement with students have been reported by teachers after the initial challenges posed by the pandemic (Lee & Yin, 2021).

As claimed in Hypothesis 2, the teachers in the experimental group reported significantly higher resilience scores at the post-test than the waiting list group. This positive outcome may be attributed to the methodology and the contents provided during the training course and supervision meetings. They received specific training targeted to provide them with the knowledge and strategies to gain awareness on the mechanisms of coping, to adapt successfully in the face of adversities and to take care of own mental health. Furthermore, supervision and monitoring helped teachers to feel confident in delivering the contents of the curriculum. These aspects might have had a positive impact in increasing the teachers' individual psychological resources, as well as, developing the collective capacity to be able to display trust among colleagues and exhibit joint and collaborative efforts to overcome difficulties.

Impact on teachers' self-efficacy

PROMEHS was also effective in improving teachers' self-efficacy, confirming Hypothesis 3. The teachers who participated in the program training and implementation felt more confident than those in the waiting list group, about their capability to engage and motivate students, successfully manage the classroom, and adopt the instructional strategies to adequately teach subject matters. Interestingly, even the self-efficacy of teachers belonging to the waiting list group increased at the post-test. As the research was carried out during the COVID-19 pandemic, all teachers faced sudden changes in their school routine and needed to adjust their practices to the new circumstances. It is likely that every teacher, despite the challenges, had some positive experiences related to their teaching. Notably, self-efficacy is shaped by different sources of experiences, namely mastery experiences (i.e., concrete evidence of success or failure in specific tasks), vicarious experiences (i.e., observation of results achieved by positive models), verbal persuasion (i.e., feedback provided by significant colleagues, mentors, or students), and physiological and affective states (i.e., emotional arousal during specific tasks) (Pfitzner-Eden, 2016). Thus, all teachers, regardless of their group, may have experienced such situations that resulted in feelings of greater self-confidence at work.

The teachers in the experimental group, however, outperformed those in the waiting list group in self-efficacy. This might be due to the fact that beliefs about own ability to produce students' outcomes are related to SEL components - which significantly improved only amongst teachers who implemented the PROMEHS program. For instance, self-awareness and self-regulation skills are necessary to recognize and manage emotional arousal in classroom management, whilst social awareness is crucial to gather positive or negative feedback about the effectiveness of practice. Research shows that social and emotional learning helps teachers feel more effective in their classroom, with a positive impact on their practice, and in turn, on students' academic achievement, motivation, and adjustment (Zee & Koomen, 2016). On the other hand, teachers who lack such emotional resources are less sensitive and supportive towards students, who in turn, will be less motivated and obtain lower school achievement (Jones et al., 2019).

The resulting classroom climate inevitably also affects teachers. As such, self-efficacy both impacts and is impacted by the emotions experienced at school. Burić et al. (2020) found that higher levels of teachers' efficacy predicted positive emotions (e.g., joy and pride) whilst negative emotions (e.g., anger, exhaustion, and sense of hopelessness) predicted lower levels of self-efficacy. Furthermore, the more teachers are confident in own capacities, the more they will exhibit job satisfaction, motivation and enthusiasm, as well as higher instructional quality (Skaalvik & Skaalvik, 2014). In addition, a high level of self-efficacy was also associated with lower stress, burnout, depressive symptoms, and turnover intentions (Jeon et al., 2018). Therefore, as the literature suggests, self-efficacy and mental health are two sides of the same coin, and the improvement of teachers' efficacy in enhancing positive outcomes in students, is positively related to their own mental health and well-being.

Conclusion

Given the increasing concern about the stress of the teaching profession, teachers' mental health has become a priority in various countries across the world. This study indicates that the implementation of PROMEHS by trained and supported school teachers leads to an enhancement in their social and emotional learning, resilience and self-efficacy, and consequently their mental health. The program underlines the importance that teachers implementing mental health programs in school, need to be supported in developing and accessing personal and contextual resources at school, through high-quality training courses, adequate resources and mentoring support (Martinsone et al., 2022b).

However, this study is not without limitations. First, teachers who participated in the study joined PROMEHS voluntarily, therefore the results might not be generalizable to all teachers, such as those who might be resistant to such interventions. Secondly, we evaluated the impact of the program at the post-test (six months later), but follow-up evaluations are needed to assess whether gains will be maintained over time.

Despite these limitations, the present study marks an encouraging step forward in developing school-based and evidence-based programs on teachers' mental health promotion with a particular focus on their social and emotional learning, resilience and self-efficacy. In particular, PROMEHS innovatively addresses both the promotion of protective factors in teachers' mental health, social and emotional learning and resilience, as well the prevention of psychological difficulties.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest.

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