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Research Article

Teachers' and Students' Changes in Social and Emotional Competences Following the Implementation of PROMEHS: A European Program for Promoting Mental Health at Schools

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Abstract

Social and Emotional Learning (SEL) is the process through which both students and teachers acquire and effectively apply the same social and emotional competences such as learning to understand and use emotions, set positive goals, establish, and maintain positive relationships and engage in responsible decision making. Most interventions to develop SEL at schools have focused exclusively on students, whereas there is a paucity of research examining teachers' own social and emotional competences. Current study aimed to address changes in teachers' and students' perceptions of social and emotional skills following the Promoting Mental Health at Schools (PROMEHS) program, an intervention targeting both teachers' and students' social and emotional competences. Hundred fifty-two Greek teachers from kindergarten to secondary schools completed the Social and Emotional Competence for Teachers (SECTRS) for their social and emotional competences. Teachers also completed the SSIS SEL Brief Scales-Teacher K-12 Form for their 1558 students' social and emotional competences. Finally, 458 students completed the SSIS SEL Brief Scales-Student Form for their social and emotional competences. Teachers reported moderate changes in their own social and emotional competences. They also reported moderate changes for their students' social and emotional competences, which were further confirmed by students' reports. Findings are discussed in terms of teacher training and professional development.

Keywords: Social and emotional competences; Teachers; Students; Mental health at schools

Teaching is an emotionally demanding job with relevance to teachers' personal and professional performance [1]. Teachers' emotions are integral to teaching and play a crucial role in students' learning and teacher-student relationships [2]. Social and Emotional Learning (SEL) has recently been suggested in the literature as a protective factor to stressors of teachers' daily practice, from which teachers can improve their own social and emotional competences and general well-being [3, 4]. Social and Emotional Learning (SEL) is the process through which both children and adults acquire and effectively apply these same skills, learning to understand and use emotions, set positive goals, establish, and maintain positive relationships and engage in responsible decision making (Collaborative for Academic, Social and Emotional Learning, 2016; [5]. However, most interventions to develop SEL at schools have focused exclusively on students, whereas teachers receive little support and training for the implementation of SEL programs or their own SEL skills [6]. Teachers have come to understand that teachers alike need SEL training and coaching, and that their own modeling of social and emotional competences through teaching is critical to student success [6, 7]. Teacher preparation programs provide no guidelines or "*best practices*" for prospective teachers, either to implement cell in their classrooms or develop their own cell for their own [4]. Current study presents an intervention program aimed to cultivate both teachers' and students' social and emotional competences and describes the initial results following its implementation in a group of in-service Greek teachers.

Teachers' social and emotional competences and students' well-being

The emotion socialization perspective states that teacher's act as emotional socializers to students and their emotion-related behaviors have a significant impact on students' emotional competences [8]. Teachers' social and emotional competences influence the quality of teacher-student relationships, their classroom management organization and the quality of learning environments [6, 9, 10]. Socially and emotionally competent teachers are more likely to establish supportive relationships with students, coach students with conflict interactions and act as role models for appropriate pro-social behavior [11]. The quality of teachers' emotional interaction with students subsequently influences students' well-being and academic achievement [12, 13, 14]. In addition, this is actually true for at-risk children who display early social and/or academic problems in their school adjustment [14, 15]. Moreover, students in early adolescence face challenges such as academic decline and social maladjustment. The delivery of school-based SEL programs has been suggested as an antidote for promoting positive development and preventing negative outcomes for students [16]. SEL programs contribute to the effective enhancement of students' SEL competencies and to their psychosocial health [17].

On the other hand, teachers with poor mental health have low perceptions of their ability to support students' well-being [18]. Teachers with higher levels of depression and lower levels of well-being have students with more emotional and behavioral difficulties comparing to their colleagues with lower levels of depression and higher levels of well-being [13]. In other words, nurturing teachers' social and emotional competence can be a requisite for providing supportive classroom climate. In order to create these environments though, teachers need to be equipped with social and emotional competences to teach, model and promote these skills to their students [19, 20].

Teachers' social and emotional competences and teachers' well-being

Research by Jennings and Greenberg [11] suggests that socially and emotionally competent teachers are better at understanding, managing their own, others' emotions, and display stronger relationship-building capability. As teachers experience effectiveness in their work with students, they become more confident in their teaching [11]. These competences are in turn positively associated with greater work satisfaction and reduced stress and burnout [11, 21].

Nevertheless, the role of teachers' own social and emotional competences has been overlooked [6, 22]. Although several prevention programs have been developed for teaching students social and emotional competences [12, 23, 24], these interventions have focused exclusively on students, and there is a paucity of research examining teacher outcomes [25]. Teachers receive little support and training for the implementation of SEL programs in their classrooms, and even less support for the cultivation of their own social and emotional skills [6]. This delay on teachers' own SEL was attributed to the assumption that teachers are already social and emotional competent and therefore have the tacit knowledge of the teaching profession to act as social and emotional competent models for their students [11, 26]. Teachers' own social and emotional skills are vital to teaching and need to be cultivated early in their teaching preparation and supported throughout their careers [6, 27]. Teachers who are equipped with social and emotional competences are likely to recognize the importance of SEL and be better prepared to lead the implementation of SEL programs, practices and policies in their school [19].

[28] Conducted the first study to evaluate the impact of a combined intervention at schools targeting both teachers and students' social and emotional skills. Their results showed that the intervention helped students to decrease their levels of anxiety, whereas they provided no information about teachers' outcomes.

Limited research emphasizing on teachers' SEL per se revealed positive impact on teachers' personal well-being and positive emotions [11, 22], and decrease in their psychological distress [29]. A meta-analysis of 43 studies evaluating the efficacy of school based SEL interventions, showed small to medium effect sizes favoring the experimental comparing the control groups, with SEL interventions improving teachers' social and emotional competences, well-being and minimizing psychological distress [1]. The implementation of a program targeting teachers' SEL strategies also resulted to students with increased emotional control, prosocial behavior, peer acceptance and reduced aggression [30]. When SEL interventions are developed for teachers themselves, positive outcomes occur for both teachers and students, whereas it is not always possible to isolate the direct or indirect effect to teachers or students [1].

Current Study

Policy makers have identified schools globally as an ideal universal context to promote mental health for all students, to identify students with emerging mental health difficulties, and to target students with emotional and behavioral difficulties [31]. Schools and teachers acknowledge their role in promoting students' mental health, but they lack confidence in their abilities to promote students' mental health [32, 33]. In addition, many mental health programs lack rigorous evaluation of their effectiveness when implemented at schools [34]. This is especially true in the country of Greece, where numerous mental health programs have been implemented, especially in primary schools and central cities, but there is no evidence in terms of implementation, fidelity or the long-term outcomes of these programs [35].

The impact of SEL programs on students has been well-documented [36]. Nevertheless, there is a paucity of research examining teacher outcomes [25]. There is potential for teachers to also benefit from implementing SEL programs [25], these programs are initially developed either for students' social and emotional competences or directly address teachers' social and emotional competences. The current study aimed to address changes in teachers' perceptions of their social and emotional skills following PROMEHS, an intervention targeting both teachers' and students' social and emotional competences. The study also aimed to address changes in students' social and emotional competences. It is argued that social and emotional competencies are better assessed using multiple sources including self, teacher or parents [37]. Therefore, this study examined teachers and students' perceptions of students' social and emotional competences, without directly addressing any discrepancies between these two informants. The specific research questions were:

1. How do teachers perceive changes in their own social and emotional competences following an intervention program promoting mental health at schools?
2. How do teachers perceive changes in students' social and emotional competences following an intervention program promoting mental health at schools?
3. How do students perceive changes in their own social and emotional competences following an intervention program promoting mental health at schools?
4. We hypothesized that the intervention program in social and emotional competences would result in both teachers' and students' amelioration of social and emotional competences.

Method

Design and Setting

The study was a quasi-experimental cluster study involving experimental and control schools. The schools were matched for socio-economic status (SEC), location (regional, rural, remote) and number of students enrolments. I Data collection occurred two time points (pre and post) in both experimental and control schools. We used a multi-method design (qualitative and quantitative data), multi-site and multi-informant (school leaders, teachers, and support staff, students, parents/care and policy makers). In the current paper, we present teachers and students' quantitative information on their social and emotional competences.

Recruitment and Participants

Open call to kindergarten, primary and secondary schools of Achaia prefecture resulted in the volunteering schools. The study was conducted in conformity with the recommendations of the Ethics Committee of the University of Patras. Participants were ensured about the anonymity and confidentiality of their responses. All participating schools (teachers and students) completed a formal online consent form.

Hundred fifty-two teachers teaching in schools in Achaia prefecture in Greece (12 male; 7.9% and 140 females; 92.1%), divided into experimental (82; 53.9%) and control (70; 46.1%) groups completed a self-report questionnaire for their social and emotional competences. Fifty of them (32.9) were kindergarten teachers, teaching students aged 5-6 years old, 60 of them (39.5%) were primary teachers, teaching students aged 6-12 years old, 28 of them (18.4%) were high school teachers, teaching students 12-15 years old, and 16 of them (10.5%) were lyceum school teachers, teaching students 15-18 years old (high school and lyceum are grades of secondary education). Teachers also completed questionnaires for their student's social and emotional competences. In total 1558 questionnaires (758; 48.7% male and 800; 51.3% female students) were completed, with 846 (54.3%) of them were completed by the experimental and 712 (45.7%) from the control group. In addition, 698 (44.8%) questionnaires were completed by teachers of kindergarten students, 656 (42.1%) by teachers of primary students, 80 (5.1%) of high school students, and 124 (8.0%) of lyceum students. Finally, students completed

questionnaires for their own social and emotional competences. In total 458 questionnaires were completed by students (214; 46.7% male and 244; 53.3% female), divided into experimental (200; 43.7%) and control groups (258; 56.3%). Two hundred eighty (61.1%) of them were primary students and 178 (38.9%) were high and lyceum school students.

PROMEHS Curriculum

PROMEHS is a mental health curriculum designed to address teachers and students' mental health. It was developed by researchers, policy-makers and scientific associations from 7 European countries (Croatia, Italy, Latvia, Romania, Portugal, Malta and Greece). The curriculum was designed following the high-quality criteria identified by [38]. PROMEHS was based on three core modules with activities targeting both teachers and students. These core modules of mental health were the following: a) Social and Emotional Learning (SEL), the process of cultivating skills and attitudes to students and adults to develop healthy relationships with self and others. [38] Identifies five core inter-related competencies and skills namely self-awareness, self-management, social awareness, relationship skills and responsible decision-making. Teachers' participation in SEL programs targeting students' promotion of mental health revealed positive effects to teachers' teaching efficacy, positive emotions and self-compassion, higher levels of well-being and job satisfaction [39, 40, 41] as well as students' increase of well-being and lower distress [42]; b) Promoting resilience, the dynamic process of successful adaptation in the contexts of significant threats to development [43]. Teachers' resilience has been linked to teachers' self-efficacy, professional development and job satisfaction and commitment [44, 45]; c) Preventing social, emotional and behavioral problems. Teaching is one of the most stressful and emotionally demanding profession, which can challenge teachers' psychological, physical and social well-being [46]. If teachers' stress is not adequately addressed it could lead to turnover, burnout, physical illness with consequences to students' well-being [47]. PROMEHS framework advocates for the promotion of teacher wellbeing as a vital component of effective school mental health strategies [46].

PROMEHS Training and Implementation Program

Teachers' social and emotional competences need to be strengthened in a micro level through teachers' professional training, to develop their own competences and incorporate SEL practices in their regular teaching, and in a macro level, through SEL implementation on a policy level [49]. PROMEHS aimed to address teachers' needs in both levels. Teachers and students of both experimental and control groups participated in a purpose designed training program, delivered by the research team, to increase their knowledge, skills and attitudes, in different time-points (experimental group received training before PROMEHS program implementation, and control group received training after PROMEHS implementation). The training comprised sessions based on three core modules (Promoting Social and Emotional Learning; Resilience; and Prevention of emotional and behavioral difficulties). The instruction delivered over an intensive 3-day training program for teachers, via a synchronous online environment, using teleconference technology to facilitate the building of networks and communities of practice. This decision was based since training program took place during the restrictions of Covid-19 (October 2020). Following teachers' training, PROMEHS was implemented at schools, with the consent of participating school directors, teachers, students, parents and local policy makers. PROMEHS implementation lasted six months (December 2020 to May 2021). During the implementation, teachers of the experimental group were asked to implement in classrooms at least 12 of PROMEHS activities (4 for each core model: social and emotional learning, resilience, and preventing social and emotional problems) described in PROMEHS handbooks for teachers and students. In Greece, the majority of the implementation was conducted through teleconferencing. To ensure for the quality and the fidelity of the implementation, the training and the supervision sessions during the implementation process were led by teacher trainers with MA and Ph.D. degrees in Educational Psychology with experience in teacher training.

Measures

Social and Emotional Competence for Teachers (SECTRS)

Teachers' social and emotional competences were measured with the Social and Emotional Competence for Teachers (SECTRS; [49]). SECTRS includes 25 items reflecting the 4 core SEL competences (CASEL, 2020), namely: *Teacher-student relationships,* describing positive interactions between teachers and students (7 items), with a sample item "I am aware of how all of my students are feeling", *Emotion-Regulation*, describing teachers' ability to manage their emotions (6 items), with a sample item " I nearly always stay calm when a student upsets me", *Social-awareness,* describing teachers' sensitivity to diversity (6 items), with a sample item "I appreciate individual and group differences (e.g., cultural, linguistic, socioeconomic, etc.)", and *Interpersonal relationships,* describing teachers' relationships with parents and staff (6 items). A sample item is "In conflict situations with staff members, I can effectively negotiate solutions". Responses could range from "1" (*strongly disagree*) to "6" (*strongly agree*). The SECTS items were translated to Greek and back-translated to English by three students of English literature and piloted to five elementary teachers to ensure the conceptual accuracy of the items and their adherence to the original content. A CFA with robust maximum likelihood estimation was used to examine the 4-factor measurement model underlying the Social and Emotional Competence for Teachers (SECTS). The model fit indices were x^2=476.04, df=269, p=.00 (p>.05), CFI=.70 (>.95), RMSEA=.10

(<.08).Cronbach's alphas were .79 for teacher-student relationships, .72 for emotion regulation, 068 for social-awareness and .67 for interpersonal relationships.

SSIS SEL Brief Scales-Teacher K-12 Form [50]

The SSIS SEL Brief Scales-Teacher K-12 Form includes 20 statements for students' social and emotional learning skills, aged 3-18, and taxonomies into five subscales (relationship skills, responsible decision-making, self-awareness, self-management, and social awareness). Teachers indicate the frequency with which students exhibit each social and emotional skill. Responses are rated on a 4-point Likert scale from 0 (Never) to 3 (Almost always). Example items are "*Asks for help when needed*" and "*Completes tasks without bothering others*". The SEL items were translated to Greek and back-translated to English by three students of English literature and piloted to five elementary teachers to ensure the conceptual accuracy of the items and their adherence to the original content. A CFA with robust maximum likelihood estimation was used to examine the 5-factor measurement model. The model fit indices were x^2= 1558.59, df=160, p=.00 (p>.05) , CFI=.85 (>.95), RMSEA=.10 (<.08).Cronbach's alphas were .77 for relationship skills, .83 for responsible decision making, .76 for self-awareness, .78 for self-management, and .80 for social awareness, which are comparable to reliability coefficients reported in the U.S. [51, 52].

SSIS SEL Brief Scales-Student Form [53]

The SSIS SEL Brief Scales-Student Form includes 20 statements for students' social and emotional behavior, aged 3-18, taxonomized into five subscales similarly to teachers SSIS SEL Brief Scales (relationship skills, responsible decision-making, self-awareness, self-management, and social awareness). Responses are rated on a 4-point Likert scale from 0 (Never) to 3 (Almost always). Example items are: "*I ask for help when I need it*" and "*I stay calm when dealing with problems*". As previously, the SSIS items were translated to Greek and back-translated to English by three students of English literature and piloted to 4 primary, 4 secondary high and 4 secondary lyceum students to ensure the conceptual accuracy of the items and their adherence to the original content. A CFA with robust maximum likelihood estimation was used to examine the 5-factor measurement model. The model fit indices were x^2=336.96, df=160, p=.00 (p>.05), CFI=.88 (>.95), RMSEA=.06 (<.08). Cronbach's alphas were .64 for relationship skills, .70 for responsible decision-making, .71 for self-awareness, .69 for self-management, and .72 for social awareness, similarly to US studies (Eliot et al, 2021).

Results

Teachers' Perceptions of Their Own Social and Emotional Skills

Participant teachers were matched by code to combine the pre-test and post-test scores. Only teachers who had scores in both tests were included in the data set. The mean test item score replaced missing values. (Table 1) presents teachers' ratings on their social and emotional competences. In general lines, teachers scored higher in social awareness and teacher-student relationships in relation to interpersonal relationships and emotion regulation competences, in agreement with studies indicating that teachers find easier to define aspects of social awareness as an orientation toward others than defining aspect related to self [33, 49].

Social and Emotional Competence	Group	Phase	Mean	Sd	N
Teacher-student relationships	Experimental	Pre	4.76	0.68	41
		Post	4.98	0.61	41
	Control	Pre	4.78	0.46	35
		Post	4.93	0.5	35
Emotion regulation	Experimental	Pre	4.55	0.61	41
		Post	4.71	0.56	41
	Control	Pre	4.65	0.65	35
		Post	4.75	0.53	35
Social awareness	Experimental	Pre	5.26	0.61	41
		Post	5.45	0.48	41
	Control	Pre	5.31	0.38	35
		Post	5.17	0.5	35

Interpersonal relationships	Experimental	Pre	4.67	0.56	41
		Post	4.89	0.54	41
	Control	Pre	4.72	0.45	35
		Post	4.63	0.48	35

Table 1: Teachers' self-reports on their own Social and Emotional Competence.

Two-way mixed ANOVA was conducted to compare differences in teachers' perceptions before and after PROMEHS implementation in both experimental and control groups. Results showed that although there was no significant difference between experimental and control groups, there were significant interactions between groups (experimental and control) and phases (pre-test and post-test) in social awareness and interpersonal relationships, where experimental and control groups evolved in opposite directions from pre-test to post-test phases. Specifically, ANOVA results showed that there was no significant difference between experimental and control groups on the Teacher-student relationships ($F(1, 74) = .016$, $p = .90$, $\eta_p^2 = 0.00$), but there was significant main effect between pre and post-test phases ($F(1, 74) = 15.60$, $p < 0.001$, $\eta_p^2 = .17$). Non-significant interaction between group and phase ($F(1, 227) = 0.61$, $p = 0.43$, $\eta_p^2 = 0.00$), shows that both experimental and control groups evolved in the same way. No significant difference between experimental and control groups was also found on the Emotion regulation $F(1, 74) = .30$, $p = .58$, $\eta_p^2 = 0.00$), but there was significant main effect between pre and post-test phases ($F(1, 74) = 5.46$, $p < 0.02$, $\eta_p^2 = .06$). The interaction between group and phase was non-significant ($F(1, 227) = 0.59$, $p = 0.43$, $\eta_p^2 = 0.00$). No significant difference was found between experimental and control groups on the Social awareness $F(1, 74) = 1.30$, $p = .25$, $\eta_p^2 = 0.01$), no significant main effect was found between pre and post-test phases ($F(1, 74) = 0.19$, $p = .66$, $\eta_p^2 = .00$), but significant interaction was found between group and phase ($F(1, 227) = 9.41$, $p = .00$, $\eta_p^2 = 0.11$) (Figure 1), denoting that the experimental group scored higher in the social awareness, whereas the control group scored lower following the intervention. Similarly, no significant difference was found between experimental and control groups on the Interpersonal relationships $F(1, 74) = 0.89$, $p = .34$, $\eta_p^2 = 0.01$), no significant main effect was found between pre and post-test phases ($F(1, 74) = 0.29$, $p = .25$, $\eta_p^2 = .01$), but significant interaction was met between group and phase ($F(1, 227) = 8.19$, $p = .00$, $\eta_p^2 = 0.10$) (Figure 2).

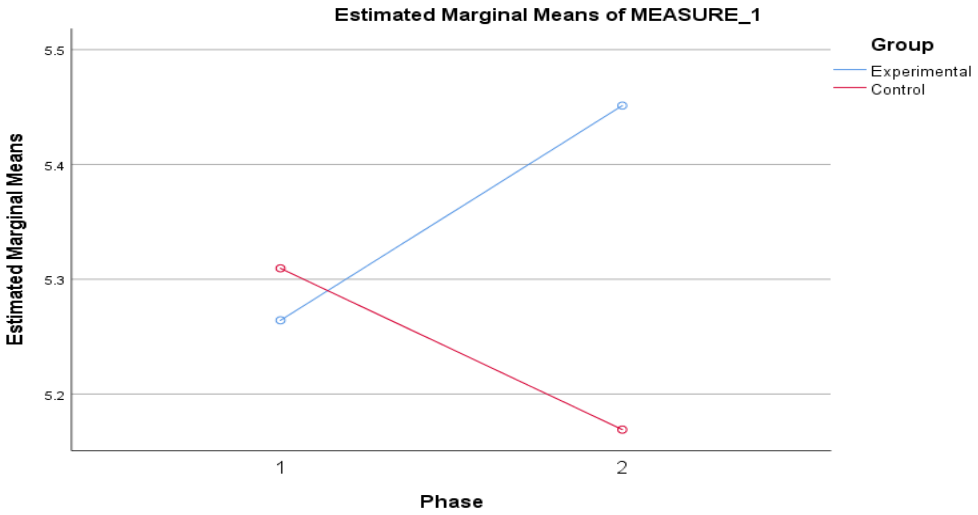

Figure 1: Teachers' perceptions of their own social awareness.

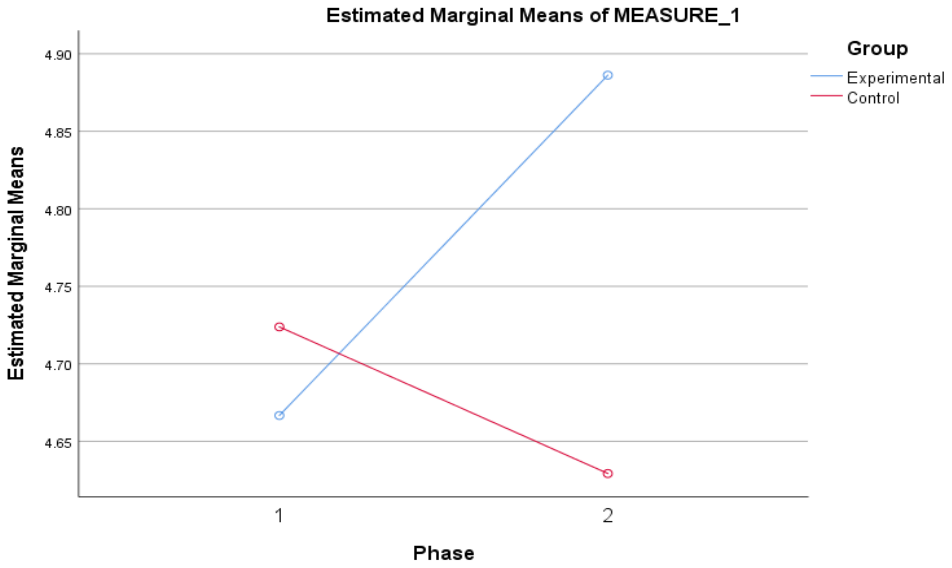

Figure 2: Teachers' perceptions of their own interpersonal relationships.

Teachers' Perceptions of Students' Social and Emotional Skills

Similarly, to teachers, students were matched by code to combine the pre-test and post-test scores. Only children who had scores in both tests were included in the data set. The mean test item score replaced missing values. (Table 2) presents teachers' perceptions of students' social and emotional competences. Students of the experimental and control groups presented significant differences mainly in self-awareness and social awareness subscales, according to teachers' ratings. However, significant interactions between groups and phases reveal that higher scores were met in experimental groups comparing to control groups from pre-test to post-test phase. Taken separately, ANOVA results show that there was no significant difference between experimental and control groups on the Relationship skills (F (1, 777) =2.65, p=.10, η_p^2 = .00), but there was significant main effect between pre and post-test phases (F (1, 777) =24.35, p=.38, η_p^2 = .00). A significant interaction was found between group and phase (F (1, 777) =27.86, p=.00, η_p^2 = .03) (Figure 3). There was no significant difference between experimental and control groups on the Responsible decision-making (F (1, 777) =.75, p=.10, η_p^2 = .00). However, there was significant main effect between pre and post-test phases (F (1, 777) =13.09, p=.00, η_p^2 = .01) and significant interaction was found between group and phase (F (1, 777) =28.31, p=.00, η_p^2 = .03) (Figure 4). In contrast, two-way mixed ANOVA results showed that there was significant difference between experimental and control groups on the Self-awareness (F (1, 777)=7.52, p=.00, η_p^2 = .01), significant main effect between pre and post-test phases (F(1, 777)=17.80, p=.00, η_p^2= .02) and significant interaction between group and phase (F (1, 777)=22.00, p=.00, η_p^2 = .02), (Figure 5). On the self-management subscale, no significant difference was found between experimental and control groups (F (1, 777) =.15, p=.69, η_p^2 = .00). There was significant main effect between pre and post-test phases (F (1, 777) =13.05, p=.00, η_p^2 = .01), and significant interaction between group and phase (F (1, 777) =6.63, p=.01, η_p^2 = .00) (Figure 6). Finally, there was significant difference between experimental and control groups on the social awareness (F (1, 777) =6.56, p=.01, η_p^2 = .00), significant main effect between pre and post-test phases (F (1, 777) =36.57, p=.00, η_p^2 = .04), and significant interaction between group and phase (F (1, 777) =31.87, p=.00, η_p^2 = .03) (Figure 7).

Social and Emotional Competence	Group	Phase	Mean	Sd	N
Relationship skills	Experimental	Pre	3.15	0.51	423
		Post	3.33	0.55	423
	Control	Pre	3.18	0.56	356
		Post	3.18	0.61	356

Responsible decision-making	Experimental	Pre	3.27	0.55	423
		Post	3.41	0.55	423
	Control	Pre	3.32	0.6	356
		Post	3.29	0.65	356
Self-awareness	Experimental	Pre	3.02	0.51	423
		Post	3.17	0.6	423
	Control	Pre	3	0.51	356
		Post	2.99	0.55	356
Self-management	Experimental	Pre	3.1	0.57	423
		Post	3.2	0.56	423
	Control	Pre	3.13	0.57	356
		Post	3.14	0.61	356
Social awareness	Experimental	Pre	3.13	0.53	423
		Post	3.35	0.57	423
	Control	Pre	3.14	0.57	356
		Post	3.15	0.62	356

Table 2: Teachers' reports on students' Social and Emotional Competences.

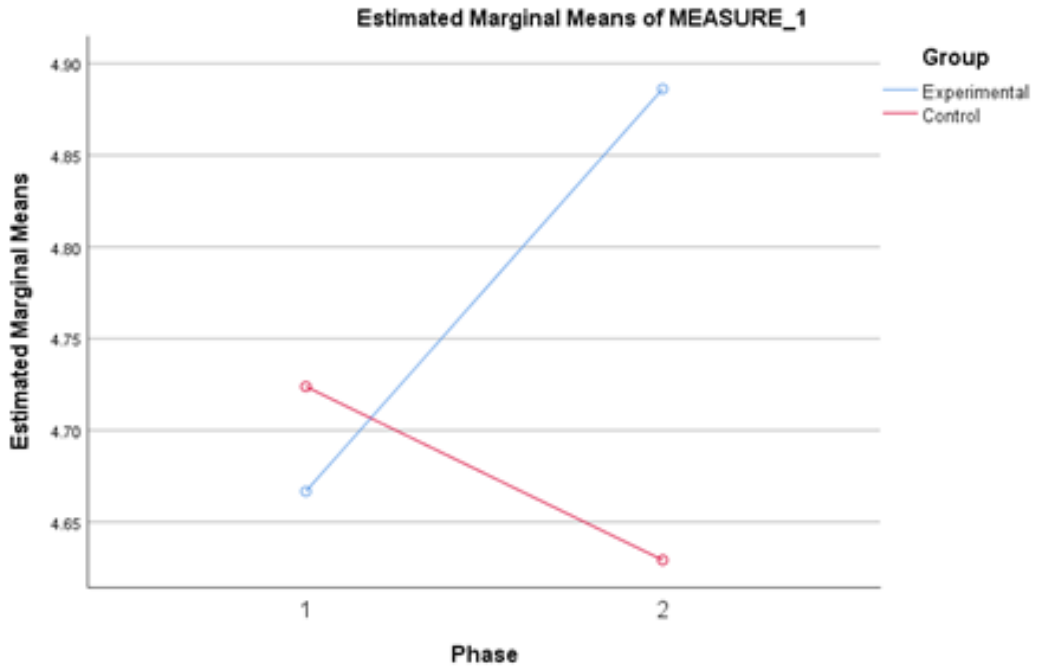

Figure 3: Teachers' perceptions of students' relationship skills.

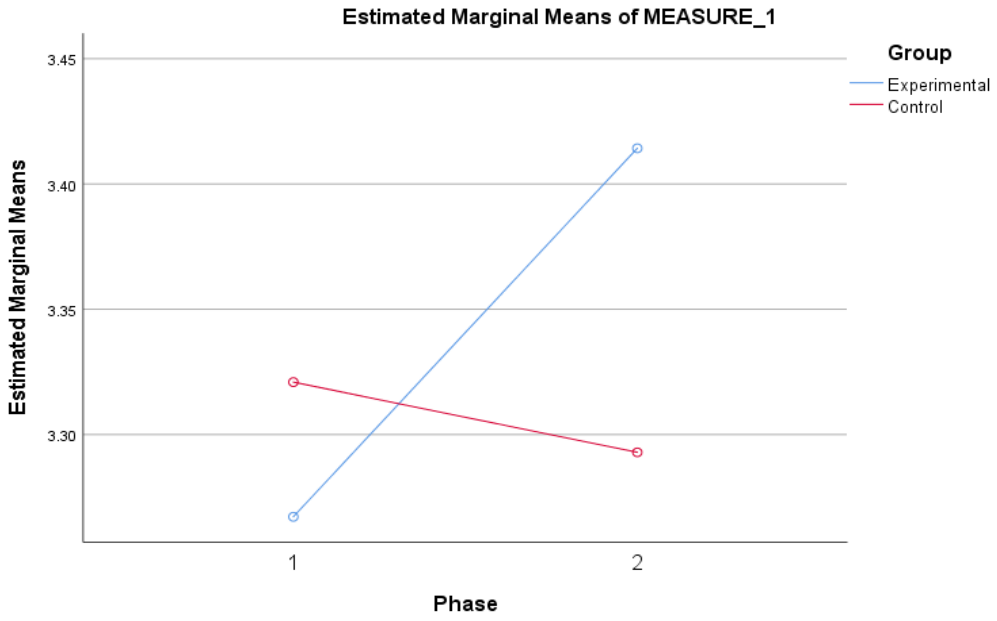

Figure 4: Teachers' perceptions of students' decision-making.

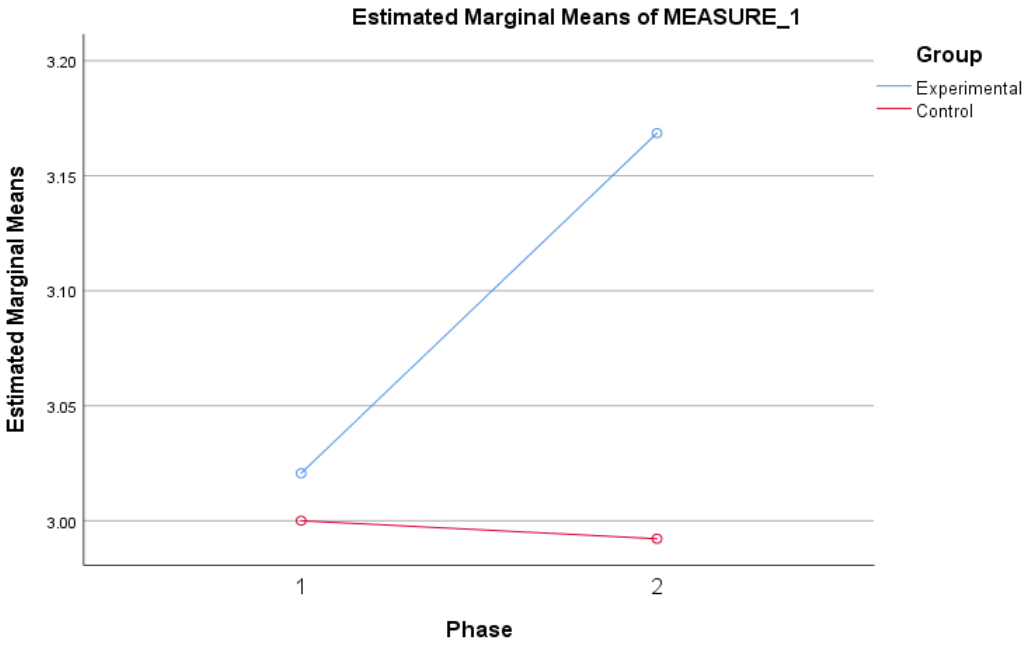

Figure 5: Teachers' perceptions of students' self-awareness.

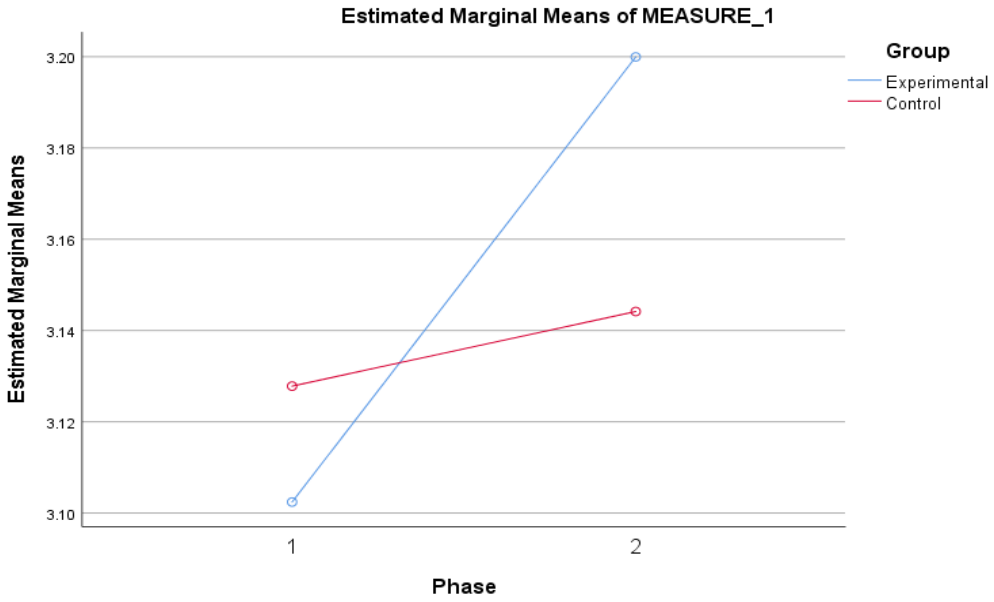

Figure 6: Teachers' perceptions of students' self-management.

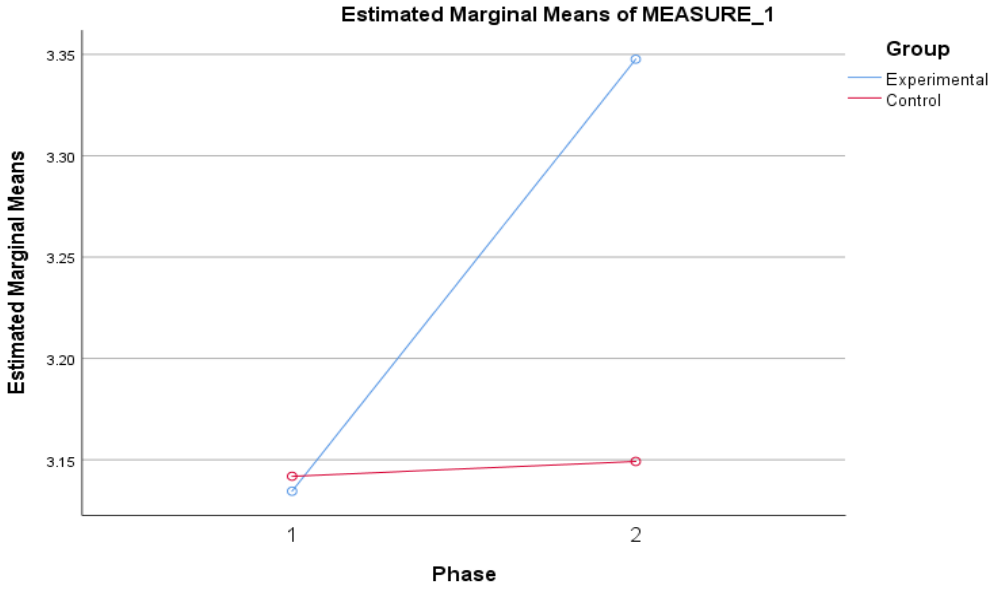

Figure 7: Teachers' perceptions of students' social awareness.

Students' Perceptions of Their Own Social and Emotional Competences

Besides teachers' perceptions of students' social and emotional competences, students themselves were asked to rate their competences before and after PROMEHS implementation. Students were matched by code to combine the pre-test and post-test scores. Only students who had scores in both tests were included in the data set. The mean test item score replaced missing values. (Table 3) presents students' ratings. According to students, there were significant differences in their social and emotional competences between experimental and control groups, providing evidence that the implementation brought about significant changes to the students who received it. Specifically, a significant

difference was found between experimental and control groups on the Relationship skills (F (1, 227) =6.73, p=.01, η_p^2 = .02), significant main effect between pre and post-test phases (F (1, 227) =5.23, p=.02, η_p^2 = .02), but non-significant interaction between group and phase (F (1, 227) =.44, p=.50, η_p^2 = .00). In a similar line, there was significant difference between experimental and control groups on the Responsible decision-making (F (1, 227) =9.32, p=.00, η_p^2 = .03), significant main effect between pre and post-test phases (F (1, 227) =8.08, p=.00, η_p^2 = .03), but non-significant interaction between group and phase (F (1, 227) =.20, p=.64, η_p^2 = .00). There was significant difference between experimental and control groups on the Self-awareness (F (1, 227) =19.09, p=.00, η_p^2 = .07). There was no significant main effect between pre and post-test phases (F (1, 227) =2.15, p=.14, η_p^2 = .02), and no significant interaction between group and phase (F (1, 227) =.12, p=.72, η_p^2 = .00). Self-management was the only subscale where no significant difference was found between experimental and control groups (F (1, 227) =3.55, p=.06, η_p^2 = .01). There was however significant main effect between pre and post-test phases (F (1, 227) =8.02, p=.00, η_p^2 = .03). No significant interaction was found between group and phase (F (1, 227) =.57, p=.45, η_p^2 = .00). Finally there was significant difference between experimental and control groups on the social awareness (F(1, 227)=6.56, p=.01, η_p^2 = .00), significant main effect between pre and post-test phases (F(1, 227)=3.62, p=.05, η_p^2 = .01), and non-significant interaction between group and phase (F(1, 227)=.10, p=.74, η_p^2 = .00), suggesting that both experimental and control groups evolve in a similar direction.

	Group	Phase	Mean	Sd	N
Relationship skills	Experimental	Pre	3.28	0.53	100
		Post	3.34	0.47	100
	Control	Pre	3.4	0.51	129
		Post	3.5	0.46	129
Responsible decision-making	Experimental	Pre	3.17	0.6	100
		Post	3.26	0.49	100
	Control	Pre	3.31	0.45	129
		Post	3.44	0.44	129
Self-awareness	Experimental	Pre	2.98	0.59	100
		Post	3.05	0.47	100
	Control	Pre	3.24	0.51	129
		Post	3.28	0.47	129
Self-management	Experimental	Pre	2.6	0.67	100
		Post	2.77	0.59	100
	Control	Pre	2.76	0.58	129
		Post	2.86	0.57	129
Social awareness	Experimental	Pre	3.25	0.61	100
		Post	3.35	0.53	100
	Control	Pre	3.4	0.5	129
		Post	3.47	0.49	129

Table 3: Students' self-reports on Social and Emotional Competences.

Discussion

The study presented a quasi-experimental cluster research investigating changes in teachers' social and emotional competences and students' social and emotional competences following the implementation of an intervention promoting mental health at schools. Previous research has mainly focused on the effect of mental health programs delivered at schools on students' outcomes with limited attention paid to teachers, as the main implementation agents [54]. This study described a novel approach to building on teachers' own social and emotional competencies as well as students' social and emotional competences, while implementing a program targeting simultaneously teachers and students' mental health. In addition, current study adds to the literature by investigating students' own perceptions of their social and emotional competences.

Our findings support the argument that SEL programs benefit not only the students, but also the teachers who deliver the programs [25]. Teachers benefit directly both teaching a SEL program to students, and indirectly when they practice and model the skills they teach [25]. Teachers of our study have been significantly impacted by the pandemic, including experiencing a large number of stressors that were linked to poor mental health, coping and teaching. Yet, PROMEHS provided teachers with valuable knowledge of how to implement meaningful social and emotional skills to themselves and their students. The PROMEHS training and implementation took place exclusively on-line, it revealed moderate changes between the experimental and control groups in teachers' social and emotional competences. Moderate change in students' social and emotional competences were reported by teachers, which were further confirmed by students' self-reports, similar to prior studies [37], where overall teachers and students do not perceive their level of social and emotional competences differently. These moderate changes in perceptions might be due to the implementation of PROMEHS program, a finding though which needs further investigation.

Our findings add to the growing empirical evidence for the positive impact of SEL programs to students [12] and teachers [1], and to the need for an epistemological and ontological paradigm shift to effective teacher preparation programs [19]. Since teachers' own social and emotional competences are key factors influencing their teaching performance and well-being, as well as student outcomes, it is imperative that they develop these competences early on [55]. Teachers who develop strong social and emotional competences are likely to recognize the importance of SEL and are better prepared to lead the implementation of SEL programs, practices and policies in their school [19]. In contrast, the absence of teachers' training on the area of intrapersonal and interpersonal competences, such as being able to identify and manage their own emotions and behaviors [4] influence their own well-being and in turn students' academic achievement [4]. Therefore, by promoting teachers' social and emotional competences we avoid the devastating ripple effects of teacher burnout and turnover in our education system [56].

Effective, engaging and evidence-based training for teachers must be designed with taking into consideration what teachers and school staff need and would like [32, 57]. Mental health training for teachers must be practical, simple and interactive. Moreover, the importance of ongoing professional development in SEL cannot be overstated [5]. Successful SEL implementation depends on effective initial staff training, ongoing coaching and support, and synergetic use of multifaceted social-emotional assessments for youth, adults and school climate [58]. When teachers take an emotional assessment, they grow an understanding of their own level of social and emotional competences and how it reflects to their teaching and classroom management [59]. Thus, professional development for teachers need to expose teachers to the same social and emotional content with their students and give them the opportunity to practice, applying these same skills in their professional work [21].

Limitations

Our study has several limitations that must be acknowledged. The context consideration that limited our efforts need to be considered during data interpretation. Greece in 2021 had school closures and remote learning due to COVID-19 pandemic. Because of this fluid situation, higher attrition rate for schools and participant than anticipated resulted, and PROMEHS training and implementation at schools were conducted exclusively via teleconference. Different picture of results would have been obtained if implementation with face-to-face activities would have been practiced. Teachers' voluntarily participation and the use of self-report measures are subject to bias and social desirability. The use of objective measures methods to assess teachers' and students' social and emotional competencies would further enhance the validity of our findings. Employing a multimethod and multi-reporter design in conjunction with direct observations should be a goal of future research addressing the questions we explore. Finally, it is also important to point out that our data were mainly descriptive precluding correlational or causal conclusions.

Although there are limitations, this research is important for several reasons. First, understanding teachers' perceptions of their own social and emotional competences could inform teacher trainers and administrators of what training and support is needed for helping teachers. Second, this study could help teachers reflect on their experiences and changes of their own competences in addition to students' competences when implementing a program. Third, the voice of students' regarding any potential changes in their social and emotional competences following a SEL

implementation provides insights to teachers who implement SEL programs. Now, more than ever teachers and students need emotional support. COVID-19 pandemic revealed that social and emotional competences of teachers are essential. Teachers' well-being need to be nurtured if students' social and emotional needs are to meet.

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