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Research Article

Teaching Self-Efficacy at Primary Education in Greece

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Abstract

The parent quantitative research deals with teaching self-efficacy in primary education in Greece. The research aims to investigate teachers' teaching self-efficacy in primary education in Greece. Specifically, an attempt is made to investigate how primary school teachers evaluate their level of self-efficacy regarding teaching tasks, managing disciplinary incidents in the classroom, and motivating students to be actively involved in the classroom and learning tasks, how the self-efficacy of primary education teachers from their educational experience and studies and what are the possible obstacles to the self-efficacy of these teachers. A sample of primary education teachers was recruited for this purpose. The research shows that the overall self-efficacy perception of teachers is exceptionally high with teachers considering themselves to be more effective in managing the classroom and implementing teaching strategies/educational approaches. Also, the self-efficacy of primary school teachers seems to be influenced by their educational experience and studies. Instead, it seems that teachers' overall self-efficacy perception is related to factors such as the stress and pressure they experience, the degree of effectiveness they generally feel as individuals, and their goals.

Keywords: self-efficacy, self-concept, teachers, primary education

Introduction

Self-efficacy comes from Bandura's socio-cognitive behavior change theory (Bandura, 1997). It refers to the teacher's belief in his/her ability to cope successfully with the tasks, obligations, and challenges related to his/her professional role, such as teaching tasks, managing discipline problems in the classroom, but also motivating students to actively participate in the learning process (Caprara et al., 2006). Several factors, including the personality traits of teachers as individuals, determine this belief. According to the Theory of Self-Determination, teachers with a controlling motive perform teaching activities because they wish to receive external rewards, such as the approval of the school principal, or to avoid feelings of guilt. On the other hand, self-motivated teachers perform teaching activities because of the intrinsic value they attach to them (Roth et al., 2007). According to Tschannen-Moran and Hoy (2001), teachers' self-efficacy is related to their perception of their effectiveness in general as individuals and their teaching experience. At the same time, Doménech Betoret and Artiga (2010) have found that the level of stress and mental fatigue of teachers negatively affect their self-efficacy, while, according to the findings of Toe and Longaretti (2022), teachers placed in schools with children of lower socioeconomic strata, but also those whose studies are not of a higher level, have low levels of self-efficacy; At the same time, Pajares and Schunk (2002) report that teachers' sense of self-efficacy is also related to the goals they set themselves. In other words, how effective teachers feel determines the professional-developmental goals they set and the effort they are willing to make to achieve their goals.

Considering the above, exploring the dimensions of teachers' self-efficacy and the factors determining it was necessary and exciting. Through this investigation, important conclusions emerge regarding their goals, which are essential for their personal educational and professional development and consequently for the adequacy and improvement of educational programs and how they are taught to students.

Self-Efficacy: Definition and Approaches

Self-efficacy is the extent or quality of one's belief in one's capacity to accomplish responsibilities and achieve goals (Ormrod, 2006). Psychologists have studied self-efficacy from various perspectives, noting different ways to improve self-efficacy. Self-efficacy is a person's judgment of their ability to compose and perform tasks to achieve optimal performance. High self-efficacy is associated with social, physical, and psychological performance. Bandura (1977), former president of the American Psychological Association, industrialized one of the most influential cognitive theories of character. It began with observational learning theory and the idea that the human being observes and thinks about his direct behavior. Bandura argued that people's belief in dominance and achievement and their beliefs determine the types of performance they will exercise and the amount of risk they will take. He used self-efficacy to describe a person's confidence in engaging in and performing a particular behavior ineffectively. Bandura (1997) says that self-efficacy has a strong effect on behavior. A strong sense of self-efficacy allows individuals to feel free, influence, and even create life situations. In addition, the perceived state of manipulating one's self-efficacy reinforces the sense that one can control it (Conyers et al. 1998). Bandura (1977) defines self-efficacy as confidence in one's ability to organize and execute the action needed to manage potential situations. It is a personal observation about one's ability to perform a task.

Thus, self-efficacy is the feeling of accomplishment that one feels in different aspects of one's life and is related to one's beliefs or subjective judgments about one's ability to control certain aspects of one's life and achieve the desired results (Bandura, 1997). In this sense, one's beliefs about one's abilities are examined, not one's

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actual abilities. The feeling of low or high self-effectiveness can vary depending on the frame of reference and has been shown to be related to one's focus on the task and the degree of commitment to it. In particular, self-effectiveness plays a decisive role in the choice of activities, effort, and perseverance. People who are aware of their abilities and have a high sense of self-efficacy make more persistent efforts to solve problems during their work and attribute their failures to their insufficient effort. At the same time, individuals who doubt their abilities and have a low sense of self-efficacy put less effort into solving problems and attribute their failures to their inadequacies (Bandura, 1977).

In addition, the sense of self-efficacy affects the individual emotionally, with high self-efficacy facilitating cognitive processes and low self-efficacy associated with feelings of anxiety, depression, and pessimistic thoughts about personal development (Schwarzer & Hallum, 2008). Consequently, individuals' beliefs about their abilities determine three essential areas of their activity (McAuley, 1992). Precisely, they determine (a) the choice of activities in which they engage; (b) the degree of effort and perseverance they demonstrate; and (c) the degree of resistance to stressful situations of the activity they have chosen. This level of efficiency (low - high) correlates positively with its performance in the workplace, i.e., the higher/lower the self-efficiency, the higher/lower the performance.

According to Bandura (1997), the formation of an individual's belief in self-efficacy is influenced by a number of key sources of information. In particular, one's past experiences and personal achievements are the most reliable source of information because any previous experience (positive or negative) affects one's self-efficacy, which affects future performance and thus creates a cyclical process (Feltz & Mugno, 1983). Also, by replacing experiences by monitoring other people's performance, the individual is significantly affected when monitoring the performance of people with whom he shares characteristics (e.g., gender, similar experiences) (Gould & Weiss, 1981). Furthermore, verbal persuasion is used to enhance one's sense of accomplishment, even when experiencing difficulties or failures (Bandura, 1977). Finally, the physical and emotional state experienced by the individual influences the person's behavior through cognitive assessment. The increase in self-efficacy depends on interpreting physiological wakefulness (Bandura, 1977).

Teaching Self-Efficacy

Teacher self-effectiveness refers to teachers' beliefs about their ability to provide quality classroom instruction (Christophersen et al., 2016) but also to influence the way students learn, even those who have difficulties or lack motivation (Guskey & Passaro, 1994). Self-efficacy influences the teacher's personal choices, motivations, and actions (Antoniou et al., 2017). Self-efficacy is significant because it relates to teacher engagement and burnout (Antoniou et al., 2022; Antoniou et al., 2023; Tsakiridou & Polyzopoulou, 2014). Tschannen–Man & Hoy (2007) illustrate the cyclical nature of teachers' self-efficacy in their model. In particular, teachers' beliefs about the factors that hinder their teaching and educational abilities, based on the four sources of information mentioned above, affect their performance and, at the same time, constitute new sources of information for their self-effectiveness. Consequently, teachers with a high sense of self-efficacy set higher goals for their personal development and their students than teachers with a low sense of self-efficacy (Ross & Bruce, 2007).

The self-effectiveness of teachers depends on the school atmosphere, the family environment, the role of the teacher in the classroom, and the students' behavior (Kyriakidis & Antoniou, 2010). In addition, good relationships between teachers and their students' parents increasingly impact teachers' self-effectiveness (Skaalvik & Skaalvik, 2010). Also, many studies have shown a positive correlation of job satisfaction with teachers' self-effectiveness (Skaalvik & Skaalvik, 2010), but also the function of their beliefs as determinants of their job satisfaction (Wang et al., 2015). In addition, other research has shown the influence of teachers' demographic factors on their self-efficacy. In particular, some studies have shown that gender is not related to teachers' self-efficacy (Odanga et al., 2015). However, according to Karimvand (2011), women tend to have higher self-efficacy than teachers with more years of service. According to Aktaş et al. (2013), Teachers' gender and years of service influence their self-efficacy. Regarding the effect of age and years of service on the self-efficacy of teachers, Motallebzadeh et al. (2014) reported that self-efficacy tends to decrease as their age and years of service increase. In addition, other research has shown that the degree of work in education (Avanzi et al., 2013), classroom, and school type (Badri et al., 2013) are significantly related to teachers' self-efficacy and effectiveness beliefs about their pedagogical role. Also, in their research, Zoniou-Sideri and Vlachou (2006) found that teachers' positive attitudes towards inclusion were associated with high self-efficacy. Moreover, interaction with people with disabilities tends to alleviate difficulties toward their inclusion (Bania et al., 2021, 2022, 2023). Moreover, attitudes toward inclusion constitute a complex phenomenon. Consequently, as many factors as possible should be examined (Charitaki et al., 2022; Kourti et al., 2023). These factors include their sense of efficacy in implementing inclusive practices and their sentiments regarding inclusion (Vogiatzi et al., 2021, 2022).

Measuring Teaching Self-Efficacy

Several researchers have measured teacher effectiveness from the primary definition of self-efficacy to a person's belief in one's ability to succeed or complete a task in specific situations (Bandura, 1997). Skaalvik and Skaalvik (2010) claim that teachers' self-efficacy is related to teaching, motivation, adaptation, discipline, cooperation, and coping. Chen and Yeung (2015) identify three categories of factors that influence teacher self-efficacy: (a) teacher factors (language, pre-service teaching, experience, student understanding); (b) student factors (student responses, classroom discipline, motivation, student-teacher relationships, age); and (c) related factors (culture, influence from other teachers, class size, resources). Poulou (2003) identifies personality, skills, motivation, preparation, active mastery, surrogate experiences, social and verbal persuasion, physiological state, and university training as sources of self-effectiveness of teachers. In addition, internationally recognized instruments measure the self-effectiveness of teachers. TSES – Teachers' Sense of Efficacy Scale – (Duffin et al., 2012) shows three areas of teaching effectiveness: (a) classroom management; (b) student engagement; and (c) teaching strategies. Another tool is the PSES – Principals' Sense of Efficacy Scale – (Isik & Derinbay, 2015), which consists of three subscales: effectiveness for management, effectiveness for teaching, and effectiveness for ethical leadership.

Aims of Research

The research aims to investigate the teaching self-efficacy of teachers in primary education in Greece. In particular, the research attempts to investigate how primary school teachers assess their level of self-efficacy in terms of teaching tasks, managing disciplinary incidents in the classroom, and motivating students to be actively involved in the classroom and learning tasks if there is a correlation between the perception of self-efficacy of teachers in the above fields, how the self-efficacy of primary school teachers is affected by their educational experience and studies and what are the possible obstacles to the self-efficacy of these teachers.

Objective

The research objective is to investigate teachers' teaching self-efficacy in primary education in Greece.

Research Questions

To achieve the objective of the study the following research questions were selected:

1. How do primary school teachers assess their level of self-efficacy in terms of teaching tasks, managing disciplinary incidents in the classroom, and motivating students to be actively involved in classroom and learning tasks?

2. How is the self-efficacy of primary school teachers affected by their educational experience and studies?
3. What are the possible obstacles to the self-efficacy of these teachers?

Methodology

Design

Research was at the core of the creation and dissemination of knowledge. Different types of research are classified based on a range of criteria, such as study application, research objectives, and information sought. However, other categories take into account the time factor for research. The most important differences between methods are the degree of understanding and explanation of phenomena as a goal of investigation, the differences between impersonal and personal roles of researchers, and the differences between constructed and discovered knowledge. Research can be qualitative or quantitative. There are different definitions for qualitative research. In general, these methods aim to address scientific and practical issues of societies and include naturalistic and interpretive approaches to different topics. These methods use various empirical materials, such as case studies, life experiences, and stories that show the routines and problems that individuals struggle with, focusing on their deep meaning and motivations that numbers cannot determine. Qualitative research aims to collect and analyze primary textual data using specific interpretative methods. Quantitative research is the method of using numerical values derived from observations. It also applies empirical evaluations to determine how much a rule or standard is met in a particular policy or program. The numerical data collected is analyzed using mathematical methods. In other words, quantitative methods determine social reality and use specific questions to obtain numerical data for these specific purposes.

Sample

In particular, the sample used in this survey consisted of kindergarten teachers and teachers (first and second grade) of primary schools approached in Athens. A total of 68 people took part in the survey.

Tool

Quantitative data collection was used for this research, and the Teaching Efficacy Instrument: Teachers' Sense of Efficacy Scale [TSES] by Tschannen-Moran & Hoy (2001) was used for data collection. The scale consists of 24 items, comprising three composite subscales: efficacy for instructional strategies, efficacy for classroom management, and efficacy for student engagement. The questionnaire used in the survey consists of the following parts:

In the first part of the questionnaire, participants were asked to provide information regarding their gender, age range, level of educational institution (kindergarten or primary school), studies, years of experience, and personal email address.

In the second part of the questionnaire, in order to investigate teachers' self-efficacy, participants will be asked to complete the Teaching Efficacy Instrument: Teachers' Sense of Efficacy Scale [TSES] by Tschannen-Moran and Hoy (2001), which was translated into Greek. The research of Tschannen-Moran and Hoy (2001) found that this questionnaire has a reliability factor of Cronbach's Alpha = .94.

In the third section of the questionnaire, participants were asked to describe general situations about themselves, such as the stress and pressure they experience, the degree of effectiveness they feel in general as individuals, and their goals as they emerge from the theoretical background of Tschannen-Moran & Hoy (2001), and Doménech & Artiga (2010), but also Toe and Longaretti (2022) and Pajares and Schunk (2002). These questions serve research objectives regarding factors influencing individuals' self-efficacy perceptions. Participants were asked to respond via a Likert 5-point satisfaction scale from "*not at all*" to "*very much*". Results are presented in Table 2 and Table 4.

Data Collection

The survey took place in March 2023. Participants were invited to answer the questionnaire through the online platform Google Forms. The sample was approached through acquaintances of the researcher's environment and the link to the online questionnaire was shared via email and in groups of preschool teachers on social media (Facebook). If they were initially positive to participate in a survey, they were informed of the title and purpose of the survey. After a positive initial response, prospective participants were given a participant information form detailing the survey and the participants' rights. Participants who wished to participate in the survey were then given a consent form, with the signature of which they would consent to participate. Participation in the survey simply consisted of answering questions in a questionnaire, which was not expected to take more than 15 minutes to complete. In the context of completing the questionnaire, in addition to the questions specific to the survey, they were asked for their gender, age range, educational institution level (kindergarten or primary school), studies, years of experience, and email address.

Data Analysis

The data obtained was gathered and encoded in a database. Then, the survey data was processed with the help of the statistical package SPSS (Statistical Package forth Social Sciences V. 22.0). This package was used as it is a popular tool for conducting statistical analyses and presenting the results in the tables.

Results

Demographic Characteristics

Sixty-eight teachers participated in the survey, the majority of which were women with a percentage of 95.6%, followed by men with 4.4%. Regarding their age range, most participants were over 45 years old with a percentage of 42.6%, followed by those up to 25 years old with 22.1%. However, representatives of all age groups participated in the survey. Regarding the level of education at which they work, most of them worked in kindergarten with a percentage of 80.9%, followed by employees in primary schools with 19.1%. Regarding the level of academic studies of teachers, most were graduates of TEI - College with a percentage of 63.2%, followed by graduates of Universities with 27.9%. Finally, regarding teachers' years of experience, the average was 18.7 years (± 12.12 years) with a minimum of one year of experience and a maximum of 37 years.

Table 1
Demographic Characteristics

Demographic characteristics	*n*	%	Valid %	Cumulative %
Sex				
Men	3	4.4	4.4	4.4
Women	65	95.6	95.6	100
Total	68	100	100.0	
Age range				
18 - 25	15	22.1	22.1	22.1
26 - 35	14	20.6	20.6	42.6
36 - 45	10	14.7	14.7	57.4
Over 45	29	42.6	42.6	100
Total	68	100	100	

Demographic characteristics	*n*	%	Valid %	Cumulative %
Education level				
Nursery school	55	80.9	80.9	80,9
Primary school	13	19.1	19.1	100,0
Total	68	100	100	
Academic studies level				
Technical Educational Institute College	43	63.2	63.2	63.2
Higher Education Institution	19	27.9	27.9	91.2
Master's degree	6	8.8	8.8	100
Total	68	100	100	
Teaching experience (Year)			*M*	*SD*
Minimum	1		18.7206	12.12478
Maximum	37			

Teaching Self-Efficacy

The second part of the research dealt with the investigation of teachers' level of self-efficacy. Participants were asked to complete the Teaching Efficacy Instrument: Teachers' Sense of Efficacy Scale [TSES]. Then, the results per questionnaire question are presented (Table 2).

On the question, "Can the most difficult students understand you?" Most teachers agreed from *very* to *very much*, with a percentage of 67.7%. To the question, "Can you help your students practice critical thinking?" Most respondents answered from *very* to *very much*, with 67.7%. To the question "Can you control disordered behavior in the classroom?" most respondents answered from *very* to *very much* with 67.7%. To the question, "Can you motivate students who show less interest in schoolwork?" Most respondents answered from *very* to *very much*, with a percentage of 66.1%. To the question, "Can you make clear your expectations about student behavior?" Most respondents answered from *very* to *very much*, with 76.5%. To the question, "Can you convince students that they can do well in school?" Most respondents answered from *very* to *very much*, with 80.9%. When asked, "Can you answer difficult questions from your students?" Most respondents answered from *very* to *very much*, 75%. To the question, "Can you enforce daily procedures so that activities run smoothly?" Most respondents answered *very* to *very much* with a percentage of 78.0%. When asked, "Can you help your students appreciate learning?" Most respondents answered a *very* to *very much*, with 73.5%. To the question, "Can you measure students' understanding of what you taught?" Most respondents answered *very* to *very much*, with 72.1%. To the question, "Can you construct good questions for your students?" Most respondents answered *very* to *very much*, with 75%. To the question, "Can you boost students' creativity?" Most respondents answered *very* to *very much*, with a percentage of 80.9%.

To the question, "Can you persuade children to follow the classroom rules?" Most respondents answered from *very* to *very much*, with 79.4%. To the question, "Can you improve the understanding of a student who fails?" Most participants answered from *very* to *very much*, with a percentage of 73.5%. To the question, "Can you calm a student who is naughty or noisy?" Most respondents answered *very* to *very much*, with 60.3%. To the question, "Can you impose a classroom management system for each group of students?" Most respondents answered from *very* to *very much*, with 69.1%. To the question, "Can you adapt your lessons to the appropriate level for each student?" Most respondents answered from *very* to *very much*, with a percentage of 67.6%. To the question, "Can you use a variety of evaluation strategies?" Most respondents answered from *very* to *very much*, with 57.4%.

To the question, "Can you prevent some problem students from ruining an entire lesson?" Most respondents answered from *very* to *very much*, with 63.2%. To the question, "Can you provide an alternative explanation or example when students are confused?" Most respondents answered from *very* to *very much*, with 73.5%. To the question, "Can you deal with quarrelsome students?" Most respondents answered *very* to *very much*, with a percentage of 46.1%, followed by those who answered about 42.6%. When asked, "Can you help families help their children do well in school?" Most respondents answered from *very* to *very much*, with 70.6%. To the question "Can you implement alternative strategies in your classroom?" most respondents answered from *very* to *very much*, 67.6%. To the question "Can you provide appropriate challenges for highly capable students?" most respondents answered from *very* to *very much* with a percentage of 70.6%.

Table 2
Teaching Self-Efficacy

Questions	Not at all	Little	Relatively	Very	Very much
1. Can you be understood by the most difficult students?	1 (1.5%)	1 (1.5%)	20 (29.4%)	39 (57.4%)	7 (10.3%)
2. Can you help your students practice critical thinking?	1 (1.5%)	2 (2.9%)	19 (27.9%)	39 (57.4%)	7 (10.3%)
3. Can you control disordered behavior in the classroom?	1 (1.5%)	1 (1.5%)	20 (29.4%)	39 (57.4%)	7 (10.3%)
4. Can you motivate students who show reduced interest in schoolwork?	0 (0%)	4 (5.9)	19 (27.9%)	36 (52.9%)	9 (13.2%)
5. Can you make clear your expectations about student behavior?	0 (0%)	2 (2.9%)	14 (20.6%)	41 (60.3%)	11 (16.2%)
6. Can you convince students that they can do well in school?	0 (0%)	2 (2.9%)	11 (16.2%)	45 (66.2%)	10 (14.7%)
7. Can you respond to difficult questions from your students?	0 (0%)	2 (2.9%)	15 (22.1%)	42 (61.8%)	9 (13.2%)
8. Can you enforce daily procedures so that activities run smoothly?	0 (0%)	2 (2.9%)	13 (19.1%)	39 (57.4%)	14 (20.6%)
9. Can you help your students appreciate learning?	0 (0%)	2 (2.9%)	16 (23.5%)	39 (57.4%)	11 (16.2%)
10. Can you measure students' understanding of what you taught?	0 (0%)	5 (7.4%)	14 (20.6%)	37 (54.4%)	12 (17.6%)
11. Can you construct good questions for your students?	1 (1.5%)	2 (2.9%)	14 (20.6%)	41 (60.3%)	10 (14.7%)

Questions	Not at all	Little	Relatively	Very	Very much
12. Can you boost students' creativity?	2 (2.9%)	0 (0%)	11 (16.2%)	39 (57.4%)	16 (23.5%)
13. Can you convince children to follow the rules of the class?	1 (1.5%)	1 (1.5%)	12 (17.6 %)	44 (64.7%)	10 (14.7%)
14. Can you improve the understanding of a student who fails?	2 (2.9%)	1 (1.5%)	15 (22.1%)	43 (63.2%)	7 (10.3%)
15. Can you calm a student who is naughty or noisy?	0 (0%)	3 (4.4%)	24 (35.3%)	31 (45.6%)	10 (14.7%)
16. Can you impose a class management system for each group of students?	0 (0%)	3 (4.4%)	18 (26.5%)	36 (52.9%)	11 (16.2%)
17. Can you tailor your lessons to the appropriate level for each student individually?	1 (1.5%)	2 (2.9%)	19 (27.9%)	37 (54.4%)	9 (13.2%)
18. Can you use a variety of evaluation strategies?	0 (0%)	3 (4.4%)	26 (38.2%)	34 (50%)	5 (7.4%)
19. Can you prevent some problem students from ruining an entire lesson?	0 (0%)	4 (5.9%)	21 (30.9%)	35 (51.5%)	8 (11.8%)
20. Can you provide an alternative explanation or example when students are confused?	1 (1.5%)	3 (4.4%)	14 (20.6%)	37 (54.4%)	13 (19.1%)
21. Can you deal with quarrelsome students?	1 (1.5%)	6 (8.8%)	29 (42.6%)	23 (33.8%)	9 (13.2%)
22. Can you help families help their children do well in school?	1 (1.5%)	7 (10.3%)	12 (17.6%)	36 (52.9%)	12 (17.6%)
23. Can you implement alternative strategies in your classroom?	2 (2.9%)	1 (1.5%)	19 (27.9%)	39 (57.4%)	7 (10.3%)
24. Can you provide suitable challenges for highly capable students?	1 (1.5%)	5 7.4	14 (20.6%)	39 (57.4%)	9 (13.2%)

Of the previous questions, questions 1 - 8 concern teachers' self-perception of their ability to implement teaching strategies/educational approaches (Score 1), questions 9 - 16 concern teachers' self-perception of their classroom management competence (Score 2), and questions 17 - 24 concern teachers' self-perception of their ability at the level of student engagement (Score 3).

Table 3 shows the *M* and *SD* values of the above results. As can be seen, a higher average value appears in teachers' self-perception of their ability at the class management level (*M* = 3.84), followed by teachers' self-perception of their ability to implement teaching strategies/educational approaches (*M* = 3.82), and finally teachers' self-perception of their ability at the level of student engagement (*M* = 3.70).

Finally, an audit was carried out to determine whether the self-efficacy of primary school teachers is affected by their educational experience and studies. A Chi-square audit found no statistically significant difference between the perceived self-efficacy of primary school teachers and their educational experience or level of education.

Table 3
Teachers' Self-Perception

Subscales	Min.	Max.	*M*	*SD*
Score1	1.63	5.00	3.82	.54
Score2	1.50	5.00	3.85	.61
Score3	1.50	5.00	3.70	.64

Note. *N* = 68.
Min. = minimum; Max. = maximum.

General States of Self

In the last part of the questionnaire, participants were asked to describe general situations about themselves, such as the stress and pressure they experience, the degree of effectiveness they feel in general as individuals, and their goals, which are factors that influence individuals' perception of self-efficacy (Table 4).

To the question, "Do you feel that you are effective in what you do in your life?" Most respondents answered from *very* to *very much*, with a percentage of 76.5%. To the question, "Do you feel that you do not have anxiety in general?" Most respondents were *relatively* about 41.2%, followed by those who answered *not at all* to *little* 39.7%. To the question, "Do you feel that you have not suffered fatigue from your volume and working hours?" Most respondents answered *relatively* with 45.6%. To the question, "Do you feel satisfied with your personal and professional development goals?" Most respondents answered from *very* to *very much*, with 73.5%. To the question, "Do you feel that you are at a good level in terms of fulfilling the goals you have set?" Most respondents answered from *very* to *very much* 78%.

Table 4
General States of Self

Questions	Not at all	Little	Relatively	Very	Very much
1. Do you feel that you are effective in what you do in your life?	1 (1.5%)	3 (4.4%)	12 (17.6%)	47 (69.1%)	5 (7.4%)
2. Do you feel that you do not have anxiety in general?	8 (11.8%)	19 (27.9%)	28 (41.2%)	10 (14.7%)	3 (4.4%)
3. Do you feel that you are not tired from your volume and working hours?	8 (11.8%)	16 (23.5%)	31 (45.6%)	11 (16.2%)	2 (2.9%)
4. Do you feel satisfied with your personal and professional development goals?	0 (0%)	6 (%)	12 (17.6%)	31 (45.6%)	19 (27.9%)
5. Do you feel that you are at a good level in terms of fulfilling the goals you have set?	0 (0%)	5 (7.4%)	10 (14.7%)	39 (57.4%)	14 (20.6%)

A test was then carried out to see if the above factors affect teachers' perception of self-efficacy. Table 5 shows teachers' self-perception of their ability to implement teaching strategies/educational approaches (Score 1) is influenced by all factors 1 - 5 examined. Teachers' self-perception of their classroom management competence (Score2) and teachers' self-perception of their ability at the level of student engagement (Score 3) is influenced by factors 1, 3, 4, and 5 examined. Overall, teachers' overall perception of self-efficacy was found to relate to all five factors.

Table 5
Correlation of Teachers' Self-Perception with the Five Self-Related Factors

Questions	Statistical criterion	Score1	Score2	Score3	Overall self-perception
1. Do you feel that you are effective in what you do in your life?	Pearson correlation	.55**	.46**	.41**	.50**
	Sig. (2 - tailed)	.00	.00	.00	.00
2. Do you feel like you don't have anxiety in general?	Pearson correlation	.28*	.24	.23	.26*
	Sig. (2 - tailed)	.02	.05	.06	.03
3. Do you feel that you are not tired from your volume and working hours?	Pearson correlation	.31*	.29*	.26*	.30*
	Sig. (2 - tailed)	.01	.02	.03	.01
4. Do you feel satisfied with your personal and professional development goals?	Pearson correlation	.37**	.40**	.43**	.43**
	Sig. (2 - tailed)	.00	.00	.00	.00
5. Do you feel that you are at a good level in terms of fulfilling the goals you have set?	Pearson correlation	.43**	.50**	.46**	.49**
	Sig. (2 - tailed)	.00	.00	.00	.00

Note. *N* = 68.
Correlation is significant at the .05 level (2-tailed)* and at the .01 level (2-tailed)**.

Discussion

One of the premises of socio-cognitive theory (Bandura, 1997) is that human functioning involves a dynamic interaction of intrapersonal, behavioral and environmental factors linked together by a triadic mutual codetermination. Individuals are seen as agents who deliberately influence their functioning and the course of events in their lives. Their action is based on corresponding beliefs of self-efficacy, which are influenced by various behavioral and environmental factors. Specifically through experiences of domination, substitutionary experiences (i.e., social model), social persuasion, and physiological and emotional states (Bandura, 1997). Self-efficacy beliefs influence the quality of human functioning through cognitive, motivational, emotional and decision-making processes. These beliefs shape expectations about the outcome of individuals, the causal attributions of successes and failures, and how individuals motivate themselves and maintain their attitude in the face of obstacles. In addition, self-efficacy affects individuals' beliefs about their coping abilities, mechanisms for regulating emotions, and vulnerability to stress and depression. Finally, self-efficacy beliefs can influence individuals' choices at important points in their lives, potentially shaping their lives and what they become.

Self-efficacy beliefs are specific and manifest differently depending on the activity and situation. In teaching, teacher self-efficacy refers to teachers' beliefs in their abilities to teach their subject and achieve student engagement and learning outcomes even when teaching challenging students (Tschannen-Moran & Hoy, 2001). In general, people with high self-efficacy beliefs perform better at work, as they tend to work harder, are more persistent, and experience lower levels of stress (Bandura, 1997). In this light, teachers with a strong sense of effectiveness invest more time in planning, are better organized, are more open to new ideas and methods, show greater enthusiasm for teaching, and tend to be more persistent in working with students (Tschannen-Moran & Hoy, 2001). Indeed, research shows that teacher self-efficacy is related to various indicators of teacher performance, such as students' academic performance and motivational beliefs, as well as teachers' teaching quality (Klassen & Tze, 2014).

Modern concepts of teaching quality state that the impact of teachers and classrooms on student learning is achieved through interactions between teachers and students. For example, the teaching through interactions framework suggests that there are three important areas of classroom teaching: classroom organization (which promotes positive behavior and attention), educational support (which enhances learning), and emotional support (which promotes students' social development). Similarly, Praetorius et al. (2018) believe three key dimensions of framework: classroom management, cognitive activation, and a supportive climate are critical to learners' learning and motivation. Classroom management includes providing well-structured and organized instruction and demonstrating effective student behavior management that ensures enough time for learning activities and promotes student learning and achievement as well as motivation (Schlesinger & Jentsch, 2016). Cognitive activation refers to one's ability to engage students in higher-order thinking skills and demanding tasks, encourage students to understand content in-depth, and stimulate exploration of concepts, ideas, and prior knowledge (Pianta et al., 2012; Schlesinger & Jentsch, 2016) and is related to students' participation in higher-level thought processes and metacognition (Baumert et al., 2010).

Finally, the supportive climate focuses on aspects of self-determination theory (Deci & Ryan, 1985). It refers to one's ability to demonstrate characteristics of the teacher-student relationship, such as constructive feedback during teaching, a positive approach to students' mistakes and misconceptions, and caring behavior (Klieme et al., 2009). This dimension of teaching quality is thought to enhance student well-being and learning motivation (Praetorius et al., 2018). In their synthesis of 40 years of TSE research, Zee and Koomen (2016) concluded that teachers with high levels of self-efficacy tend to effectively address a range of problematic student behaviors in the classroom, use proactive and student-centered behavior strategies in the classroom, and build positive relationships with their students. Moreover, the existing empirical evidence clearly supports the relationship between teacher self-efficacy and dimensions of teaching quality. For example, teachers with a strong sense of effectiveness tend to create a supportive environment in the classroom, give cognitive activation guidelines and organize classroom activities effectively.

Student motivation is a process through which learning or achievement activity directed towards goals is stimulated and maintained. According to a socio-cognitive view of motivation, motivational beliefs, values, and goals are critical. For example, the expectation-value theory of success motivation argues that students' choices, perseverance, and performance in an activity can be explained by their motivational beliefs. That is, their confidence, expected return, and perceived value of the activity (i.e., achievement value, intrinsic value, utility value, and cost) can affect their level of commitment and perseverance in an activity. Students' expectations and values are shaped by goals, self-shapes, and perceptions of the demands of their tasks, rooted in perceptions of their past experiences and various influences of

socialization. Therefore, teachers (and their teaching behaviors) can play an important role in shaping students' motivational beliefs, i.e., expectations and values. More specifically, ensuring that students are attentive and receive adequate cognitive stimuli and opportunities for success, along with fulfilling their needs in a self-determined way, can boost their confidence levels and expectations for success, as well as the subjective value they attach to learning tasks.

Conclusion

The research objective was to investigate the teaching self-efficacy of teachers in primary education in Greece. More specifically, an attempt was made to investigate how primary school teachers assess their level of self-efficacy in terms of teaching tasks, managing disciplinary incidents in the classroom, and motivating students to engage in classroom and learning tasks actively, how the self-efficacy of primary school teachers is affected by their educational experience and studies and what are the possible obstacles to self-efficacy of these teachers.

The survey found that teachers' overall perception of self-efficacy is exceptionally high, believing they are more effective in managing the classroom and implementing teaching strategies/educational approaches. It was also found that the self-efficacy of primary school teachers is affected by their educational experience and studies. On the contrary, it was found that teachers' overall perception of self-efficacy is related to factors such as the stress and pressure they experience, the degree of effectiveness they feel as individuals, and their goals.

Although self-efficacy is an intrapersonal variable that captures key aspects of human action (Bandura, 1997), it also responds to other influences (Klassen & Tze, 2014). Therefore, the results of this research have important educational implications for both teachers and their students. High-quality teacher education programs for pre-service teachers and professional development programs for in-service teachers could enhance self-efficacy to promote their teaching quality. In addition, training teachers to be competent class leaders, create a supportive classroom climate, and know how to stimulate higher-order thinking can strengthen students' motivational beliefs. Finally, improving teacher teaching quality can promote student outcomes and teachers' sense of own effectiveness, as these teaching behaviors also represent sources of self-efficacy for teachers. However, these suggestions should be treated carefully.

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