


The Effect of a Teacher Empowerment Programme on the Resilience Levels of Primary School Teachers

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Abstract

The aim of the study is to examine the effect of a Teacher Empowerment Programme on the resilience levels of primary school teachers working with disadvantaged students in Turkey and the views of teachers about the effectiveness of the programme. In the study, the Teacher Empowerment Programme which contains various protective factors was implemented on the participants in the experimental group, and no intervention was made in the control group. Five different data collection tools were used. In the data analysis, a two-way ANOVA for mixed measures with the SPSS 23 package program, descriptive analysis, and content analysis were utilised. The findings reveal that the programme was effective in resilience by developing the participants' protective factor characteristics, self-esteem levels, and coping with stress attitudes. It was also concluded that the participants held positive views about the programme.

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INTRODUCTION

The quality of education is, to a large extent, affected by the ability of teachers to transfer the knowledge they have to the educational environment. In this sense, teachers' opportunities for professional development aimed at increasing their professional skills are beneficial for many elements of the education system. Particularly in disadvantaged schools, all efforts to develop the climate can be effective for the teachers (Gu & Day, 2013). For both student success and the functioning of the educational system, it is important for teachers to be resilient and to feel empowered in their work climate. Studies aimed at increasing protective factors are crucial for individuals to feel empowered and to promote resilience. It is considered that by increasing resilience and protective factors, implementations developed to empower teachers will make it possible for teachers to gain more satisfaction from their professions, to become more committed to their professions and institutions, to experience fewer feelings of stress and burnout, and to work in cooperation with their colleagues. Thus, this study was carried out to flourish teachers' characteristics of resilience by providing an educational environment where they can engage with their colleagues through the Teacher Empowerment Programme, which includes some protective factors that affect resilience.

Because concern for better understanding of emotional health and teachers' resilience is beneficial for improving the quality of education, this concern is becoming increasingly important (Jones et al., 2013). Although the importance of studying resilience against professional stress has been understood (Day & Gu, 2014; Taggart, 2015), the number of studies conducted on teachers is limited. No experimental study on teachers' resilience characteristics could be found within the scope of the reviewed literature. Considering the difficulties of the teaching profession and the adverse situations that teachers working with disadvantaged groups can encounter, any kind of intervention that can help deal with these problems is critical. This study is expected to create positive professional and social changes by providing teachers with experiences that enable understanding and increasing protective factors. Empowering both individual and external resources of teachers could serve as a buffer against the adverse effects of the risks in the schools. This study is considered to serve as a guide for practices carried out to improve protective factors that teachers have and to promote their resilience in a professional sense.

The study aims to examine the effect of a Teacher Empowerment Programme on the resilience levels of primary school teachers working with disadvantaged students in Turkey and the views of teachers about the effectiveness of the programme. Within the scope of the study, answers were sought for the following research questions:

1. Is there a significant difference between the pretest, posttest, and retention test of protective factors, self-esteem, and coping with stress scores in favour of the experimental group?
2. What are the views of participants in the experimental group about the effectiveness of the Teacher Empowerment Programme?

CONCEPTUAL FRAMEWORK

EMPOWERMENT

Empowerment is defined as supporting and motivating the human resources in institutions to achieve corporate goals (Griffin & Moorhead, 2013). As Spreitzer (1995) stated that, individuals' motivation levels and working efficiency increase when they feel empowered in the work atmosphere. Empowering is approached in two dimensions, structural and psychological. Structural empowerment is the ability of an organization to provide information, resources, support, and opportunities to its employees (O'Brien, 2010), and psychological empowerment is employees' perceptions of whether they feel empowered (Thomas & Velthouse, 1990). Empowerment of teachers is possible if they have

qualities such as autonomy, participation in the decision-making process, benefiting from opportunities for professional development, and occupational self-efficacy (Short, 1994). Because empowerment is associated with several protective factors related to resilience, orientation towards increasing teachers' characteristics of resilience is a major requirement as a starting point for teacher empowerment efforts. By the efforts to empower their teachers, schools can have a school climate for increasing resilience by implementing programmes that contribute to teachers' development, assist them to advance their hopefulness and coping skills, and provide their participation in the decision-making process (Lai-kuen Lo, 2014).

RESILIENCE

Resilience is the ability of individuals, when they encounter a situation that involves risks, to get rid of the negative effects of that situation successfully, and to return to their previous states (Masten, 2001). Although the term resilience is used to express a personality characteristic that exists in the individual from birth, in recent years it has been regarded as a characteristic that can be developed (Luthar et al., 2000). Studies on resilience emphasise the need to examine the risk factors that cause the occurrence or continuance of damaging conditions that individuals find themselves in, and the protective factors that enable them to survive in difficult circumstances (Kumpfer, 1999; Rutter, 1990). Bronfenbrenner (1979) states that it is necessary to plan these studies by considering individuals' values and attitudes based on a social-ecological approach. This approach lays stress on the mutual interaction between environment and the internal and external factors that affect their behaviours (Bronfenbrenner & Evans, 2000), and examines the relationship between the surrounding and context in which they are located during their development process (Bronfenbrenner, 1979). According to this approach, environmental factors, such as family and friends, occupy a substantial place in the definition of resilience (Ungar, 2013). The social-ecological approach has been a guide in planning all the stages of this research.

TEACHER RESILIENCE, RISK AND PROTECTIVE FACTORS

Resilience in teachers is defined as the capacity to cope with and adapt to troubling circumstances, and the ability to enhance social, academic, and professional competence when subjected to stressful situations or when under everyday life stress (Henderson & Milstein, 2003). According to Patterson et al. (2004), in resilient teachers, the qualities of possessing individual values that affect the decision-making process, giving importance to personal development and striving for development, being benevolent, recovering swiftly, solving problems effectively, establishing supportive relationships, and discovering new ideas are found. Resilience is a key characteristic required by teachers to provide effective education, improve professional satisfaction, adapt successfully to changing circumstances, and ability to be a role model (Bobek, 2002; Gu & Day, 2007; Howard & Johnson, 2004).

In the literature, risk factors such as disadvantaged students, unsupportive management, inadequate facilities, negative relationships with parents and colleagues, and unfavourable location of the school are expressed as examples of risk factors faced by teachers (Beltman et al., 2011; Bullough et al., 2012; Day, 2012; Kaldi, 2009; Lai-kuen Lo, 2014; Sinclair, 2008). It is known that these factors cannot be reduced to a certain geographical characteristic and that these are universal issues that teachers serving in many countries can face. Protective factors can include individual characteristics, family and environmental factors, or situations that result from the interaction of these dimensions (Greene & Conrad, 2002). Examples of individual protective factors are self-efficacy, professional competence, self-esteem, intrinsic motivation, coping, communication skills, and problem-solving. Colleague and management support, organizational commitment, relationship with students, supportive family relationships, positive school climate, professional development opportunities can also be given as examples of family and social environmental factors (Bobek, 2002; Brunetti, 2006; Day,

2008; Gu & Day, 2007; Howard & Johnson, 2004; Sinclair, 2008; Tait, 2008; Woolfolk-Hoy & Burke-Spero, 2005).

METHOD

RESEARCH DESIGN

Mixed method was used in this research. Teddlie and Tashakkori (2010) define mixed research methods as a research design in which quantitative and qualitative approaches are used together in the research methods and processes of data collection, analysis, and interpretation. The advantages of mixed methods are that the possibility of missing data is reduced and the two methods together strengthen the research (Creswell, 2012). This study comprises a combination of quantitative and qualitative data. The data collection and analysis process was structured according to a sequential descriptive design. According to Creswell (2003), in a sequential explanatory design, gathering and analysing quantitative data is followed by the collection and analysis of qualitative data. In research, qualitative data are collected to assist the explanation of the quantitative data, and the priority of the study is in the quantitative dimension. In this study too, the process of collection and analysis of the quantitative data is followed by the collection and analysis of the qualitative data.

The quantitative dimension of the study is designed as the pretest-posttest-retention test control group quasi-experimental design. In planning the research process, factors that may affect internal and external validity have been taken into consideration. For this purpose, the experimental and control groups of the study were formed by considering experimental mortality that might occur during training, and the groups comprised individuals with similar characteristics. All measurements were carried out with the same tool, and a certain interval was given between the measurements. It was intended that the study should be regarded as a normal education process rather than an experimental study, and the experimental group was not given detailed information about the process. The implementation was carried out with all the teachers employed at the same school.

In the second stage, a programme evaluation form was applied to the participants in the experimental group on completion of the sessions, and semi-structured interviews were held. Because it was suitable in terms of participant profiles and timing, a focus group interview was planned as part of the research. Considering the weak aspects of the focus group, such as the fact that planning and conducting are difficult and that each participant may not display the same level of engagement (Yıldırım & Şimşek, 2008), individual interviews were also utilised during the research process. In this way, by using different data collection techniques, the aim was to get more in-depth data related to the experiences of participants who were subjected to the programme and to their views about the programme. The symbolic view of the research design is shown in Table 1.

Table 1. Research Design

<i>Groups</i>	<i>Pretest Assessments</i>	<i>Procedure</i>	<i>Posttest Assessments</i>	<i>Procedure</i>	<i>Procedure</i>	<i>Retention Assessments</i>
Experimental	PFS*	Implementation of Teacher Empowerment Programme	PFS*	Implementation of Programme Evaluation Form	Conducting focus group interview and individual interviews	PFS*
	RSES**		RSES**			RSES**
	ICSA***		ICSA***			ICSA***
Control	PFS*	-----	PFS*	-----	-----	PFS*
	RSES**		RSES**			RSES**
	ICSA***		ICSA***			ICSA***

*PFS: Protective Factors Scale for Primary School Teachers

**RSES: Rosenberg Self-Esteem Scale

***ICSA: Inventory of Coping with Stress Attitudes

PARTICIPANTS

The study group consisted of primary school teachers employed at a primary school in Aydın, Turkey. To determine the study group, the criterion sampling method was used. The school where the implementation was to be made possessed at least one risk factor was taken as the first criterion. An attempt was made to identify schools with inadequate physical facilities where disadvantaged students are educated in risky areas. The second criterion was set as that the number of teachers employed at the school was at least 15, allowing because there might be a loss of test subjects during the implementation. Two of the four schools having these characteristics were not willing to take part in the implementation, but permission was given for the application of data collection tools. Thus, one of these schools was selected as the control group. One of the other two schools was specified as the experimental group; the other one was designated as the pilot scheme school. Personal information about the study group is presented in Table 2.

Table 2. Personal Information About the Participants

	Personal Information	Experimental Group		Control Group	
		n	%	n	%
Gender	Female	15	68	14	74
	Male	7	32	5	26
Age Range	31-40 years	5	23	10	53
	41-50 years	10	45	7	37
	51-60 years	7	32	2	10
Professional Experience	0-10 years	2	9	1	5
	11-20 years	4	18	10	53
	21-30 years	10	46	6	32
	31-40 years	6	27	2	10

To determine whether the experimental and control groups were equal before the implementation, the results of the pretests were compared. First, to determine whether the groups showed normal distribution, the Shapiro-Wilk test results were examined. It was seen that the pretest means of the experimental and control groups satisfied the normality assumption. To find out whether there was a significant difference between the pretest means of the groups, an independent sample t-test was performed. Findings in the comparison of the groups by the pretest results are shown in Table 3.

Table 3. Comparison of Experimental and Control Groups by Pretest Results

Pretests	Groups	n	x	s	sd	t	p
	Control	19	105.53	8.76			
Rosenberg Self-Esteem Scale	Experimental	22	1.63	.95	39	0.192	.849
	Control	19	1.57	.96			
Inventory of Coping with Stress Attitudes	Experimental	22	103.18	13.24	39	1.530	.134
	Control	19	97.47	10.14			

As seen in Table 3, there is no significant difference between the scores. It can be said that the participants in the groups were equal before the implementation. The study group for the second stage comprised 12 primary school teachers from the experimental group. A focus group interview was carried out with six participants, and individual semi-structured interviews were held with a further six participants from the same group.

DATA COLLECTION TOOLS

The measurement tools used in the study were determined under the content of the developed programme. For this purpose, Protective Factors Scale, which has four sub-dimensions relevant to the programme, Self-Esteem Scale and Inventory of Coping with Stress Attitudes inventory, which are included the other factors in the programme, were used.

PROTECTIVE FACTORS SCALE FOR PRIMARY SCHOOL TEACHERS

This scale was developed by Üstündağ et al. (2018) to determine the protective factors that teachers have. It comprises of 18 items and 4 factors. These factors are named as individual characteristics (professional self-perception and competence perception), job satisfaction, organizational commitment and sense of belonging, and perception of administrative support. These factors explain 62.40% of the total variance. As a result of the confirmatory factor analysis, it was concluded that the fit indices were acceptable. In the study made to test the criterion validity, the Pearson correlation coefficient of the scale with the General Self-Efficacy Scale and Resilience Scale were significant. Cronbach's alpha reliability coefficient was calculated as .87 for the whole scale, .86 for the first sub-dimension, .74 for the second sub-dimension, .78 for the third sub-dimension, and .72 for the fourth sub-dimension while the test-retest reliability coefficient was calculated as .96.

ROSENBERG SELF-ESTEEM SCALE

This scale was developed by Rosenberg (1965), the translation of the scale into Turkish and Turkish validity-reliability studies were carried out by Çuhadaroğlu (1986). The scale includes subscales tested in different ways. The questions on the scale, which include 10 questions, are scored with the Guttman assessment method. The highest obtainable score is 6. A score of 0-1 indicates high self-esteem, 2-4 means moderate self-esteem, and 5-6 shows low self-esteem. In this study, the general reliability coefficient was recalculated following the pretests and was found to be .62.

INVENTORY OF COPING WITH STRESS ATTITUDES

This scale was developed by Özbay (1993), and adapted to Turkish by Özbay & Şahin (1997). It consists of 43 items and six factors. The sub-dimensions of the inventory are active planning, seeking outside assistance, seeking refuge in religion, avoidance-abstraction (emotional and factional), avoidance-abstraction (biochemical), and acceptance-cognitive restructuring. These factors explain 50.2% of the total variance, and the general reliability coefficient was calculated as .81. In the validity study, which was conducted with the aid of a similar scale, a relationship with a significance level of .54 was found. In this study, the general reliability coefficient was recalculated following the pretests and found to be .72.

INTERVIEW FORM

During the preparation, interview forms prepared for similar aims were examined, and the subject headings were extracted in line with the aim of the research. Open-ended questions were prepared in which participants could express their views about the programme. After the revisions were made following consultation with two experts, who are experienced in qualitative research and are specialised in Guidance & Psychological Counseling and Curriculum & Instruction, the final version of the form contains questions in which views regarding the positive and negative aspects, the content, implementation process of the programme, group members, implementer features, and recommendations of the participants are asked for. Examples of questions; what are your thoughts on the positive and negative aspects of the implemented program? What benefits do you believe it will bring you? How do you evaluate the information and activities in the program's content, the implementation process, the duration of the program, and its practitioner characteristics?

PROGRAMME EVALUATION FORM

The questions included in the form were prepared by considering characteristics that allowed participants to evaluate every session, such as that they were easy to understand and open-ended, they were not multidimensional, they did not include orientation (Yıldırım & Şimşek, 2008), and they conformed to the aim of the research (Patton, 1990). After consultation with experts, the form took its final version. The form includes nine open-ended questions containing assessments of all sessions about subjects, such as the effectiveness of the programme and expected benefits of the programme.

THE DEVELOPMENT OF THE TEACHER EMPOWERMENT PROGRAMME

While the programme was being created, a needs analysis including a review of the related literature, semi-structured interviews, and implementation of a needs analysis form was utilised. In preliminary interviews, an attempt was made to determine the areas in which the participants experienced difficulties in their professional lives, and they were asked what kind of training they had chosen. Similarly, in the needs analysis form, participants' preference for training programmes was asked. As a result of the needs analysis, the protective factors regarding the teachers were defined, and the creation of the programme content was planned in the context of these factors. Regarding ways of increasing protective factors in the teachers and what could be done to empower the teachers, previous experimental studies, psychological counselling techniques and group counselling practices were examined, and the subjects to be dealt with were included in the programme by creating educational activities. Next, a draft plan about the content of the programme and the implementation process was created. The draft was evaluated by obtaining the views of specialists, and the programme was decided on. The programme was structured in a way to include variables that raise protective factors and individuals' probability of coping with hard conditions. Thus, content and activities are organized to improve professional competence, self-esteem, coping with stress, and effective communication skills, and to enhance organizational commitment, in-house social support, and professional satisfaction. The general framework of the Teacher Empowerment Programme is presented in Table 4.

Table 4. *The General Framework of the Teacher Empowerment Programme*

The aim of the programme	Promoting teachers' characteristics of resilience
Approach the programme is based on	Social-ecological approach
Programme type	Instruction-oriented, group-focused, activity-based
Participants	Primary school teachers working with disadvantaged groups
Characteristics	The programme considers teachers' needs. Before the implementation, the group members were informed about the aims of the programme. Techniques such as discussion and question-answer were used. Written-visual materials were benefited during the implementation. Computer, projection, internet, worksheets, and study files were used. Collaboration and effective participation were structured supportively, and in such a way that every participant could express his/her opinions. The programme includes 10 sessions and the sessions were planned to last 75 minutes on average.
Content	Introduction to the programme and the concept of resilience, resilience in teachers, self-esteem, coping with stress, in-house social support, organizational commitment/Job satisfaction in teaching, effective communication, professional competence (teaching methods and techniques/educational technology), conclusion.
Expected outcomes	Participants will be familiar with the concept of resilience, create an awareness of protective factors and risk factors, perceive the importance of increasing protective factors, reinforce their self-esteem, and boost their skills for coping with stress.

THE PILOT SCHEME

The pilot scheme was applied by researchers on teachers working in a primary school in the central district of Aydın Province in the spring term of the 2017-2018 academic year, in such a way as to include three sessions. Totally 35 primary school teachers took part, and each session lasted 75 minutes on average. Through this study, the applicability of the programme was tested, and with the revisions considered necessary by the experts, the programme was made ready for implementation.

DATA COLLECTION AND DATA ANALYSIS

The implementation was carried out under the leadership of the researchers over 7 weeks at the school where the participants were employed. First, pretests were conducted with the experimental and control groups, and then the Teacher Empowerment Programme was implemented on the participants in the experimental group. Posttests were carried out with both groups at completion of the experimental process, while retention tests were performed eight weeks later. After the completion of the last session, a general evaluation form was applied to the participants in the experimental group to determine their views about the programme. Two weeks after the sessions ended, a focus group interview was conducted with the participants and the individual interviews were conducted during the same week. The interview times were determined in line with the participants' preferences in accordance with their lessons and workload.

The SPSS 23 software program was used for the analysis of the data obtained from the pretest, posttest, and retention measurements. To determine whether there were differences between the groups' pretest, posttest, and retention scores, a two-way anova for repeated measures was used. For analysis of the qualitative data, descriptive analysis and content analysis were used together. The analysis of qualitative data is examined in the three stages proposed by Miles and Huberman (1994) data reduction, data presentation and inference, and data confirmation. In this study, these steps have been followed. To ensure plausibility, transmissibility, consistency, and verifiability, precautions were taken such as the expert opinion in creating data collection tools and the analysis of data. Different data collection tools were used for variation. The characteristics of the participants, sampling methods, environment in the research, data collection tools, and analysis process are explained in detail. The data are described without adding comments, and direct quotations are included. Two different codings were made with researchers experienced in qualitative research, and coder reliability was calculated. The fit percentage between the two codings was found to be 81% (144 of 176 codes are compatible) for the interview data; it was found to be 84.9% (73 of 86 codes are compatible) for the evaluation form. Then, by combining the codes, revisions were made for those that did not show conformity.

FINDINGS

To examine whether the change in pretest, posttest, and retention test of protective factors, self-esteem, and coping with stress scores of the participants showed a significant difference in favour of the experimental group, analysis of variance was utilised. First, in the analysis of variance, the independence of the groups, the dependent variable being at least interval scale, the normal distribution of the groups for each measurement, and the homogeneity of variance assumptions were examined, and it was seen that the assumptions were satisfied. The arithmetic means and standard deviations of the scale scores are presented in Table 5.

Table 5. Arithmetic Means and Standard Deviation Values

Scale	Pretest			Posttest			Retention Test		
	n	x	s	n	x	s	n	x	s
PFS									
Experimental	22	108.18	8.04	22	119.00	4.49	22	117.82	4.43
Control	19	105.53	8.76	19	107.32	8.22	19	108.11	7.45
RSES									
Experimental	22	1.64	0.95	22	0.73	0.83	22	0.82	0.79
Control	19	1.58	0.96	19	1.47	0.84	19	1.37	0.76
ICSA									
Experimental	22	103.18	13.24	22	124.36	12.10	22	122.00	11.71
Control	19	97.47	10.14	19	97.89	9.98	19	98.95	10.09

Another important assumption of variance analysis is the assumption of sphericity. In the results of the test of sphericity, when $p > .05$, the assumption of sphericity is met, and the variance analysis results are interpreted by looking at the Sphericity Assumed row. In cases where the test produces a significant result ($p < .05$), yet, the epsilon value is examined and the degrees of freedom are adjusted, and the results are interpreted by looking at the Greenhouse-Geisser or Huynh-Feldt row (Tabachnick & Fidell, 2007). If epsilon values are greater than .75, the Huynh-Feldt value is considered, whereas if they are below .75, the Greenhouse-Geisser value is referred to (Leech et al., 2008). The results of the Mauchly Sphericity Test are presented in Table 6.

Table 6. Mauchly Sphericity Test Results

	W	X^2	Sd	p	Epsilon values		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
In-group							
PFS	.22	57.24	2	.00	.562	.582	.500
RSES	.69	13.95	2	.00	.765	.810	.500
ICSA	.24	53.54	2	.00	.570	.590	.500

The results of the two-way ANOVA for repeated measures performed to determine whether there were any significant differences in the changes observed in the participants' scale scores between the pretest, posttest, and retention test are presented in Table 7.

Table 7. ANOVA Results

		Source of Variance	SS	df	MS	F	p	η^2
PFS	Between Subjects		7304.37	40				
	Group		1966.05	1	1966.05	14.36	0.001	.26
	Error		5338.31	39	136.88			
	Within Subjects		1966.14	46.11				
	Measurement	Greenhouse-Geisser	1047.78	1.12	931.65	89.05	0.000	.69
	Group*Measurement	Greenhouse-Geisser	459.49	1.12	408.56	39.05	0.000	.50
Error	Greenhouse-Geisser	458.86	43.86	10.46				
		Source of Variance	SS	df	MS	F	p	η^2
RSES	Between Subjects		79.18	40				
	Group		5.21	1	5.21	2.75	0.105	.06
	Error		73.96	39	1.89			
	Within Subjects		23.22	66.44				
	Measurement	Huynh-Feldt	7.09	1.62	4.37	22.04	0.000	.36
	Group*Measurement	Huynh-Feldt	3.58	1.62	2.21	11.13	0.000	.22
Error	Huynh-Feldt	12.54	63.20	0.19				
		Source of Variance	SS	df	MS	F	p	η^2
ICSA	Between Subjects		24509.96	40				
	Group		10366.11	1	10366.11	28.58	0.000	.42
	Error		14143.85	39	362.66			
	Within Subjects		6487.83	46.70				
	Measurement	Greenhouse-Geisser	2991.12	1.13	2625.59	120.26	0.000	.75
	Group*Measurement	Greenhouse-Geisser	2526.73	1.13	2217.95	101.59	0.000	.72
Error	Greenhouse-Geisser	969.98	44.42	21.83				

As seen in Table 7, pretest, posttest, and retention test scores showed a significant difference, the joint effects of being in different functional groups and of factors showing measurements at different times were significant on the participants' protective factors [$F(1.12,43.86)= 39.054, p<.05$], self-esteem levels [$F(1.62,63.20)= 11.131, p<.05$], and coping with stress attitudes levels [$F(1.13,44.43)= 101.592, p<.05$]. In this case, it can be concluded that the programme had a significant effect on increasing the participants' protective factor characteristics, self-esteem, and coping with stress attitudes levels. The joint effect of the group and measurement variables explains 50% of the change in protective factor characteristics. It explains 22% of the change on self-esteem levels and 72% of the change in coping with stress attitudes levels.

The results of the Bonferroni Multiple Comparison Test, performed to determine between which measurements were the differences that were revealed between groups, are shown in Table 8.

Table 8. Multiple Comparison Test Results

	Measurement (I)	Measurement (J)	Mean Difference (I-J)	Sh	p
PFS	Pretest	Posttest	-6.304	.652	.000
		Retention Test	-6.108	.637	.000
	Posttest	Pretest	6.304	.652	.000
		Retention Test	.196	.185	.886
	Retention Test	Pretest	6.108	.637	.000
		Posttest	-.196	.185	.886
RSES	Pretest	Posttest	.507	.099	.00
		Retention Test	.514	.102	.00
	Posttest	Pretest	-.507	.099	.00
		Retention Test	.007	.059	1.00
	Retention Test	Pretest	-.514	.102	.00
		Posttest	-.007	.059	1.00
ICSA	Pretest	Posttest	-10.801	.907	.00
		Retention Test	-10.146	.961	.00
	Posttest	Pretest	10.801	.907	.00
		Retention Test	.656	.288	.08
	Retention Test	Pretest	10.146	.961	.00
		Posttest	-.656	.288	.08

As given in Table 8, the test results revealed that the joint effect between groups was at a significant level ($p<.05$) in the transition from pretest to posttest and the transition from pretest to retention test, whereas it was not at a significant level ($p>.05$) in the transition from posttest to retention test.

In the second stage of the study, participants' views in the experimental group about the effectiveness of the Teacher Empowerment Programme were received. The results of the views of participants about the content, implementation process, group members, and the implementer of the programme are presented in Table 9.

Table 9. Participants' Views on the Elements of the Programme

Categories	Themes	Codes
Positive	Content	Practical in classroom
		Reinforcing
		Related to everyday life
		Informative
		Directive
		Interesting
	Implementation Process	Effective
		Interactive
		Productive
	Group Members	Enjoyable
		Communicative
		Active
Master of subject		
Willing		
Good communicator		
Implementer	Energetic	
	Effective classroom manager	
	Motivating	
	Entertaining	
	Facilitating	
	Negative	Implementation Process
Boring		
Group Members		Noisy
		Insufficient sharing
Implementer		Inexperienced

As explained in Table 9, the participants' views are gathered in positive and negative categories. Yet, based on the results, it can be said that the participants held favourable views toward the implemented programme. Some participants' statements were as follows:

"My curiosity was aroused in the first session, and it reminded me of some things I had forgotten. The process was enjoyable."

"There was information that will be useful in the classroom; there is stress everywhere from daily life. You wonder how you will cope, but when I listened in this way, I felt I would be more successful."

"Its positive aspects were much greater. We had a lot of interaction."

"Because the instructors also took part in the implementation, the process was productive."

"As a subject, it is interesting because risk factors and protective factors are a part of our lives."

"Our implementer was a master of the subject, willing and established good communication."

"The implementer was willing, equipped, and energetic, and directed the process well. It was entertaining. The group members were active."

The results of the participants' views on the benefits of the programme are presented in Table 10.

Table 10. Participants' Views on the Benefits of the Programme

Categories	Themes	Codes
Beneficial	Professional life	Supporting professional development
		Acquisition of new knowledge
		Revising knowledge
		Socialisation
		Increasing motivation
	Private life	Objective observation
		Effective classroom management
		Increasing awareness in class
		Sharing
		Associating with daily life
		Coping with problems
		Being open to different ideas
		Perceiving importance of resilience
		Gaining awareness
		Self-evaluation
Not beneficial	Professional life	Gaining a positive outlook
		Recognising oneself/environment
		Gaining problem-solving skills
		Stress management
		Superficial knowledge
		Repeating

As understood from Table 10, the participants' views on the benefits of the implemented programme are separated into the categories of beneficial and not beneficial. Yet, it can be said that most participants considered the programme was structured in such a way as to provide benefits for developing many features of life. Some quotes were as follows:

"It was very useful for drawing attention to subjects that we were not aware of, had glossed over, or might have forgotten. We assessed risk factors and protective factors associated with ourselves; it was a self-evaluation for us."

"It taught us to tackle unfavourable situations and risk factors. There were several examples of games; we use similar ones, but it showed us we could use them in different places in different ways. I believe we gained knowledge that will enable students to be more active."

"The ability to self-criticise and to see our positive and negative aspects. I think it will be useful in the classroom and for stress management."

"I believe it will help me recognise both my positive and negative characteristics. I have gained knowledge that will be useful in both professional and private life."

The results of the participants' views on what can be done to increase the effectiveness of the programme are presented in Table 11.

Table 11. *Participants’ Recommendations to Increase the Effectiveness of the Programme*

<i>Themes</i>	<i>Codes</i>
Implementation process	Entertainment
	Games and activities
	Non-formality
	Socialisation
	Active participation
	Case studies and videos
	Planning
Participants	Theory and practice combination
	Applying to teacher candidates
Implementer	Organizing by age
Content	Good communication
	Unknown subjects

As given in Table 11, the participants’ views are gathered in the implementation process, participants, implementer, and content categories. Some participants’ recommendations were as follows:

“There may be more activities. We are tired of being given information. Continuous professional development is important, but having to listen to things all the time is difficult.”

“We do not want to be forced to receive training just for the sake of doing it. We need more social activities and want to be entertained. There should be stimulating things for teachers to do their job better.”

When the findings obtained from the quantitative and qualitative data are evaluated together, it can be said that the programme was effective in increasing the protective factors possessed by the participants and in enhancing their levels of self-esteem and attitudes for coping with stress. The findings obtained from data in the interview and assessment form are such as to support the results of the experimental study. It is supported by the qualitative findings of research that the significant difference in quantitative data is not only due to experimental conditions, but that the implemented programme is beneficial in the resilience of teachers.

DISCUSSION, CONCLUSION AND IMPLICATIONS

The findings reveal that the programme was effective in fostering the protective factor characteristics of the participants, their levels of self-esteem, and their attitudes towards coping with stress. It is seen that this research had an increasing effect on the resilience levels of teachers working with disadvantaged students. Because, as is known, these factors are protective factors associated with resilience. There are several studies in which high self-esteem is evaluated as one characteristic of protective factors and in which positive correlations between resilience and self-esteem are found (Baumeister et al., 2003; Gizir, 2007; Sameroff & Seifer, 1990; Traş et al., 2013). That resilience is a personal quality that reduces stress and improves the ability to cope with events is discussed in various studies (Işık, 2016; Klag & Bradley, 2004; Lopez et al., 2004; Maddi & Khoshaba, 1994). The fundamental condition that enables individuals to cope with problems and to adapt more quickly to life is their possession of the quality of resilience (Masten, 2001).

Resilience not only has a structure that appears with the interaction between the individuals and the situations they find themselves in (Masten & Barnes, 2018), it is also affected by their experiences and living conditions (Gu & Day, 2013). The ability of people to be equipped to cope robustly with all kinds of problems and risks they may encounter in their lives depends on the development of their resilience characteristics (Terzi, 2006). Therefore, resilience is a necessary

feature, especially for teachers working in risky regions with disadvantaged students. For teachers, resilience is not only their capacity to survive and to live in difficulties but also, enables them to maintain their effectiveness for functioning in teaching and learning environments despite many factors that cause temporary disruptions to daily functions or more serious setbacks (Luthar & Brown, 2007). In recent years, schools have become the focus of attention as environments where self-esteem, hope, and resilience are reinforced (Brooks & Goldstein, 2008). By taking the explanations in the relevant international literature as the basis, when the school's socio-ecological dimension is taken into consideration, interventions and approaches aimed at empowering teachers can have a direct effect on disadvantaged students and the education system of countries. To minimise the effects of troubles experienced by teachers, it is important to determine the factors that will increase their motivation, commitment, and effectiveness by focusing on the affirmative aspects that they possess in their professional lives (Day, 2008).

The findings show that the participants held positive views about the programme, and that it could provide benefits to their professional and private lives and bring about improvements in coping with difficulties, motivation, and knowledge levels. According to Wilson & Berne (1999), a good professional development programme should consist of wide content, active participation, consistency, suitable periods, and participants who can act in cooperation with each other. Training programmes that are planned and applied effectively can boost teachers' reflective thinking and problem-solving skills and enable the development of high self-esteem and self-confidence, as well as favourable attitudes (Fantilli & McDougall, 2009). Creating surroundings that will enable individuals' needs to be met will also allow for protective factors to improve (Place et al., 2002). In Murray's (2003) study, it is recommended that a school programme for building up resilience structures should have features such as increasing autonomy, self-esteem, problem-solving skills, academic and cognitive competence, improving school-family relations, and cooperation. So, it can be said that the implemented programme had similar characteristics to other programmes designed to promote resilience. Resilient teachers are individuals who are more willing to spend time with students, who create a healthy school climate, who have more effective teaching skills, and whose students are more successful (Tschannen-Moran et al., 1998). It is expected that the involvement of teachers working in disadvantaged areas as resilient individuals in the education system will assist them in eliminating problems they may encounter in their professional lives and foster teacher productivity and student achievements.

LIMITATIONS OF THE STUDY AND RECOMMENDATIONS FOR FUTURE RESEARCH

Within the study, protective factors perceived as interventional and considered having critical importance were discussed. Studies can be conducted on the measurement of factors such as locus of control and problem-solving, which have important effects on teacher resilience and which fall outside of this study and on increasing these characteristics. Because it was difficult within this study to identify the risk factors that teachers have, and it was very difficult to bring teachers working in different institutions together, the risk factors were examined in the school context. In this sense, an attempt was made to determine schools with the greatest possibility of harbouring risky situations. Studies can be conducted to determine factors that hinder the development of teachers' resilience characteristics as individuals and to reduce or eliminate the effects of these factors. It can be recommended that activities in schools that contribute to teachers' perceptions of empowerment and their resilience are increased and that in these activities, interaction and cooperation with the school management and parental participation are prioritised. This study reveals the differences in the resilience characteristics of teachers before and after implementing the programme. Longitudinal studies can be conducted on how these differences in teachers cause changes in the classroom.

AUTHOR CONTRIBUTION

This study is produced from the first author's doctoral dissertation under the supervision of the second author. The first author has made substantial contributions to the writing of the theoretical framework, and the collection and analysis of data. The second author has been involved in drafting the manuscript, revising it critically and final approval of the version to be published.

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