

Impact of Distance Professional Development Course on Early Childhood Teacher's Knowledge, Skills, and Beliefs about Self-Regulation

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ABSTRACT

This study aims to evaluate the impact of a distance professional development course, within the framework of the Preschool Situational Self-Regulation Program (PRISIST), on the knowledge, beliefs, and skills of early childhood education teachers about self-regulation skills. One of the qualitative methods, the case study, was preferred for the current study. The research was conducted with 5 early childhood education teachers, working in a city in middle Anatolia, Turkey. The teachers attended the synchronous distance professional development course 1 day a week for 5 weeks. The total duration of the five sessions was 120 minutes. Interview forms, reflective journals, and documents were used as data collection tools. As a result of the research, it was found that the course had positive impact on teachers' knowledge, skills, and beliefs about self-regulation skills

INTRODUCTION

Self-regulation is the ability to control thoughts, behaviors, emotional responses, and social interactions to achieve a goal or respond appropriately to a situation. When an individual is successful at self-regulation, self-control becomes easier for her/him. Self-regulation is about diminishing the intensity and frequency of strong impulses. A self-regulated person often does not need to focus on self-control (Nigg, 2017). Self-regulation is a process that begins to develop from infancy and shows improvement through certain stages. In the other regulation stage, in the first few years of life, babies and toddlers are mostly dependent on their caregivers to calm them down when they're upset. Parents soothe their unsettled, anxious, crying babies and toddlers by providing affectionate and responsive sensory input such as hugging, shaking, singing, swaddling, or slowly patting. The child regulates himself in this way, and the attachment and trust between the child and their caregiver becomes secure and strong. In the co-regulation stage, as the child develops and matures, the child begins to 'co-regulate' with the parent. In this process, the caregiver and the child engage in calming activities together, and the child internalises the caregiver's calm and peace. These activities and experiences may include dialogue reading activities before bed, hugging each other, and deep breathing exercises to relax together when experiencing uncomfortable emotions or situations such as sadness, anger, etc. These meaningful experiences also support attachment and trust. In the final stage, parents can guide their children in "self-regulation" by encouraging them to engage in independent, self-soothing strategies and activities. Around the age of six, children with expected developmental characteristics can be taught to realize when their energy or emotional level is rising and to use a strategy to calm down independently.

Self-regulation skills develop dramatically, particularly in the early childhood years (Bronson, 2000). During this period, children's environment and interactions with others play an important role in self-regulation.. Studies have shown that when children growing up with socio-demographic risk factors are exposed to an environment and targeted interventions that support self-regulation skills, these negative risks tend to disappear and the achievement gap between the child and their peers are reduce over of time (Duncan et al., 2007; von Suchodoletz, Trommsdorff, Heitkamp, Wieber, & Gollwitzer, 2009; Setknan et al., 2010; Obradovic, 2010). Improving self-regulation skills has played a facilitating role in children's lives. All these studies have led educators and researchers to find effective ways and design early intervention programs and educational curriculums to support children's self-regulation skills (Pandey, Hale, Das, Goddings, Blakemore, & Viner, 2018; Savina, 2021).

In the national literature on self-regulation skills, most studies have been conducted to assess the level of children's self-regulation skills (Ertürk Kara, & Gönen, 2015; Fındık Tanrıbuyurdu, & Güler Yıldız, 2014; Arslan et al., 2021; Ural, Gültekin Akduman, & Şepitci Sarıbaş, 2020; Saraç, Abanoz, & Gülay Ogelman, 2021). On the other hand, limited research has been implemented to support children's self-regulation skills (Keleş, 2014; Ezmeci, 2019; Sezgin, 2016). In the national literature, a study in which teachers participated in the professional development program (PD) to support their self-regulation skills was conducted by İvrendi, Cevher Kalburan, and Şimşek (2022). This research aimed to promote the awareness of teachers about self-regulation skills and to

provide them with knowledge and skills for implementing the Red Light, Purple Light (RLPL) Self-Regulation Intervention Program (Tominey, McClelland, & Tracy, 2018) in their classrooms. RLPL aims to enhance children's self-regulation skills through music, movement, and games. It consists of five main games (e.g., sleeping, freeze), each with a different version. The results of this research indicated that the PD program in which the teachers participated had positive impact on them. Unlike this research, the process of supporting self-regulation skills in the current research was planned within the framework of The Preschool Situational Self-Regulation Toolkit (PRSIST) Program (Howard, Vasseleu, Neilsen-Hewett, & Cliff, 2018). PRSIST program includes several games and stories to practice with children. In addition, bulletins and videos are also included for parents and teachers to gain knowledge and awareness about self-regulation skills. Furthermore, as part of the current research, the PD course was conducted online with the participating teachers. The distance education process has started to take place more frequently in the lives of teachers, especially due to the C-19 pandemic period. This study aims to evaluate the effectiveness of the distance education process, which in many ways is a cost-effective alternative. Due to the limited number of studies in the national literature on how teachers can support children's self-regulation skills, it is believed that the present study will contribute to the relevant literature.

Within this context, the research questions addressed in the current study are:

1. At the beginning of the distance professional development course, under The Preschool Situational Self-Regulation Toolkit (PRSIST) Program, what are the needs of early childhood education teachers regarding self-regulation skills, development of self-regulation skills in the early childhood period, and supporting practices of the self-regulation skills of the children?
2. At the beginning of the distance professional development course, under PRSIST Program, what are the beliefs of early childhood education teachers in terms of the importance of supporting children's self-regulation skills in the early childhood period and the role of the teacher in this process?
3. During the distance professional development course, under the PRSIST Program, how do teachers reflect, use, and implement the knowledge and strategies they learned in the sessions to in-class practices?
4. What are the views of early childhood education teachers about the distance professional development course, carried out under PRSIST Program?
5. At the end of the distance professional development course, under PRSIST Program, in what ways do early childhood education teachers use strategies to support children's self-regulation skills?

METHOD

The current study is a case study, which is one of the qualitative research methods. A case study is defined as a qualitative research method in which the researcher investigates, analyzes, and specifies one or more time-limited cases using different data collection tools (observation, interview, audiovisual) (Creswell, 2005).

Participants

A convenience sampling method was used while reaching the participants. In this regard, various criteria were determined accordingly. These criteria are that the participating teacher works in the field of early childhood education, the teacher declares that she will fully participate in the online training, and the teacher is willing to complete the relevant data collection tools. According to these criteria, 5 early childhood education teachers working in the same school participated in the research process. Two of the teachers graduated from Hacettepe University, the others from Muğla University, Aksaray University, and Selçuk University. All participant teachers had a bachelor's degree in early childhood education. They work in a formal kindergarten affiliated to the Ministry of National Education. Four teachers have 10 years or more of professional teaching experience, and one has 1 year of experience. Three teachers had previously received training on self-regulation skills. Three teachers have a class size of 16–20 children, two teachers have a class size of 10–15 children. One of the teachers works with children aged 48–60 months, and four of them work with children aged 60 months and over. An online meeting (pre-interview) was held with the participating teachers. During this online meeting, the content of the distance professional development course, the rules for the research process (keeping the cameras on during the training sessions, ensuring regular attendance at all sessions, filling in the data collection tools completely, etc.), and the behaviors expected from the participating teachers (tasks at the end of the session, preparing the classroom environment for self-regulation skills, etc.) were explained in detail to the participating teachers. Permission for this research was obtained from the Ethics Committee and Provincial Directorate of National Education for this research.

Data Collection Tools

Within the research process, various data collection tools were used before, during, and after the distance professional development course.

Teacher Needs Assessment Form for Supporting Self-regulation

This form was prepared by the researchers to determine the needs of teachers participating in online training on how to support children's self-regulation skills in the classroom environment. The teachers responded to the 42 statements in the form by choosing one of the options "I know how to support, I know partially, I don't know". The statements describe specific behaviors related to emotional, behavioral and cognitive regulation.

The Sample Statements:

- If a student is damaging things/toys as a result of negative emotions (anger, disappointment, etc.), how can I support him/her to respond appropriately to his/her feelings?
- If a student is constantly distracted while doing an activity or doing something, how can I support him/her to stay focused.
- If a student has difficulty following the classroom rules, how can I support him/her to follow the rules.

Self-Regulation Skills Teacher Beliefs Form for Early Childhood Education Teachers

This form was prepared by the researchers to determine the beliefs of the teachers participating in the online professional development program about supporting self-regulation skills and the teacher's role in supporting self-regulation skills in the early childhood period. The form, in which expert opinion was asked, consists of 2 open-ended questions: 1. Do you think that supporting self-regulation skills in the early childhood period plays a significant role in the development and education process of the child? If so why? Please explain. 2. Does the teacher have a role in supporting children's self-regulation skills in the early childhood period? If yes, explain what role the teacher plays.

Reflective Journal

The reflective journal was designed by the researchers to understand the teachers' evaluations of the sessions after each online training session and the impact of the online PD program on their learning and experience in the process. Reflective journals are defined as a gradual process consisting of three parts: (1) the individual's revisiting his or her experiences (remembering); (2) establishing a relationship between one's experiences (reasoning); (3) using one's experiences for personal experience and development (reflecting) (Lee, 2005). Each session sought to answer the question "What have I learnt that I can reflect on in class? Reflective journals were used to assess the extent to which teachers had participated in the training process and to plan the next training sessions.

Distance Professional Development Course – Teacher Opinion Form

This form was prepared by the researchers and expert opinion was sought. The form aims to assess the learning outcomes of the teachers participating in online education, the difficulties they experienced, and their suggestions for the improvement of the program. The form consists of 3 open-ended questions: (1) "Was the online training process productive for you?", (2) "Did you experience any difficulties in the training process?", (3) "Do you have any suggestions for improving the program, and if so, what are they?"

Teacher Performance Evaluation Form on Self-Regulation Skills

This form was used to assess the ability of teachers who had participated in the online training to put into practice the knowledge they had gained at the end of the training. Teachers were asked to prepare a newsletter with stories, play activities, and family education material on how to support children's self-regulation skills. There are three questions in the performance evaluation form: (1) "Write two play activities that you think will support children's self-regulation skills.", (2) "Write a story that you think will support children's self-regulation skills.", (3) "Prepare a newsletter for families on the importance of supporting children's self-regulation skills."

Implementation and Data Collection Process

Distance Professional Development Course on Self-Regulation

The distance professional development course was delivered as part of the The Preschool Situational Self-Regulation Toolkit (PRISIST) Program (PRISIST) which was developed by Howard, Neilsen-Hewett, and Vasseleu (2018). First, the researchers thoroughly explored the website and resources related to PRISIST. After obtaining the necessary permissions, all the resources in the program content were translated into Turkish. Language and content validity was ensured through the consensus of three field experts.

The Preschool Situational Self-Regulation Toolkit (PRISIST) Program aims to engage, challenge, and extend children's self-regulation in ways that are play-like, low-cost, routine, and target all aspects required for successful self-regulation (i.e., goal setting, motivation, problem-solving, self-regulatory capacity). Specifically, the PRISIST Program is a collection of professional learning videos (PRISIST Talks), Adult Practices (Practices), low-cost, play-based, and everyday Child Activities, and home connections to support the development of children's early self-regulation. The program has been designed to be compatible across a range of early learning contexts, and has been piloted, evaluated, and revised on the basis of feedback from early years practitioners on child and practitioner enjoyment; compatibility with preschool contexts, routines, and practices; and perceived benefits. As a result, the program has been developed, so that it can be implemented for different durations, intensities, and combinations and sequences of elements (www.prisist.au).

One of the researchers met with the participants once a week for 5 weeks, through the online platform ZOOM, and conducted the sessions. The researcher who conducted the session was observed by another researcher. It was followed and ensured that the

sessions were carried out as planned. At the beginning of each session, the participants were reminded of the rules of the session. After the session, reflective journals, news bulletins, PRSIST talks, and children's activities were shared with the teachers. Until the next session, the teachers wrote reflective journals, read the news bulletins, listened to the PRSIST talks, and implemented the children's activities they learned in that session in their classrooms.

The data collection process used before, during, and after the online course was as follows(Figure 1):

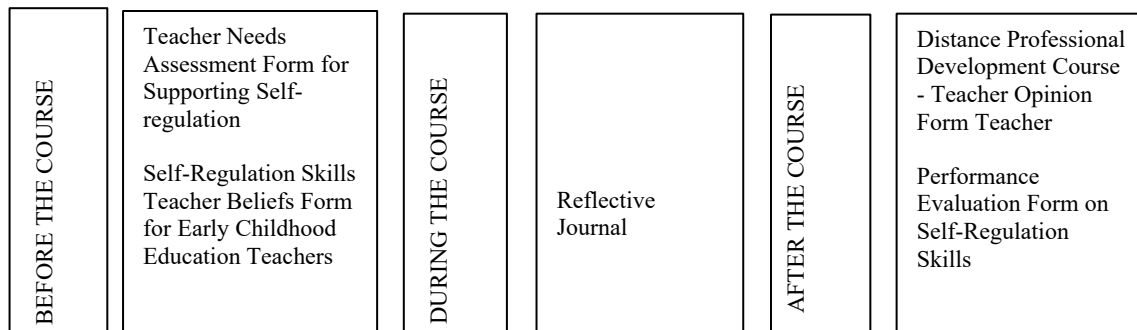


Figure 1. Data collection process

Analysis of Data

Content analysis was used to analyze the data. The basic process in content analysis is to gather similar data within the framework of certain concepts and themes and to organise and interpret them in a way that the reader can easily understand (Yıldırım & Şimşek, 2013). During this process, the stages of naming, category development, validity and reliability, calculation of frequencies, and interpretation of content analysis were carefully established. The findings are provided by quoting directly from the data of the participants. The participating teachers were coded as T1, T2, T3, T4, and T5. Within the current study, data triangulation and researcher triangulation were fulfilled within the scope of validity and reliability. Multiple data sources are interview forms, documents, and reflective journals. The collected data were analyzed and interpreted by two researchers. An in-depth description was also done in the research process. The participants, the PRSIST program, the training process, the data collection process, the analysis of the data, and the findings supported by direct quotations are presented in detail and clearly. Therefore, it is aimed that the readers can make sense of the research context. The field experts' opinions were sought in determining the content of the program, developing the data collection instruments and analyzing the data. The sessions were observed by another researcher and reliability was ensured regarding the implementation of the sessions as planned.

FINDINGS

At the beginning of the distance professional development course, under The Preschool Situational Self-Regulation Toolkit (PRSIST) Program, what are the needs of early childhood education teachers regarding self-regulation skills, development of self-regulation skills in the early childhood period, and supporting practices of the self-regulation skills of the children?

When the answers given by the teachers to the statements in the needs assessment form are examined, it was found that the teachers answered most of the statements about emotional, behavioral and cognitive regulation with “I know partially how to support.”. According to the data obtained from the form, it was observed that the content of the PRSIST program and the needs of the teachers were consistent with each other. Accordingly, the researchers planned and organized the PRSIST program content by taking into consideration the needs of the teachers in 5 sessions and a total of 120 minutes as shown in Table 1.

Table 1. Distance professional development course on self-regulation content

	1. Session	2. Session	3. Session	4. Session	5. Session
Newsletters	About self-regulation	What does core self-regulatory behaviors look like?	How can we foster children’s capacity for self-regulation?	How can we encourage children to set goals to be self-regulated?	How can we encourage children to become and remain motivated? How can we encourage children’s problem-solving, risk-taking, and persistence?

PRERSIST Talks (Videos)	The nurture of self-regulation The importance of self-regulation	How children learn to self-regulate Activities to support self-regulation	Being a detective – Assessing self-regulation The Role of Play in Self-regulation	Understanding children's development Creating supportive learning environments	The emotional environment and conflict resolution
Child Activities	Same kind Split singing Acting out	Mind reader Disciplined dance Balloon bounce	Brace race Secret shadow. Blind spot.	Bursting bubbles Rhythm Repeat Actor's studio	Head'n shoulders Managing musicians Eye spy
Adult Practices	Monitor children's development. Safe, secure, and supported	Model self-regulation Provide encouragement	Children lead & choose. Problem-solving & persistence	Communicate expectations. Conflict resolution	Responding to emotions Sense of community Effective communication

The PRERSIST program also has supplementary resources. In addition to the resources listed in the table, other resources were shared with the teachers during and at the end of the sessions. Subsidiary sources consist of storybooks (I Don't Miss The Shopping List, Polly And Her Lolly, The Pear That Wasn't There, and Quincey Quokka's Quest) and visual supports in PDF format (mind reader visuals, problem-solving (scientific) process visuals, problem-solving visuals, visuals of the emotions).

At the beginning of the distance professional development course, under PRERSIST Program, what are the beliefs of early childhood education teachers in terms of the importance of supporting children's self-regulation skills in the early childhood period and the role of the teacher in this process?

Findings on the beliefs of the early childhood education teachers about the importance of supporting self-regulation skills in the early childhood period were examined under the theme of children's outcomes (Figure 2).

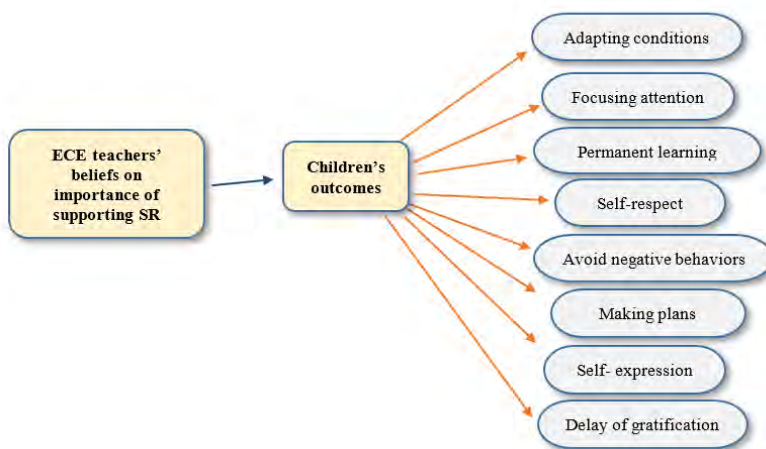


Figure 2. Theme and codes for ECE teachers' beliefs on the importance of supporting SR

The participating teachers stated that supporting teachers' self-regulation skills will lead to children's learning and acquisition of these skills in the early childhood period. It was found that the teachers focused on both cognitive processes that can be effective in the learning process and social interactions/adaptation in the skills that children learn and acquire.

The sample views of the teachers are given below.

Of course, it is very important throughout the development, learning, and education processes. I think that the child needs to have acquired self-regulation skills to perceive himself/herself as an individual and develop self-esteem (T2).

Self-regulation is very important for the child to follow the rules, control his/her emotions, direct his/her attention, and delay his/her desires. Children will be more successful in their educational life thanks to the learning and acquiring of self-regulation skills (T5). I think that self-regulation skills should be supported in the early childhood education process. Because it supports children's learning and development such as in terms of making plans, following rules, adapting to conditions, expressing themselves, and controlling their emotions (T4).

The findings regarding the beliefs of the early childhood education teachers about the importance of their role in supporting self-regulation skills in the early childhood period were examined under the theme of strategies (Figure 3).

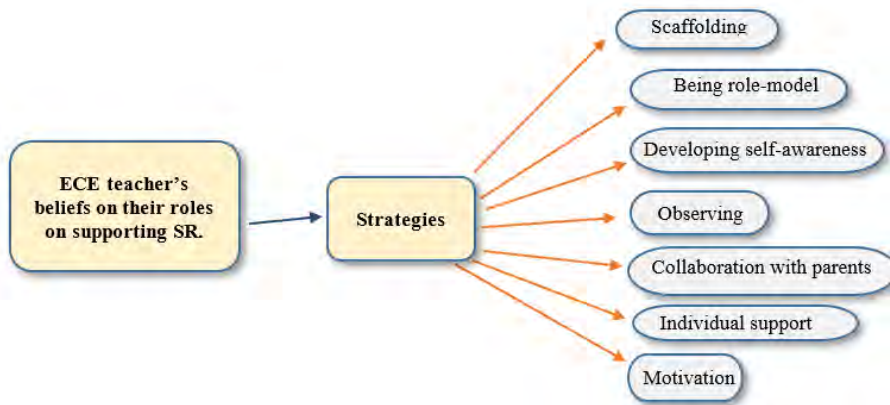


Figure 3. Theme and codes for ECE teachers' beliefs on their role in supporting SR.

The opinions of the teachers showed that they believe that they have a role to play in managing this process by using different strategies to support the self-regulation skills of children in the early childhood period.

The sample views of teachers are given below.

In the early childhood period, the teacher has an important role, as children spend most of their time outside the home at school. The teacher observes, supports as a model, scaffolds, and thus guides and supports children in the acquisition of skills.. This process takes place in cooperation with the family (T4).

The role of the teacher is great. He/She leads the child in the acquisition of self-regulation skills successfully by providing individual support and encouraging the child. In this sense, he/she provides scaffolding to the child. Children achieve important acquisitions more quickly with the guidance of an adult (T2).

During the distance professional development course, under the PRSIST Program, how do teachers reflect, use, and implement the knowledge and strategies they learned in the sessions to in-class practices?

The views of the participants on how they could reflect the knowledge and skills they learned during the sessions in their classroom practices were examined under the theme of classroom practices (Figure 4).

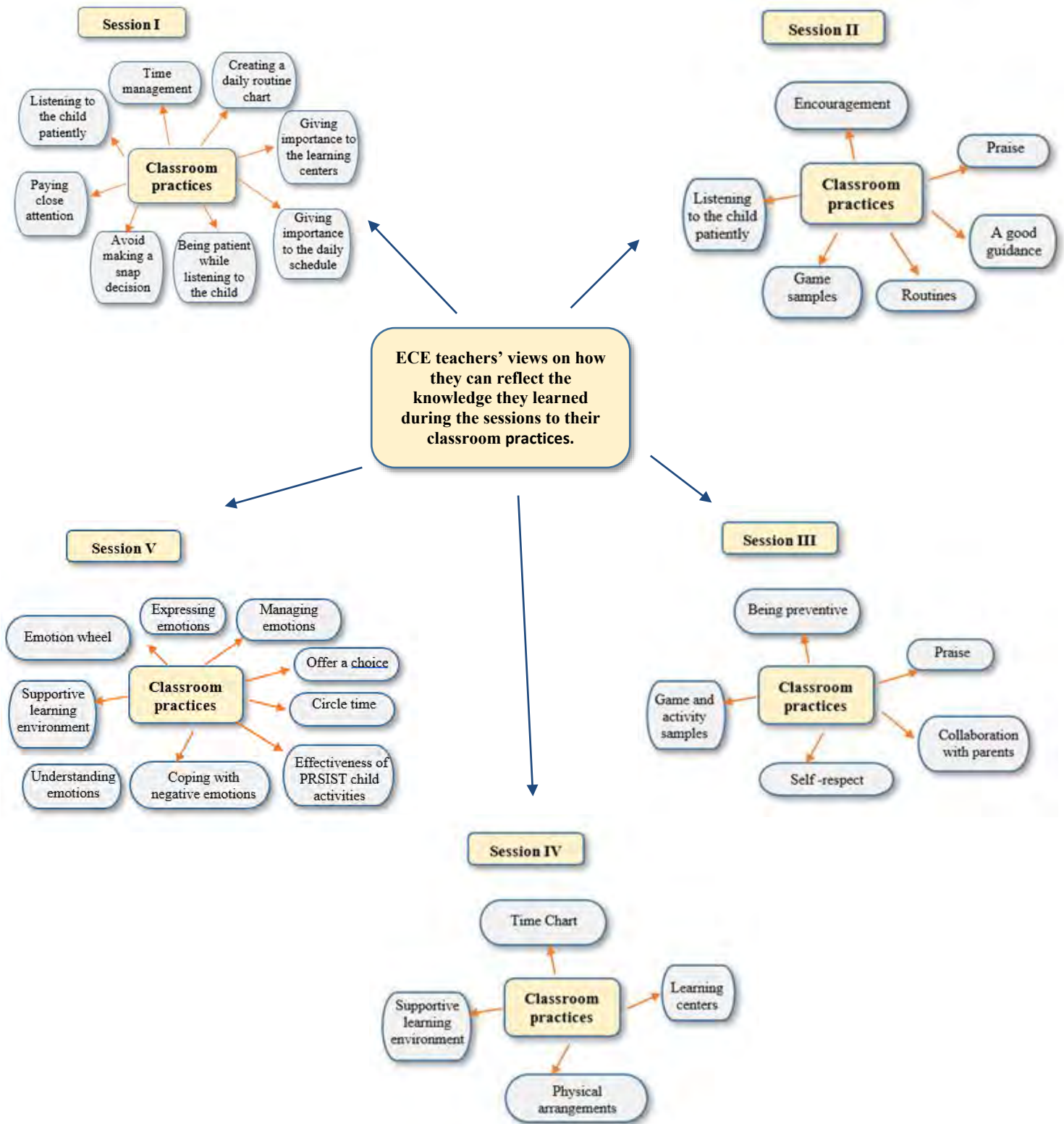


Figure 4. Theme and codes for ECE teachers' views on how they can reflect the knowledge and skills they learned during the sessions in their classroom practices.

Sample views of teachers are given below.

Session I

I have learned not to make immediate and sudden decisions, to listen more carefully, and not to be in a rush to listen and understand the child (T1).

I have understood the importance of planning time in the classroom (T2).

I have learned the importance of using the bathroom chart, the importance of the learning centres, and the daily routine chart (T5).

Session II

I have learnt that oral encouragement should be used with praise (T1).

I have learnt how to use the oral language of encouragement in the classroom (T5).

Session III

I have learnt the practices of responding to the hitting behavior and the practices for children with concentration problems (T2).

I have learnt new and different techniques for challenging situations (T4).

Session IV

Practicing activities with children together was enjoyable and made a positive contribution to the children (T1).

I have learnt what can be done to design teaching and learning environments in a supportive way, the location of the learning centers while designing the classroom, and how to ensure the appropriate design in the learning centers (T3).

Session V

I have learnt about the importance of understanding, expressing, and managing emotions and the practices such as the emotion wheel, the circle of emotions, and needs (T3).

During the circle time, I have learnt several practices on how to teach children how to deal with negative emotions (T1).

What are the views of early childhood education teachers about the distance professional development course, under PRSIST Program?

The *opinions* of the participants were examined under three themes: benefits, challenges, and course content (Figure 4).

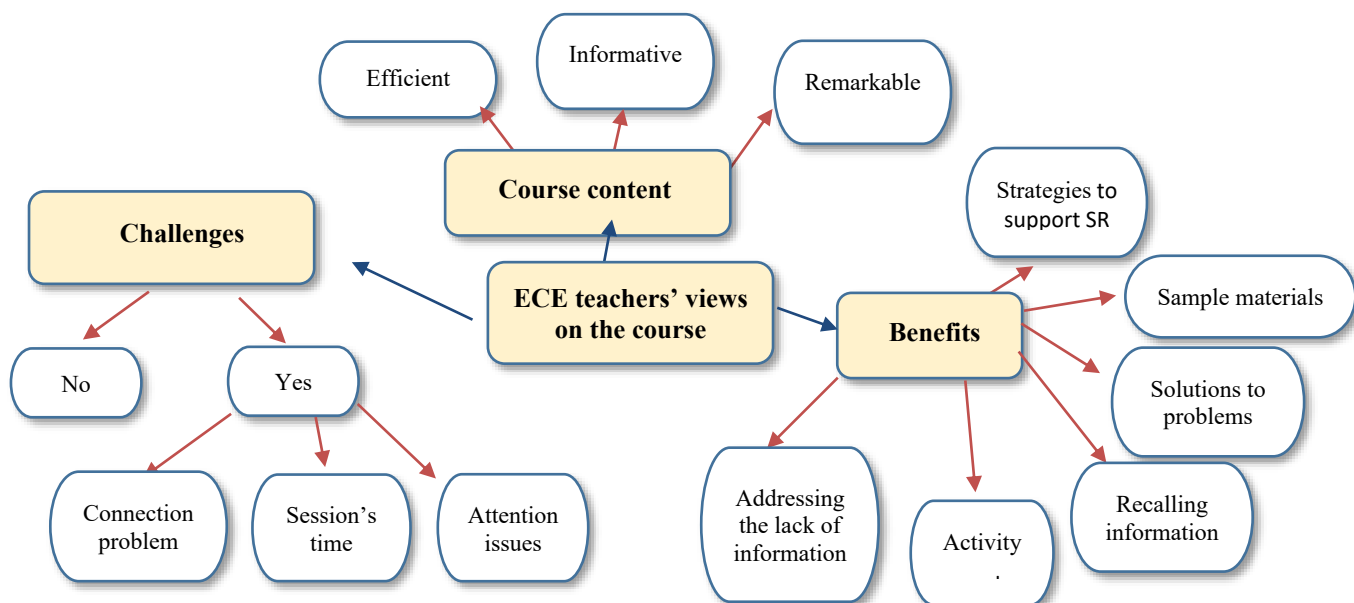


Figure 4. Themes and codes for ECE teachers' views on the distance professional development course, carried out under PRSIST Program

The sample views of teachers regarding the benefits of the course are given below.

I have remembered things I had learnt a long time ago and this was very helpful in terms of classroom practices and implementations.

I have also learnt new things on the subjects that I have not known (T2).

I have learnt to work on solving problem situations where I have had challenges in practice (T3).

I have learnt strategies about what to do in different challenging situations that might occur in the classroom. I have learnt what I could do by examining scenarios about possible events in the classroom. I have also practiced the children's activities that I have learnt from the course (T4).

The sample views of teachers regarding the challenges of the course are given below.

Throughout the online training process, connecting to the video was a problem for me from time to time (T2).

Because I have a small baby, I sometimes found it difficult to concentrate and maintain my focus and attention from time to time (T5).

The sample views of teachers regarding the content of the course are given below.

When taking into account the content of the program, it was quite informative, and I have learned new things (T2).

The resources used in the training were quite useful and remarkable (T5).

It was a very productive course. The resources provided were quite useful (T4).

At the end of the distance professional development course, under PRSIST Program, how are early childhood education teachers' skills in using strategies to support children's self-regulation skills?

Teachers' performance in play activities, story activities and family education (bulletin) planning to support children's self-regulation skills was evaluated. According to this, Teachers were first asked to write down two play activities that they thought were supportive of children's self-regulation skills. When the play activities planned by the teachers were examined, it was found that most of them (4/5) planned play activities related to cognitive regulation. These games are the 'Fox, what time is it?' game, guessing game, mirror game, and circle game. During these games, the children are expected to follow instructors, focus their attention, and keep some in mind. Most of the participating teachers (4/5) planned the 'movement-based game' for the play activity. These games are balloon games, handkerchief snatching, and freezing games. When the games were examined in terms of content and self-regulation skills, it is seen that teachers also focus on cognitive regulation skills in movement-based games, and in this context, they focus on the skills which are focusing attention, where attention, inhibitory control, and working memory. In the play activities designed by the teachers, there are situations in which the children have to remember the rules, follow the rules, wait their turn, focus their attention to follow the instructions, and maintain their attention to continue the game. Two teachers (2/5) planned role-playing games for the play activity. These games were animal imitations and dramatic play activities. When the content of the games was examined in the relation to self-regulation skills, it was found that the teachers focused on cognitive regulation skills such as working memory and behavior regulation skills. In these games, it was observed that the teachers provided opportunities for children to use their knowledge of the characteristics of animals, situations that they need to remember, and situations in which children should wait for their turns by creating a dramatic play environment (train journey). Teachers were asked to write a story that they thought would facilitate children's self-regulation skills. It was found that most of the teachers (4/5) included emotion regulation skills in their stories, and one teacher wrote a story about behavior regulation skills (patience).

Teachers were asked to prepare a bulletin for families in which they providing information about self-regulation skills and the development of these skills in the early childhood period. When the bulletins were examined, their content on self-regulation skills was about the definition of self-regulation (5/5), the importance of the early childhood period (5/5), the dimensions of self-regulation (3/5), cognitive regulation (3/5), emotion regulation (3/5), behavior regulation (3/5), and social interactions (3/5).

DISCUSSIONS and CONCLUSION

In the current research, it was aimed to enable teachers to learn detailed content and practical knowledge on the self-regulation skills of young children, to develop teachers' skills on how to support children's self-regulation skills, and to be aware of their role in supporting children's self-regulation skills through distance a professional development course. Following these purposes, foremost, the needs of teachers in this regard were determined, and it was found that all the teachers perceived themselves as partially sufficient to support children in the cognitive, emotional, and/or behavior-regulation dimensions of self-regulation. At this point, the researchers reviewed the literature in detail and confirmed that the content of the PRSIST program, which addresses self-regulation skills in these three dimensions, met the needs of the participating teachers of the current study.

The researchers examined the beliefs of early childhood education teachers about the importance of supporting self-regulation skills in the early childhood years and the role of the teacher in this process. Within this regard, it has been identified that the teachers think that all self-regulation skills should be supported in the early childhood period. It has been found that teachers approach self-regulation skills through the development, learning, and education processes of the child. Teachers thought that especially emotion and behavior regulation, attention, and delaying gratification within the scope of self-regulation skills are effective in the development, learning, and education processes of children. When their views on their roles in supporting children's self-regulation skills were examined, roles such as supporting the child, being aware of his/her feelings, collaborating with the family, being a role model, observing, intervening, making him/her aware of his/her competences, motivating, and determining the appropriate method for the child stood out. The fact that teachers found it important to support self-regulation skills in the early childhood period and their belief in their role in this process may be due to the high level of self-regulation of the participating teachers. In fact, Elma (2022) has suggested that early childhood education teachers have high self-regulation skills in the dimensions of goal setting, intrinsic interest, performance goal orientation, self-instruction, emotional control, self-evaluation, self-reaction, and help-seeking. According to Schunk, and Zimmerman (2009), high self-satisfaction among self-regulatory teachers creates a source of motivation for their engagement in further learning efforts. Therefore, the teachers' perceived importance of the activities implemented in the education and training process increases, and this leads to developments in their behavioral reactions.

In the first session, when looking at the teachers' opinions on how they could apply the knowledge gained in the sessions to their classroom practice, it was found that the participating teachers emphasised being patient and a good listener when communicating with the child. Furthermore, they realized that the design of the physical environment is a part of supporting children's self-regulation skills. They also identified the strategies they could use to support children's self-regulation skills. They considered the development of the child and emphasized teacher-parent collaboration. It was found that the teachers learned about the stages of emotion regulation. Findings indicated that the teachers focused on all the topics mentioned in the content of the sessions while expressing their opinions about self-regulation. When analyzing the teachers' views on the gains from the training process, they stated that they learned new content and practical knowledge about self-regulation, remembered the information they had forgotten, learned sample activities and materials, learned about the physical design of the in-class environment, and learned methods to support self-regulation of children. The results of the current study are consistent with the findings of İvrendi, Cevher Kalburan, and Şimşek (2022), and

Salomäki, Ruokonen, and Ruismäki (2012). In the teachers' opinions, it was found that the teachers emphasised the characteristics of a high-quality classroom environment (effective communication, physical environment, emotional climate, diverse and substantive strategies, etc.) in supporting children's self-regulation. Various studies in the literature have suggested that the process of supporting children's self-regulation skills is directly related to a high-quality classroom environment (Ertürk Kara, Gönen, & Pianta, 2017; Güler Yıldız, Ertürk Kara, Fındık, & Gönen, 2014).

The participating teachers stated that the resources used in the content of the training were remarkable and informative, and the training process was efficient. The teachers' views on this educational process in which they participate in the distance are consistent with the research findings of Bektaş and Zablın (2023). As a result of the interviews with the participating teachers, the researchers found that the teachers preferred the in-service training activities they participated in through distance education. It was found that they prefer this type of training because it is more easily accessible and economical, and flexible in terms of time and space. According to the teachers, it is more possible to maintain professional development with distance education. This is because the teachers stated that the initial training courses, they had previously attended were insufficient, and they needed to participate in continuous professional development. From this point of view, it can be said that the distance education carried out in the current research meets the needs of the teachers.

The researchers analyzed the performances of the teachers in the planning of play activities, story activities, and family education (bulletin) to support children's self-regulation skills. The results of these analyses indicated that the focus was on cognitive regulation in the play activities, emotion regulation in the story activities, and the content and importance of self-regulation skills in the bulletin. According to these findings, it can be concluded that the teachers approached the concept of self-regulation in a multidimensional way when planning educational and learning practices to facilitate children's self-regulation skills of children. The most important indicator of the effectiveness of the professional development practices was that the teachers could easily integrate what they had learned into their existing programs. According to Cohen and Hill (2000), many professional development programs are beside the point of the real practices of the teachers and the school development plan and do not focus on the real learning needs of adults. From this point of view, in the present study, it was found that the participating teachers were able to effectively reflect the knowledge they learned to the types of activities included in the MEB (2013) Early Childhood Education Program and in family education. In light of the results reached from the current research, it was found that participating in the distance professional development program process to develop their knowledge and skills in supporting children's self-regulation skills is an effective method for early childhood education teachers. The current study is limited to the data collected from five early childhood education teachers working in a kindergarten and a 5-week period.

It can be suggested that the increase in knowledge and awareness gained from this intervention should be measured again in the future and the continuity of learning should be investigated. Future research can be conducted out to support the effectiveness of PD training on self-regulation, delivered to teachers at a distance, through classrooms observations and to investigate the progress of children's self-regulation skills.

Future research can be conducted to support the effectiveness of PD training on self-regulation, which is provided to teachers at a distance, through in-class observations and to investigate the progress of children's self-regulation skills.

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