

# Experiences of Preschool Teachers in the Professional Development Program of Children's Self-Regulation Skills

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Asiye Ivrendi<sup>1</sup>, Nilgün Cevher Kalburan<sup>2</sup> and Zeynep Ceren Şimşek<sup>3</sup>

## Abstract

This study investigates preschool teachers' experiences and perceptions of a professional development (PD) program on children's self-regulation. This PD opportunity was planned around two aims: to increase preschool teachers' awareness of children's self-regulation skills and to support participants' understanding and skills to implement the Red Light, Purple Light (RLPL) Self-Regulation Intervention Program in their classrooms. The phenomenological research design is used to examine participant teachers' experiences in the PD program. The participants consist of 23 volunteer public preschool teachers. Data sources were semi-structured interviews and reflective writings. Based on the results of the content analysis, the participating teachers thought that the PD program positively affected their personal and professional development. Participating in the PD program broadened their understanding of the conceptual basis of self-regulation in children. In addition, participants expressed their perceptions about embedding ways of fostering self-regulation in the National Preschool Education Program practices and the structural features of the RLPL Self-Regulation Intervention Program.

**Key Words:** Professional development, children's self-regulation, RLPL Self-Regulation Intervention Program

## Introduction

Literature related to children's self-regulation provides evidence of its importance in children's lives. Research shows that early self-regulation is related to different skills, such as literacy (Skibbe et al., 2019) and math skills (Ivrendi, 2016). Supporting self-regulation is considered a way to prevent school failure (Blair & Diamond, 2008) since these skills, such as regulating attention, behaviors, and emotions, are necessary to succeed at school (Raver et al., 2012).

This accumulating research simultaneously leads educators and researchers to search for ways of supporting self-regulation (Pandey et al., 2018; Savina, 2021) and empowers teachers to present children with experiences to foster their self-regulatory skills. In changing the world's needs and requirements, teachers are expected to restructure educational practices with new research (Butler et al., 2004). As Cevher-Kalburan (2014) remarked, teachers need to keep up with the era by renewing themselves and reflecting on innovations in their practices. Keeping these expectations in mind and based on the research results discussed above, supporting children's self-regulation

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<sup>1</sup> The University of Pamukkale, TURKEY, aivrendi@pau.edu.tr, ORCID: 0000-0002-0555-9247

<sup>2</sup> The University of Pamukkale, TURKEY, nckalburan@gmail.com, ORCID: 0000-0003-0622-1480

<sup>3</sup> The University of Pamukkale, TURKEY, cyesilyurt@pau.edu.tr, ORCID: 0000-0002-6622-7289

skills are crucial for their immediate and future learning. Thus, preschool teachers' needs, and requirements are to devote intentional effort to providing educational environments and instructional and behavioral interventions to support children's self-regulation (Savina, 2021).

Program-based intervention is the most common form of supporting children's self-regulation (McClelland et al., 2019). As teachers' involvement in professional development impacts student learning (Timperley et al., 2008) and their learning and transfer of new knowledge into the classroom (Guskey, 2000 cited in Earley and Porritt 2014), such opportunities then appear to be essential for children and teachers. At this point, professional development seems necessary for raising teachers' awareness about and supporting their practical skills in using program-based self-regulation intervention in classrooms. Toward this end, preschool teacher PD on children's self-regulation was carried out in this study, and participants' experiences of this PD were examined.

### ***Conceptual foundations of self-regulation in children***

Self-regulation is defined as goal-directed behavior (Hofmann, Schmeichel, & Baddeley, 2012). For Singer and Bashir (1999), self-regulation monitors and directs an individual's performance and social interactions to ensure success in the learning environment. From Tominey, McClelland, and Tracy's (2018) perspective, self-regulation combines working memory, inhibitory control, and attentional flexibility in children's behavior and the ability to stop, think, and then act.

By reviewing self-regulation intervention studies, Rosanbalm and Murray (2017, 9) emphasized "providing children with age-appropriate skills instruction and teaching caregivers how to co-regulate" as two approaches to support self-regulation. To provide age-appropriate instruction, program-based self-regulation intervention is suggested for children under 10 (McClelland et al., 2019). As an example of this type of intervention, the Red Light, Purple Light (RLPL) Self-Regulation Intervention Program aims to develop children's self-regulation skills through music and games. The RLPL's effect has been tested through experimental studies, and the results are promising (McClelland et al., 2019; Tominey & McClelland, 2011). For example, a study of 157 children from low-income families examined the relationship between children's mathematics and literacy skills, and two different versions of the RLPL. It was determined that children's mathematics scores in the two version groups increased compared to those in the control group (McClelland et al., 2019).

Teachers' co-regulation skills emphasize using positive behavioral management and establishing a supportive classroom climate (Rosanbalm & Murray, 2017). For instance, Bater and Jordan (2017) found that consistent classroom routines support self-regulation development and prevent negative behaviors such as aggression and impulsivity. In this context, Salomäki, Ruokonen, and Ruismäki (2012) emphasized competency, relatedness, and autonomy as underlying factors for self-regulation's de-

velopment. Toward this end, fostering active engagement, classroom interaction, and independent thinking are essential for children's self-regulation development (Schweinhart, 2003).

The effectiveness of self-regulation intervention programs has also been proven by meta-analysis studies (Pandey et al., 2018; Robson, Allen, & Howard, 2020). For instance, Pandey et al.'s (2018) study with 49 previous studies demonstrated the overall effectiveness of self-regulation interventions in children and adolescents. In addition, those who participated in the intervention program had high academic achievement, mental health, social skills, and educational attainment.

### **Theoretical Framework**

The theoretical framework of the research is based on Vygotsky's social-cultural theory. Vygotsky's views emerged from his work on children learning from adults in authentic settings and are widely recognized for his essential role in shaping contemporary educational views (Jeong, Clyburn, Bhatia, McCourt, & Lemons, 2022). The program's content was designed by Eun (2008) following the PD practices associated with the key theoretical concepts (social interaction, mediation, internalization, and psychological systems) in Vygotsky's approach.

According to the social-cultural theory, learning occurs when individuals engage in repetitive interactions in cultural contexts such as peer groups and professional learning communities (Jeong et al., 2022). In the current training program, the participants' social interaction was provided with their peers and professionals through workshops, seminars, and study groups. Shabani (2016) concluded that social interactions should be framed within activities with a clear purpose in the professional development process. This study's experiences included understanding and supporting children's self-regulation skills and explicitly recognizing and applying for the RLPL program.

Eun (2011) explained that professionals mediate teachers by providing technical tools involved in the process of social interaction and by modeling knowledge and skills. Teachers write down the new information for later recall until they fully internalize the new knowledge. Regarding mediation, supportive reading resources related to self-regulation, web resources that can be visited were provided, and online platforms were created where participants could communicate with each other and with academics. In addition, one-to-one mentoring support was provided during the implementation phase. Additionally, a journal writing opportunity was provided regarding internalization.

Eun (2008) emphasized that during the PD process, the focus should be on cognitive functions and the interrelations of cognition with other functions, such as emotional and imaginative. In this respect, the PD applied in this study included opportunities for teachers to both improve their attitudes about self-regulation and transform what they learned into direct practice.

### ***Preschool teachers' professional development on children's self-regulation***

Professional development is about “transformations in teachers’ knowledge, understandings, skills and commitments, in what they know and what they can do in their practice, and their shared responsibilities” (Feiman-Nemser, 2001, p.1038). Literature on effective PD provides a broad range of features, such as focusing on the learning process, allocating adequate time, utilizing external expertise, supporting interactions, and leaders keenly guiding professional learning opportunities (Timperley et al., 2008). In their systematic review, Orr et al. (2013) emphasized the importance of sharing thoughts with colleagues, putting new learning and skills into practice, and working to enhance performance. More recent review studies found that considering teachers’ needs in a specific context (Nawab, Bissaker, & Dato, 2021) and the quality of the process (Atal & Sancar, 2018) as critical features of PD. Desimone (2009, p.183) states a consensus about the fundamental features of PD, namely “content focus, active learning, coherence, duration, and collective participation”. The PD program’s content focuses on the subject, how learners elicit that content, and how to represent it meaningfully (Lindvall, Helenius, & Wiberg, 2018). Coherence is the consistency of a teacher’s learning with their knowledge, beliefs and managerial policies with what is taught in PD. The optimal duration of PD activities should be at least 20 hours and include groups of teachers from the same grade, subject, or school to create an interactive learning community (Desimone, 2009; Desimone & Garet, 2015).

Evidence obtained from research supports these features. In their study on 238 preschool teachers’ perceptions of continuous learning and exploring personal practice, Vujičić and Tambolaš (2017) found that teachers considered thinking and reflecting on their practice significant PD opportunities. The relevance, meaning, and choice of PD opportunities motivate teachers to engage in learning (Broad & Evans, 2006). Vosniadou et al. (2020) mentioned that making teachers aware of their beliefs and fostering discussion and reflection is the first step towards generating conceptual change, so teachers become aware of their impact on their practice. Teachers need to find the change process meaningful in affecting personal development; one way is to connect with their own lives (Fullan, 2016). Carrillo and Flores (2020) found that educators’ and learners’ ability to be emotionally involved in relationships was central to meaningful educational experiences.

The PD under consideration in this study revolved around the above research and mainly by Desimone’s (2009) work on the core features of PD. In this respect, it was considered essential to provide teachers with professional development that focuses on raising their awareness about the conceptual basis of self-regulation, supporting such skills throughout the school day, and learning how to implement the RLPL in their classrooms. Furthermore, for teachers to create environments conducive to fostering children’s self-regulation skills, they must be competent in this subject and learn ways of actively supporting self-regulation (Fuhs, Farran, & Nesbitt, 2013). Toward this

direction, focusing on self-regulation teacher training may include environment organization, setting up routines, establishing supportive relationships, using rules, and providing opportunities to practice self-regulation skills (Rosanbalm & Murray, 2017).

Based on the above discussions, the research findings reveal the importance of supporting children's self-regulation skills in the early years, effective ways of fostering these skills, and the need for teacher professional development activities. This study aims to investigate preschool teachers' perceptions of the experiences in a professional development program on children's self-regulation. The following questions were asked:

1. What did preschool teachers experience in the PD program about children's self-regulation?
2. How did preschool teachers perceive their experiences in the PD program on children's self-regulation?

### **Methodology**

Phenomenological research design is used to examine participants' experiences in the PD program focusing on children's self-regulation skills. Phenomenology intends to reveal the experience itself and how this experience transforms into consciousness. It allows one to gain an in-depth understanding of the meaning and nature of experiences (Merriam, 2014; Patton, 2015). The phenomenon of this study is the PD program in that teachers participated.

### ***The setting and participants***

Participating teachers follow the Turkish Ministry of National Education's (MoNE) program in their classrooms. The MoNe Program (2013) is child-centred, in which children are provided with opportunities to plan, implement, investigate, and discuss their experiences. It is flexible to individualize and adapt to features of the physical environment and families. Engaging in hands-on experiences in learning centres is emphasized to foster active participation and meet children's individual needs. A typical day starts with a whole group meeting to share plans for the day, talk about weather etc., and continues with free play. Children engage in different activities, such as music, literacy, and science. The day ends with a whole group meeting to reflect on the day and share plans for the next day.

Permissions were obtained from the Pamukkale University Ethics Committee (Protocol No: 10.131.1.47 430 Dated: 2.07.2021) Provincial Directorate of National Education for this research conducted with preschool teachers in the 2021-2022 academic year. The PD program took place during one week of mid-term break scheduled for all teachers by the MoNE. The participants were 23 volunteered teachers working in half-day public early childhood institutions in a mid-sized city located in the southwestern part of Turkey. The participants were chosen by using the criterion sampling

technique. Criterion sampling includes examining situations that meet some predetermined criteria (Patton, 2018). The criteria used in this study were: Teaching in the 4-5 age group, volunteering, and priorly not participating in any PD activities on children's self-regulation.

All participants were female with 14.79 years (SD= 4.31) of average teaching experience, 19 of them (82.6 %) had a college degree, and four of them (17.4%) had a graduate level of education. Approximately half of them (43.5%) worked with five years old, nine participants (39.1 %) taught four years old, one (4.3 %) worked with 3-4 years old, and three of them (13.0 %) worked with 5-6 years old children.

### ***Data Collection Tools***

*Demographic information form:* This form includes gender, years of teaching experience, and age group.

*Semi-Structured interview with preschool teachers:* The interview's purpose was to encourage teachers to describe their experiences and perceptions of the PD program. There were three main and 14 sub-questions. Sample questions were: What are your views on this PD program? What effect has this PD had on your knowledge and skills to support children's self-regulation skills? What are your views about the RLPL Program?

*Documents:* Of the documents created in the PD sessions, only three used in this study were question-answer forms, small group assessment notes, and reflective journals.

*Question-answer form:* This form aimed to provide the participants to individually assess their experiences with self-regulation prior to and after participating in the seminar sessions of the PD. There were four questions: The state of the participants hearing the concept of self-regulation, its definitions, thoughts on its importance, and how they support children's self-regulation skills.

*Small group assessment notes:* These notes were for participants to assess their experiences in small groups after working on RLPL games. They were given three subheadings to consider: What were their experiences when playing RLPL games, challenging aspects (e.g., when considering these games implementation in their classrooms), and suggestions for the challenging aspects.

*Reflective journals:* The journals' purpose was for teachers to describe their experiences based on their perspectives. Participants wrote journals four times at the end of each PD day. They were given three subheadings to consider: What is learned, challenging aspects of activities provided in the PD day (e.g., content, flow, materials), and suggestions for the challenging aspects.

The Question-Answer Form was individually completed by the participants on the first day of PD. Small Group Assessment notes were taken by participants after they worked on the sessions of the RLPL games. The trainers of the PD conducted in-



terviews, which lasted approximately 30 minutes. Voice recording was made with the consent of the participants, and the audio recordings were transcribed.

### ***Credibility, transferability, and reliability***

Triangulation and participant confirmation strategies were used to increase credibility. Four early childhood specialists examined the data collection tools, and necessary arrangements were made based on their feedback. Researcher-based triangulation took place by taking specialists' feedback into account, assuring the confirmation of the participants during the interview process, and independently analyzing the data by four researchers. Data-based triangulation was carried out using semi-structured interviews and documents. The participants were determined by using the criterion sampling technique to increase transferability.

### ***Teacher PD program on children's self-regulation skills***

The PD program for preschool teachers lasted five days. It was funded by the Scientific and Technological Research Council of Turkey. Six early childhood faculty members conducted all PD sessions. The PD's first aim was to increase preschool teachers' awareness of self-regulation in children. For this purpose, seminars and a workshop were conducted to establish theoretical foundations of self-regulation. Sample seminar titles were: Introducing the concept of self-regulation, its development, its effects on children, supporting self-regulation in the classroom, parents' role, and embedding self-regulation and RLPL in the MoNE Program. The second aim was to support participants' understanding and skills to implement the RLPL in their classrooms. Toward this purpose, several steps were taken; presentations for introducing the RLPL, discussing the sample RLPL video clips and role-playing RLPL games, and discussions about how they felt about the games and possible challenges when implementing the program in their classrooms. After the PD was completed, the research team provided support through an online meeting, classroom visits, and communication through online platforms to teachers who aimed to implement the RLPL in their classrooms.

*The Red Light, Purple Light Self-Regulation Intervention Program:* The RLPL Program is developed by Tominey, McClelland, and Tracy (2018-2020) and aims to develop 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 games' structure includes a welcome song, game, optional review, and goodbye song. In addition, to increase the PD quality (Orr et al., 2013), the research team participated in a two-hour online training given by researchers among the RLPL Program's developers.

*Adapting the RLPL Program to Turkish:* After gaining permission from the developers (Tominey, McClelland, & Tracy, 2018), the program was translated to Turkish; a

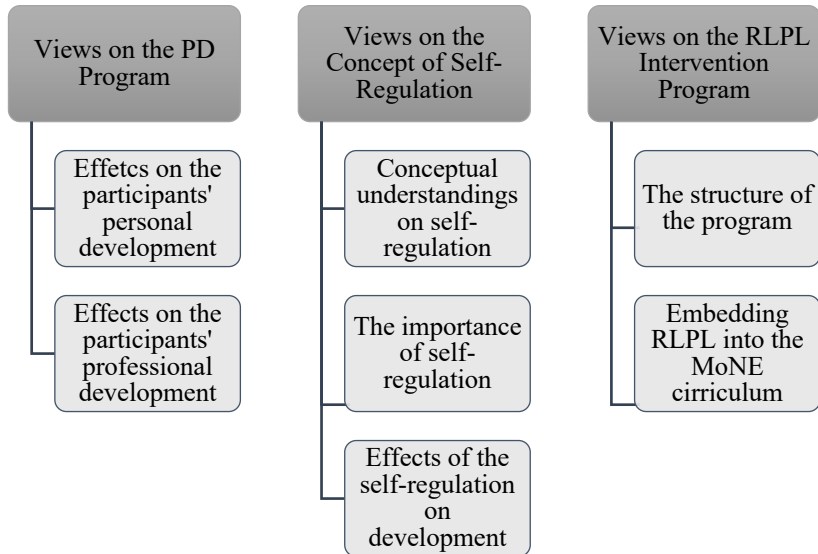
psychologist, a preschool teacher, four preschool education specialists, and one special education specialist checked the program's translation and its compatibility with Turkish culture. Necessary changes were made in the program according to their feedback. The background works of the RLPL songs were prepared by an independent musician and sung by a preschool teacher and a guidance specialist.

### **Data analysis**

The data were analyzed by using the content analysis technique. After transcribing the interviews, the data was reread line by line, and codes were developed from the participant preschool teachers' experiences and perceptions of the PD program. Next, redundant expressions were eliminated, similar codes were combined, and the themes were generated from these codes. Last, the interpretations of the participants' experiences were constructed based on the themes (Creswell, 2013). The transcript of the interviews was independently reread and analyzed by the researchers. Each researcher coded the data and determined the categories and themes (Merriam, 2014). Afterwards, the researchers shared the themes, and possible differences were discussed and agreed upon.

### **Findings**

Three main themes emerged from the data analysis: Views on the PD Program, Views on the Concept of Self-Regulation, and Views on the RLPL Program. The themes and subthemes are presented in Figure 1.



**Figure 1.** Themes and subthemes



### ***Views on the PD program***

The participants emphasized the PD's effects on their personal and professional development.

*Effects on personal development:* Teachers first stated that participating in this PD program and learning new things (self-regulation) increased their learning enthusiasm, and they can apply what they had learned in their personal lives. For example, P6 expressed that participating in the program helped her increase personal happiness and self-awareness by saying, *"Before coming here, I told myself that I would be a regular teacher. Then, I came here and talked to my colleagues here. I see what they have been doing. I have listened to what you tell us, and now I figure out that I have been doing nothing at all. Now, I tell myself that you are only at the beginning of this road, do not give up too quickly."* P4 similarly expressed herself by saying, *"I improved myself. I did something for myself. I contacted myself. Now, I am going to contact the children. I am happy."*

Secondly, participants claimed that increasing their awareness of self-regulation is also essential for their children and family lives. P8 mentioned, *"I wish we had known this concept earlier so that we could integrate this into our own children's lives."* P9 emphasized that the PD program created meaningful experiences for herself by saying, *"It turned out to be very meaningful for me to contribute to even my own child's life."* The PD program seems to help participants increase their awareness of self-regulation and the necessity of supporting these skills both in the classroom and at home. They particularly pointed out that they believe this personal development will affect their professional development, and they have numerous points to consider when teaching, such as routines and a calm classroom environment.

*Effects on professional development:* Participants discussed the PD program's effects on their professional development. For example, P4 and P9 explained how they had realized the effects of the words used during their daily routines on children by saying:

*"Instructions are fundamental. I need to work on that. We used to exaggerate. Well done, you did great... I don't know why, but we are constantly concerned to say to the child, 'well done.'" (P4)*

*"You are great; you are perfect. When we had an activity, I realized that we could not help ourselves say these. I have frequently been using those words in the classroom! I have questioned myself afterwards." (P9)*

Similarly, P25 stated that it might have more positive effects on children's development if exaggerated compliments aren't used and constant pressure is not applied on children with the statement *"We learned that during the practices that contain frequent appreciation sentences or warnings may hinder children's learning. We learned how*

*valuable words are...*”

Participants emphasized the necessity of communication and being role models for the quality of communication with children. For example,

*“I can support not only the planned activities but also the unplanned ones with a word, a sentence, or a gesture...” (P9)*

*“The first thing that I will do after this training will be to check the instructions I have given (whether they are understood), improve my self-regulatory skills as a teacher, be patient, and listen to the children more.” (P19)*

*“Here is the biggest realization of the training for me: If I want self-regulation from children, I should be the one doing this first.” (P20)*

Another area of awareness was about unnecessary interference. For example, one of the participants said:

*“I have criticized myself during the process regarding the activities. We interfere too much. ... The program contributed to me a lot. I have been personally influenced a lot because I have questioned myself and what I have been doing.” (P9)*

Similarly, P20 is criticized as *“We have been playing games in an ordinary way. However, I have realized here that we can play games with instructions that gather attention.”* K18 indicated the importance of varying the instructions in the games, saying, *“I did not use reversing instructions in the games. I did not include different materials in games.”*

The participants noticed that a calm classroom environment is primarily needed to support self-regulation skills. Statement related to this is:

*“I have seen how effective a calm atmosphere can be for children in cognitive, emotional, and social ways. Usually, we use bara-bam-bam bere-bem-bem (listening to music or communicating with loud noise); we learned that this is wrong.” (P22)*

Lastly, teachers said that supporting children’s self-regulation can help them learn better. They stated that it is necessary to think out of the box to develop a different point of view professionally to be more beneficial for themselves and the children in their classroom:

*“Teachers primarily focus on teaching, concepts, and activities. However, self-regulation is more of an awareness. When we support self-regulation, it is easier for children to learn. They will learn conceptual or mathematical skills more quickly. It should be prioritized. I wish every teacher had this training.” (P25)*

*“It helped us to develop a different professional point of view. Sometimes, we feel like the activities we do are adequate. When it is seen from the outside, it makes us realize that improvements should be made.” (P21)*

As can be understood from the statements summarized above, the PD program had positive effects on both their personal and professional development. On the one hand, the participants focused on in-class activities, daily routines, and the quality of their communication with the children. On the other hand, they emphasized that what they had learned about self-regulation would affect their family life. As a result, their awareness of self-regulatory skills’ importance increased, and they got excited to apply what they had learned to support these skills.

### ***Views on the concept of self-regulation***

The second theme was about participants’ focus on the definition, importance, and effects of self-regulation on development.

*Conceptual understandings of self-regulation:* Some participants did not hear or know about self-regulation before the PD; those who stated they had the knowledge and heard self-regulation confused it with self-discipline and self-control. The participants said it became easier to conceptualize after participating in the PD. For example, P2 stated *“When I first heard about the PD’s topic, it reminded me of being planned all the time. Nevertheless, it was not like that. I realized what self-regulation means and how important it is.”* Similarly, P22 stated that their prior knowledge of self-regulation is limited: *“I have not heard a lot about self-regulation, and when I first heard it, I imagined something like self-control. They are very similar concepts, but they are different.”* After the PD, the participants emphasized the following:

*“Self-regulation is controlling attention traffic, then being able to pay attention more or convey their attention flexibly from one thing to another.” (P17)*

*“Self-regulation is regulating themselves cognitively, emotionally and behaviorally.” (P18)*

*“I learned that we should encourage children to stop, think, and act.” (P20)*

The participants seemed to start developing conceptual knowledge about the definition and dimensions of self-regulation by attending the PD program. For example, they used phrases such as attention traffic, conscious act, and reducing reactivity.

*The importance of self-regulation:* Some participants stated that their knowledge about the importance of self-regulation skills was limited.

*“I did not think it was this important. I was impressed by its effect on academic success.” (P3)*

*“I did not know that self-regulation affects their future and the present.” (P17)*

*“We did not realize how important the knowledge we gathered in the self-regulation training. We noticed that we had not been paying attention to things that should be emphasized.” (P19)*

The participants indicated that their awareness of self-regulation’s importance has increased:

*“Self-regulation will affect the child’s academic success; we need to support self-regulation to bring children up well and help them be in good positions.” (P18)*

*“I have learned that self-regulation is teachable. It can positively affect children’s academic skills if supported at an early age.” (P20)*

As can be understood from the statements above, the participants realized self-regulation’s contribution to children’s academic success and life skills.

*Effects of self-regulation on developmental areas:* The participants noticed self-regulation’s effect on cognitive, social-emotional, language, and motor development. For example, P17 emphasized the following: *“I think it affects children’s skills such as concentration, focusing attention on something for a long time, waiting for their turn, criticizing, taking on the leadership when needed and passing it to others when required.”* In addition, P25 mentioned the effect on socio-emotional development areas: *“Self-regulatory skills are more effective after this pandemic (Covid-19). The children need them now more than ever. Because they cannot identify the emotion, they reflect this with their behaviors. Compared to the past years, they have trouble in emotional awareness.”*

Participants also expressed views on the holistic effects of self-regulatory skills on children’s development areas. For example:

*“This PD is necessary not only for children but also for adults. It is better to see the result after coordinating our lives in unity, not just emotionally, cognitively or behaviorally.” (P21)*

*“Self-regulation contributes to the children’s academic, mathematics and life skills. We have realized after the training that it is a skill affecting their success, helps children control their emotions and prevent themselves when necessary.” (P19)*

Based on the participants’ statements, it can be said that before taking part in the

PD program, they were not familiar with the concept of self-regulation, mostly confused it with discipline or control concepts. However, after the program, they were conceptually able to think about self-regulation and its contribution to the developmental areas.

### ***Views on the RLPL intervention program***

The participants expressed their views about the RLPL's structure and how to embed it into the MoNE program.

*The program's structure:* Participants first emphasized that the program helps children learn by having fun with games, songs, and music. P21 explained this situation by saying, "There is game diversity. The games help children have fun, think, and add their ideas. They match with the child's nature." P23 expressed her thoughts about the program's music: "Songs have been carefully selected, with simple lyrics and relaxing music. The kids can easily remember them." P24, on the other hand, highlighted the positive effects of the games and materials used in the program: "The games were outstanding in terms of structure; interesting materials for kids, levelled from simple to complicated. They are appropriate for children; they are interesting, fun, and do not create anxiety or stress."

Moreover, the participants stated that the program has a spiral structure that lines up from simple to complicated:

*"The program is organized from simple to complicated and practicable. It is designed with levels. The materials are easy to find. It supports children's skills while playing." (P2)*

*"The games are good, simple, and practical. Maybe not all, but we have played some of them before. We show children to match, but the first, second and third versions and different games were new to me. I have never thought of playing a game with versions, such as playing both with movements and rhythm in the third version. I have never tried anything like this before in my classroom."*

**(P16)**

They stated below that the games played before in the classroom did not have these characteristics:

*"We play the simple form in the first level, but we have not been using the tricky part (e.g., acting slowly when hearing fast music). We play the day-night game, the high-low game. After a while, we thought we had taught the concept, and the children learned it and had fun, so it was enough. We have not been doing tricky things."*

**(P21)**

*“The games are entertaining. We have been playing similar games. However, we did not have levels. We explain the rules and play; the game has been stopping there. Later, we play the same way.” (P11)*

The participants thought that the games were similar to the games they play in their daily routines. However, they have never played different versions by increasing the games’ complexity. According to the teachers, the levelling feature of the games seems to be essential to facilitate the children’s learning.

*Embedding RLPL into the MoNE Program:* The participants think the RLPL has similarities with the MoNe Program. For example, some of the similar features of the games were easy to find materials, developmentally appropriateness, and the program is parallel to the learning outcomes and indicators of the MoNE Program:

*“I will not have any problem with materials when applying the RLPL. The games, music, and duration are very appropriate. The children will play willingly. I will also enjoy practicing them.” (P20)*

*“The games are fun and are supported by songs. That is where we realized it supports all the preschool learning outcomes, such as learning about concepts.” (P25)*

*“The games contribute to the children’s auditory, sensory and social development. It makes them think and interact, respect each other, wait for their turns, become leaders, follow the leader and wait if required. The child learns to be patient. The levelling feature helps them get used to, instead of putting pressure on them while also simultaneously learning more than one skill. Using antonyms and syllables makes the brain’s different areas work.” (P13)*

Lastly, another point made by the participants is that it is easily practicable in terms of materials and duration:

*“The children will have fun and like the games. The games can be easily practiced since they are appropriate both for children and teachers in terms of materials and practicality.” (P24)*

*“The practicality is high since their materials are easy to find. The children enjoy them with slow songs, fast songs, jumping, and hopping.” (P12)*

*“The games are practicable regardless of where I work, my school, socio-cultural and economic situation. It is appropriate for the children’s readiness.” (P14)*



The participants thought that the PD supported their professional and personal development. Their awareness of the self-regulation concept, its importance and its effect on development areas increased. The participants stated that they would diversify their daily routine, activities, and communication methods. Moreover, they highlighted the RLPL's practicality and were willing to implement it in their classroom.

## **Discussion**

The study results were discussed under three headings: views on the PD program, views on self-regulation, and views on the RLPL program.

### ***Views on the professional development program***

Based on the results, teachers reported that the PD program positively affected their personal and professional development. In personal development, the teachers mentioned that their enthusiasm for learning increased, and they had a chance to reconsider relationships with their children regarding supporting self-regulation. Kaya (2020), in a study examining in-service training implemented throughout Turkey, emphasized that in-service training was essential for teachers' personal development. From this point of view, the teachers' associating the PD program experiences with teaching processes and the quality of their out-of-school relationships makes the learning process meaningful.

In the current study, teachers also thought that their self-regulation, such as constructively managing emotions, modelling behaviors, and waiting in line, is necessary for supporting children's self-regulatory skills. This view is consistent with Salomäki et al.'s (2012) conclusion that if teachers cannot self-regulate their existence and learning, they will have difficulty developing these abilities in children. In parallel, Shahmohammadi (2014) emphasized that children are interested in identifying such characteristics if the teacher is a self-regulatory person and is accepted as a model for following the rules.

Regarding the PD's influence on their classroom practices, the teachers focused on interactions with children, routines, and classroom atmosphere. Raver et al. (2012) emphasized that well-managed learning environments with a positive emotional atmosphere are more conducive to the development of self-regulation. In addition, many studies indicate that emotional support and quality classroom organization are related to children's self-regulation skills (e.g., Rimm-Kaufman et al., 2009; Cameron & Morrison, 2011; Güler-Yıldız et al., 2014). In this respect, as routines provide the confidence of predictability and encourage self-learning, they contribute to self-regulation among preschoolers (Bater & Jordan, 2017). Thus, as Ursache et al. (2012) stated, children become skilled at regulating boredom or frustration by relying on strategies, classroom rules, and routines that help regulate emotion and stress. This ensures the use of executive functioning abilities, facilitating attention, emotion, and stress man-



agement, creating a positive feedback loop.

Within the PD program, the teachers were exposed to theoretical explanations and practical examples about ‘ways of supporting self-regulation in the classroom’ and ‘factors affecting self-regulation’ and opportunities to reflect and share their own experiences. Salomaki et al. (2012) examined the effect of training given to teachers from 7 European countries and found similar personal and professional development results, including ‘to make changes in teaching methods and ‘to develop emotional intelligence. Another similarity between the two studies is that there are reflective thinking opportunities for the participants in both PD programs. Such opportunities foster the participants’ awareness and control their learning by actively reflecting and assessing what they know, what they need to know, and how they transfer this to different learning situations.

### ***Views on the concept of self-regulation***

Teachers’ views on self-regulation focused on three dimensions: conceptual basis, importance, and effect on development. According to the results, participating in the PD changed the teachers’ understanding of self-regulation. This change was observed from definitions focused on self-discipline and self-control towards explaining self-regulation within basic dimensions, namely cognitive, emotional, and behavioral. Duckworth and Seligman (2006) defined self-control and self-discipline as the ability to suppress strong responses to a higher goal and indicate that such a choice is not automatic but requires more conscious effort. Baumeister and Vohs (2007) stated that self-regulation refers to goal-directed behavior while self-control is associated with conscious impulse control. McClelland et al. (2018) stated that self-regulation results from self-control that enables flexible adaptation to the world’s demands but develops rapidly during infant and toddler periods.

Throughout the PD process, teachers were able to think about self-regulation from a broader and deeper perspective by having opportunities to discuss self-regulation with its dimensions, do further reading, and compare their newly emerging understandings with what they knew before participating in the PD. Concordantly, the PD experiences enabled teachers to develop an understanding of self-regulation’s importance in an individual’s life. Erol and İvrendi (2018) highlighted the necessity of providing experiences that promote children’s self-regulation skills from the early years. The primary purpose of the MoNE 2013 program implemented by teachers is to support children’s whole development. The support process is expected to be play-based, child-centered, and discovery-enhanced, which are also critical for developing self-regulation skills (Savina 2021). As İvrendi (2016) mentioned, children with high emotional, attention and behavioral self-regulation positively affect teachers’ expectations of them. In this respect, the perspective on self-regulation’s development and its relationship with learning can affect the teachers’ expectations that guide their prac-

tice. Therefore, it can be inferred that the teacher's phenomenological perception of the importance of self-regulation is the basis for the effective implementation of self-regulation opportunities. Like other knowledge workers in a world of change, teachers and principals may more likely need continuing professional development (Collinson et al., 2009). Further research may examine how participation in this PD affects teachers' educational practices.

### ***Views on the RLPL intervention program***

Teachers' views on the RLPL, such as easy-to-implement, a short-term intervention, spirality, and variations on children's games, overlap with the structural features of RLPL stated by Tominey, McClelland, and Tracy (2018-2020). McClelland et al. (2018) noted that interventions are most effective when they integrate multiple levels of impact across different contexts and involve the repetitive practice of behavioral skills in everyday settings that increase complexity over time. Also, the RLPL's features positively affected teachers' motivation toward using the program to support children's self-regulation skills.

Including the RLPL alongside practice-based examples that improve self-regulation in the PD process has made their experiences meaningful by bridging the conceptual foundations that teachers have acquired and their reflection in practice. Moreover, Higgins and Eden (2015) emphasized that teachers' pedagogical knowledge and skills could be improved if in-service training programs are carried out face-to-face with practice-based and group working methods. With micro-education applications in the PD program, such as role-play sessions of RLPL, participants had the opportunity to control their learning and strengthen their skills by experimenting with the application process of RLPL. For instance, in the PD, teachers engage both in large and small groups to role-play the RLPL sessions by acting like children and teachers and discussing the aftermath; the process of their application appeared to be effective for constructing their understanding of the RLPL program.

Participants also believed that RLPL could be embedded in the MoNE framework. MoNE 2013 allows the addition of contemporary approaches and intervention programs in line with children's interests and needs. According to Vosniadou et al. (2020), learners are considered active agents who interpret the information they receive considering what they already know and create their meaning. In this respect, teachers' gaining various experiences such as group discussions, mini-workshops, dialogic interaction, and cooperation during the PD process (Vosniadou & Skopeliti, 2014) was effective in their reasoning about embedding RLPL into the current MoNE curriculum.

### **Conclusion**

Preschool teachers have different educational backgrounds and experiences, making professional development opportunities especially valuable. This study showed

that PD experiences contributed to teachers' personal and professional development. Furthermore, the widening and deepening of teachers' explanations of self-regulation's conceptual foundations and importance confirm personal and professional development. However, further research aiming to quantitatively reveal the change in teachers' awareness and views on children's self-regulation skills can be conducted. Furthermore, the continuing support of teachers in the implementation processes after PD activities can reveal the possible transfer difficulties between theory and practice and unforeseen needs and produce solutions together. Finally, studies investigating the effect of RLPL teacher training on children's self-regulation skills and cross-cultural comparative studies on this subject can significantly contribute to the literature. Thus, the effect of intervention programs on the development of children's self-regulation skills from different cultural and educational backgrounds in the early years can be investigated, and the role of PD in increasing teacher competencies to support self-regulation can be revealed.

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