**Possible Selves of Pre-service Elementary School Teachers in the Time of COVID-19 Pandemic: A Sequential Explanatory Mixed-Method Study**

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**Abstract**

*Possible selves* theory describes how a person thinks about his or her own future potential. Based on past and present self-images, understanding one's *possible self* can be an incentive for one's future behavior. Social structures, cultures, identities and genders may affect the development of *possible selves*. One can envision a *possible self* that he or she would like to become or is afraid of becoming. During the COVID-19 pandemic, teachers and students quickly adapted themselves to a distance teaching and learning process. This transition to an on-line venue may influence pre-service teachers' attitudes towards teacher education and possibly modify their expectations regarding the profession. Within this context, the aim of this study was to examine the *possible selves* of pre-service teachers in order to consider implications for their future orientations. Sequential explanatory mixed-method design with a stratified purposeful sampling technique was used in the study. One hundred eighty-six junior and senior pre-service elementary school teachers constituted the quantitative strand sample of the study and thirteen of the participants were purposefully selected for the qualitative strand. Findings reveal pre-service teachers indicate a high level of *expected possible selves* while demonstrating a low level of *feared possible selves* in the "uncaring teacher" and "uninspired instruction" dimensions. However, pre-service participants expressed fears about the "loss of control" dimension of *feared possible selves*. One of the main reasons for this fear was their on-line teaching practicum course, which provided limited experience of classroom and learning management in the time of the COVID-19 pandemic.

Keywords: children, Covid-19 pandemic, elementary education, possible selves, pre-service teachers

**Introduction**

The integral role of early education on the development of the "whole child" is well-established and this effect on forming children's future is also well-accepted as critically important (Bhardwaj, 2016; Enciso et al., 2017; Zgaga, 2005). In a safe and supportive environment, a holistic perspective nurtures children's physical, emotional, social and intellectual development (Noddings, 2005). Elementary education can provide an arena for safe, challenging, and supportive learning environments. Since elementary education is a crucial phase in a child's life, it provides particular targeted roles such as enabling children to acquire cognitive, affective, and psychomotor skills (Bozdogan, 2008), along with cultural-oriented and critical thinking skills.

Elementary education, where-in initial requirements of child development need to be met, serves as an agency in organizing social relationships and promoting independence in the early years of life. Elementary school teachers, who act as facilitators in these initial stages of children's lives, become responsible for preparing children for the future (Sliskovic et al., 2017). It is critically important for teachers to create an innovative and effective learning atmosphere to assist children in discovering who they can become.

Since elementary school teachers become mentors and role models for their students, the teacher education program is significant for schooling systems, and thus, children's learning. The teacher education program refers to procedures and curriculum arranged to equip pre-service candidates with the skills, behaviors, and expectations essential to successfully fulfill their school responsibilities, as well as maintain wider quality educational environments (Ezer et al., 2010). Additionally, teacher education programs focus on nurturing pre-service candidates' professional identity, self-efficacy development, and self-actualization for their future-oriented work-related behaviors.

**Literature Review**

**Possible Selves Theory**

Since the 1980's, *possible selves theory* (Markus & Nurius, 1986) presents a central framework for future-oriented tendencies. *Possible selves theory* describes how a person thinks about his or her own future potential. As identified by Markus and Nurius (1986), *possible selves theory* serves as "incentives for future behavior" based on past and present self-images (p. 955). One can envision a *possible self* that he or she would like to become or is afraid of becoming. Generating *possible selves* is an opportunity for individuals to project who they will be in the future (Lee & Oyserman, 2008). Erikson (2007) discusses how "possible selves are conceptions of ourselves in the future, including, at least to some degree, an experience of being an agent in a future situation. Possible selves get vital parts of their meaning in interplay with the self-concept, which they in turn moderate, as well as from their social and cultural context" (p. 356). As also stated by Oyserman and Fryberg (2006), social structures, cultures, identities, and genders affect the development of *possible selves*. The perceived attainability is shaped by standards, interactions, and social norms as well (Erikson, 2019). *Possible selves theory* becomes an important motivational resource and links to provide motivations and imagined futures (Erikson, 2018). *Possible selves* can be regarded as positive since some appear as "expected or hoped for" selves while others can be labelled as negative since they are referred as "avoidant and feared" *possible selves* (Oyserman & James, 2011, p. 128-129). Hoped for or expected selves could

include health, work satisfaction, and happiness; while feared or avoidant selves might include poverty, illness, and loneliness (Dunkel & Anthis, 2001). When *possible selves theory* initially appeared, it represented a concern for social psychology (Markus & Nurius, 1986); however, now this theory is receiving heightened attention in educational settings. As a goal-focused theory, it provides a sense of motivation "in terms of futures to avoid or achieve" (Erikson, 2019, p. 29). With colleges and universities restricting access to on-ground learning because of the COVID-19 pandemic, the rapid transition from "face to face" to "online" teaching and learning resulted in stress and confusion for stakeholders involved in teacher education (Dilekci & Limon, 2020; Nasri et al., 2020). This instructional delivery transition process could alter pre-service teachers' attitudes towards teacher education programs and may impact their expectations regarding the profession.

## COVID-19 Pandemic and Teacher Possible Selves Theory

The COVID-19 pandemic changed much of the social and organizational life throughout the world (Kavrayici & Kesim, 2021). The pandemic impacted teacher education in numerous ways. Although teachers and students quickly adapted themselves to distance teaching and learning processes because of school and university mandates (Carrillo & Flores, 2020; Kaya & Dilekci, 2021), stakeholder stress/confusion occurred because of this shift to "online" instruction (Dilekci & Limon, 2020; Nasri et al., 2020). During the pandemic, teacher candidates did not experience access to children and schools; this context of instructional delivery may influence pre-service teachers' attitudes towards teacher education programs and impact expectations regarding the profession.

For example, because teaching practicum courses were implemented via on-line teaching, pre-service teacher-candidates were not exposed to teaching practicum lessons including classroom management applications and practice of teaching strategies. The lack of in-person teaching experiences might be a reason why pre-service teacher-candidates may encounter difficulties later in their careers (Nasri et al., 2020), affecting their identity development and self-actualization in the teaching profession.

In Turkey, pre-service teachers were matched with the on-line learning system of the Ministry of National Education called EBA (Education and Information Network); pre-service candidates attended on-line lessons delivered by teachers in the Ministry of National Education's schools. As a requirement of teacher education in Turkey, teacher-candidates made observations, presentations, and taught a lesson as a student teacher during COVID-19. This on-line instruction may also negatively affect their classroom management competencies and teaching strategies when they later encounter face-to-face classroom interactions.

Since future orientations of pre-service teachers represent a critical role for educational operations, the topic of *possible selves* of pre-service teachers remains one of the most important research trends of teacher education in the past two decades. *Possible selves theory*, in terms of focusing on future selves, provides an appropriate theoretical framework to examine the professional identity development of pre-service teachers; this timing represents the last stage of teacher education - a critical phase from transitioning from a student to a teacher (Hamman et al., 2010).

Pre-service teachers build their future teacher selves through the opportunities they experience during their education (Hong & Greene, 2011). Yuan (2016) states *feared possible selves* of pre-service teachers restrain their prospective actions and sense of agency. *Feared possible selves* of pre-service teachers include avoidances such as becoming a "boring" teacher (Pellikka et al., 2020). However, *positive possible selves* direct pre-service teachers to make plans and develop strategies for the future (Chan, 2006). Expected *possible selves* refers to pre-service teachers striving towards becoming "caring" and "inspiring" (Pellikka et al., 2020). *Possible selves theory* is applied as a compass to understand how pre-service teachers' future expectations, goals, and motivations develop (Hamman et al., 2013). *Possible selves theory* describes how motivated an individual is about their future selves (Oyserman & Markus, 1990), and it is helpful to "understand how efforts to become a certain type of teacher in the future are deeply rooted in the emerging professional identity of the present" (Hamman et al., 2013, p. 308). Pre-service teachers' concerns and expectations about the future may ensure considerable information for professional development of teachers and the curriculum of teacher education. An examination of feared and expected selves of pre-service teachers helps to support positive outcomes for teacher education programs (Hamman et al., 2013). Thus, the emerging *possible selves* of pre-service teachers during COVID-19 become a focus of concern. Moreover, an examination of *possible selves* of pre-service teachers provides insight regarding results of teacher education during the COVID-19 on-line learning environment.

Within this context, the intent of the current study was to describe perceptions of pre-service teachers regarding their own *possible selves*. Therefore, the study focuses on the following research questions:

1. What are the levels of *expected and feared possible selves* perception of pre-service teachers during the COVID-19 learning environment?

2. What are the feelings and thoughts of pre-service elementary school teachers about their *possible selves* during the COVID-19 learning environment?

3. To what extent could the findings of the qualitative data be used to generate a deeper perspective to evaluate *possible selves* of pre-service teachers during the COVID-19 learning environment?

**Methodology**

Researchers used a sequential explanatory mixed-methods design in this study. The intention of the design is to use qualitative data to build upon quantitative results (Creswell & Plano Clark, 2007). In explanatory sequential design, the qualitative data collection process intends to explain the results of the quantitative data in more detail (Sahin & Ozturk, 2019). The procedure in this design includes initially gathering survey data (rationalistic/quantitative analysis), analyzing the data, and then, conducting interviews and thereby generating narrative data for a qualitative analysis. In this second narrative data collection, the intent is to support the responses gathered in the survey phase (Creswell, 2014).

**Participants**

The population for this study included two hundred and fifty junior and senior pre-service elementary school teachers in a university in the middle east region of Turkey in the academic years of 2019-2020 and 2020-2021. Stratified purposeful sampling technique was used in the study. Since *possible selves* is a part of the teaching experience and related to hopes and expectations in the near future, the sample and population were determined according to their classification, selecting those who were closer to entering the profession. Therefore, seniors who experienced both teaching practicum and school observation courses and juniors who participated only in a school observation course were included in the study. From this point of view, classes of pre-service elementary school teachers were regarded as one strand; thus, one hundred, eighty-six junior and senior pre-service elementary school teachers constituted the sample of the quantitative strand of the study. See Table 1, descriptive statistics, describing the participants.

Table 1. *Descriptive Statistics of the Participants in Quantitative Strand*

| Feature | Variable | F | % |
|---|---|---|---|
| Gender | Female | 139 | 74.7 |
| | Male | 47 | 25.3 |
| Experience of Teaching Practicum Course | Yes | 110 | 59.1 |
| | No | 76 | 40.9 |
| Grade | Junior | 74 | 39.8 |
| | Senior | 112 | 60.2 |
| **Total** | | **186** | **100** |

The participants of the qualitative strand of the study were selected using a purposive sampling technique called maximum variation sampling that "reports diverse variations and identifies common patterns" (Miles & Huberman, 1994, p. 28). This sampling technique includes purposeful choice of participants in a wide range of cases in order to provide variation on dimensions of interest and identify crucial common patterns among variations (Patton, 2007). Hence, a variety of participants in different grades, genders, and ages were provided in the qualitative phase (See Table 2).

Table 2. *Participants of the Qualitative Phase*

| Participant | Gender | Age | Grade | Interview Duration |
|---|---|---|---|---|
| P1 | Male | 22 | Junior | 27.33 |
| P2 | Male | 21 | Junior | 29.04 |
| P3 | Male | 22 | Junior | 35.52 |
| P4 | Female | 24 | Senior | 33.38 |
| P5 | Male | 25 | Senior | 26.34 |
| P6 | Female | 21 | Junior | 39.18 |
| P7 | Female | 22 | Senior | 22.06 |
| P8 | Male | 24 | Senior | 43.49 |

| P9 | Female | 25 | Senior | 25.11 |
| P10 | Female | 22 | Junior | 34.23 |
| P11 | Female | 23 | Junior | 21.47 |
| P12 | Female | 25 | Senior | 41.02 |
| P13 | Female | 23 | Senior | 52.45 |

Since the aim of the qualitative phase is to explain the findings in more detail (Creswell & Plano Clark, 2017), volunteer participants were chosen from those participating in the rationalistic phase of the study. Data saturation, defined as "no new themes and information are expected to be emerged from the data" (Guest et al., 2006, p. 59), determined the number of the participants. For the interview (qualitative) section of the study, thirteen participants met the data saturation criterion which provided maximum outcome for the research problem.

**Research Instruments and Procedures**

The data in the quantitative phase were gathered via the *Possible Selves Scale* developed by Hamman et al. (2013) and adapted to Turkish by Tatli-Dalioglu and Adiguzel (2015). The *Possible Selves Scale* includes expected and feared possible selves. The *Expected Possible Selves Scale* includes two dimensions, "professionalism" and "learning to teach," while the *Feared Possible Selves Scale* includes three dimensions identified as "uninspired instruction," "loss of control," and "uncaring teacher." The scales represent a six-point Likert type and both of them include nine measures. *Expected Possible Selves Scale* explains 68.5% of total variance and *Feared Possible Selves Scale* explains 75.4% of total variance. Cronbach's alpha values for dimensions of the scales report as follows:  professionalism (.79), learning to teach (.68), uninspired instruction (.86), loss of control (.81), and uncaring teacher (.76).

For the qualitative strand of the study, semi-structured interviews were conducted via Zoom on-line meeting software. Semi-structured interviews, a commonly used data collection method, enable information-based interactions between the interviewer and interviewee. Therefore, the researcher prepared fourteen questions generating from the *possible selves* literature and the results of the quantitative strand of the study. Two field experts, academics in educational sciences with a PhD degree, analyzed the fourteen interview questions; one question was eliminated from the initial draft because of irrelevance. A pilot study was conducted with one junior and one senior elementary pre-service teacher in order to determine whether the questions in the draft were useful and comprehensive. Two questions were eliminated since they were difficult to interpret and comprehend. The final interview included eleven questions.

**Data Analysis**

Surveys created in Google Documents were posted to pre-service elementary teachers in junior and senior grades.  One hundred and ninety-four participants completed the on-line form; the researcher extracted the excel form and transferred it to SPSS 22.0 software. Outliers in the data set and the normal distribution were checked to prepare for analysis. Having applied box and whisker plots analysis, eight of the participants were detected as outliers. Then, the kurtosis and skewness values were checked, and the values were within the range of $\pm 1$, indicating normal distribution. The internal consistency coefficients for the dimensions of the scales demonstrated

the reliability: professionalism (α =.82), learning to teach (α = .73); uninspired instruction (α =. 84), loss of control (α = .78), and uncaring teacher (α = .79).

The narrative data in the qualitative strand were organized to illuminate and explain the findings of the quantitative strand by providing more detail. Interviews, implemented via Zoom on-line meeting software, were recorded under the permission of participants after they filled on-line interview consent forms as an ethical requirement. The researcher took notes during the interviews and transcribed the duration of the interviews; interviews ranged from 21.47 to 43.49 minutes. Having transcribed the data, one hundred and seventy-three pages were obtained. The researcher organized, categorized, and coded the transcribed narratives. Another researcher listened, read, and coded the data alternatively. Direct quotations were used to support and enrich the different interpretations of the data. The data of the qualitative strand were analyzed by using template analysis which intends to allow the researcher to evaluate priori themes. Priori themes build on the quantitative findings from the first phase (Hesse-Biber, 2018). Template analysis serves to help scholars to combine quantitative and qualitative data analysis (King, 2004), and can be implemented by using the themes emerging in the quantitative phase (Hesse-Biber, 2018).

Creswell (2013) and Lincoln and Guba (1985) identify various strategies to ensure trustworthiness in qualitative research. A number of trustworthiness strategies were utilized within this current study. First, the strategy referred to as *prolonged engagement* was used in which trust with interviewees during the data collection and research process was established. The second strategy was an *external audit,* which means a person, not involved in the research, checks and verifies the collected data and the generated codes (Creswell, 2013). Regarded as participant validation, *member checking* is another strategy employed in this study (Lincoln & Guba,1985). Thereby, each participant was asked to check the accuracy of the transcriptions and the results of the interview. The fourth strategy was an effort to provide *rich and thick descriptions* as well as provide deep information (Creswell, 2013). Additionally, detailed descriptions and purposeful sampling were used to ensure one criteria of trustworthiness, called *transferability*. It is used to ensure generalizability of the qualitative findings (Erlandson et al., 1993; Lincoln & Guba, 1985).

**Results**

The results align with the "weaving approach," which includes writing both quantitative and qualitative findings together on a concept-by-concept or theme-by-theme basis (Fetters et al., 2013, p. 2142). Hence, findings and discussion merge together because "the quantitative and qualitative results can easily be compared and contrasted by explaining through narrative" (Hesse-Biber, 2018, p. 291). First, an analysis examined the perceptions of pre-service elementary teachers on their *possible selves* (Research Question 1). Descriptive statistics related to their perceptions are displayed in Table 3.

Table 3. *Arithmetic Means and Standard Deviations for Pre-service Teachers' Possible Selves*

| Measurement Tool | Variables | n | $\bar{\mathrm{x}}$ | sd | Skewness | Kurtosis |
|---|---|---|---|---|---|---|
| Expected Possible Selves (EPS) | Professionalism | 186 | 5.09 | 0.64 | -.812 | .918 |
| | Learning to teach | 186 | 5.24 | 0.50 | -.305 | -.571 |
| | EPS (Total) | 186 | 5.18 | 0.48 | -.197 | -.858 |
| Feared Possible Selves (FPS) | Uninspired instruction | 186 | 3.15 | 1.53 | .192 | -.917 |
| | Loss of control | 186 | 3.91 | 1.22 | -.432 | -.538 |
| | Uncaring teacher | 186 | 2.74 | 1.29 | .519 | -.593 |
| | FPS (Total) | 186 | 3.27 | 1.14 | .180 | -.785 |

As illustrated in Table 3, the arithmetic mean of pre-service elementary teachers' perception on the "professionalism" dimension was $\bar{\mathrm{x}}$ = 5.09. Items in "professionalism" dimension of the scale were related to success in profession. This finding of the study reveals that professionalism is the factor of *possible selves* that is highly expected by pre-service elementary teachers.

Qualitative findings (Research Question 2) echo identical results and reveal the highly expected professionalism as well. Data highlight pre-service teachers' importance of professionalism and further describe their expectations. Pre-service teachers believe they will be able to help their students develop positive attitudes and they will treat them fairly and equally. They also believe that they will be successful in planning and preparing lessons. Interview data triangulated with numerical data; qualitative analysis building on strand one quantitative analysis supported a priori theme. The narrative quotations about "professionalism" include the following:

> *"First of all, I love people and children. Seeing the light in their eyes makes me cheerful when they learn something new. The idea of being the first to teach many things to prepare them for life… It is a great happiness." (P2)*

> *"I am also fair in my daily life. Even when I am sharing chocolate with my friends, I cut it with a knife in order to be equal and fair. Being fair and equitable {is}inevitable in teaching profession. I will not care about social, cultural and economic background and status of children. They will all be equal in my classroom." (P12)*

> *"University education that we have experienced is already on being planned. Plan, plan, plan! Everything belongs to this magic word. We always plan our teaching practice course and the presentations in other courses at the university." (P6)*

The arithmetic mean for the "learning to teach" dimension ($\bar{\mathrm{x}}$ = 5.24) was the highest one among the *possible selves'* dimensions. Items in the "learning to teach" dimension include collaborate with colleagues, peers, parents, and willingness to learn new methodologies. The qualitative data

strand also supports the findings of this quantitative dimension revealing that "learning to teach" is particularly important to pre-service teachers. It could be deduced from the narrations that pre-service teachers expect to build collaborative relationships with parents. In addition, data show pre-service teachers would also like to learn and try new methodologies; rather, than to teach with traditional models. Findings in the qualitative analysis shared the same perception. Pre-service elementary teachers expect that they will be willing to learn new "things" from their colleagues, parents and all the shareholders that would contribute to the educational environment. In addition, they understand the need for technology much more than they did in the past, because they experienced on-line learning management systems intensively during the time of the COVID-19 pandemic. Pre-service teachers' opinions, regarding the "learning to teach" a priori theme, are as follow:

> *"I think collaboration with parents is the most important. Children spend most of their time with their family. Parents and teachers should proceed accordingly. I think I can achieve this. Some parents can be difficult. However, with strong relationship and cooperation we can overcome these difficulties." (P4)*

> *"I want to be an effective teacher. I think I will achieve this by using different methods since we were imposed to do this during university education. I can teach students by using games effectively." (P1)*

> *"The idea of learning from peers and experienced colleagues sounds good. I am still doing this by calling my uncle who is an experienced elementary school teacher. I call him sometimes and ask: What would you do for that kind of learning outcome? I prepared this material. Do you think is it appropriate? I can do the same in initial years of the profession." (P9)*

> *"There is a possibility of hybrid education when the pandemic is over.We have experienced a lot about distance education practices and technological applications during the COVID-19 pandemic. How to make a presentation in online education? How can the materials be adapted for distance education? These experiences would be useful for us in the context of different teaching methods." (P8)*

The "uncaring teacher" ($\bar{x}$ = 2.74) dimension was the one which had the lowest arithmetic mean among the dimensions of *feared possible selves* indicating that pre-service teachers do not have fears about being uncaring in initial years of the profession. Since items in the "uncaring teacher" dimension were related to being an unjust, apathetic teacher, data indicate that pre-service elementary teachers were not afraid of being an uncaring teacher. Findings of the qualitative phase also supported the findings of this dimension indicating pre-service elementary teachers had self-confidence in being a caring teacher. Therefore, findings demonstrate pre-service elementary teachers do not fear their capacity to show care for their students. Opinions of pre-service teachers describing caring or uncaring teachers are as follow:

> *"I think they will take me as a role model. I think I use Turkish properly. Communication is an important factor. I pay attention to my dressing up. I am generally a happy and smiling person. That's why I will become a role model." (P11)*

*"I am a happy person in daily life. I love kids so much. My primary school teacher also loved us very much. I am sure that I will love my students and take care of them one by one according to their individual differences. I think my classroom will be a very good family atmosphere."* (P8)

*"I am a person who gets on very well with children. I think they will love me. I experienced this when I was a volunteer teacher at the Society Volunteers Foundation. I don't want to be a traditional teacher. All the learning process should be implemented with love and intrinsic motivation."* (P13)

"Uninspired instruction" ($\bar{x}$ = 3.15) was another dimension which represented a low arithmetic mean among the dimensions of *feared possible selves*. Since items in the dimension reflect boring and ineffective teachers, the low arithmetic mean is positive in that it implies pre-service elementary teachers would inspire their students in the instructional process. Findings from the qualitative strand evidenced similarities with the findings of the first strand. The implication is that the COVID-19 process provided small numbers of advantages in terms of time management and on-line learning programs in contrast to the abundance of disadvantages. Hence, it is possible to deduce that pre-service elementary teachers believe that they will inspire their students in the near future. Opinions of pre-service teachers describing uninspired instruction are as follow:

*"For example, I took "Intelligence and Mind Games" lesson and "Traditional Games" lesson during the Covid-19 pandemic process as a certificate from "Home and School Association." I realized that I could use even the best-known "blind man's bluff" game for learning outcomes. I think we can make education and learning permanent by combining even the slightest old tradition with games."* (P10)

*"I don't want to be a boring teacher. I think I will achieve this. When children lose interest in the lesson, I can draw their attention by doing different activities."* (P5)

*"I grew up in a village, I am the only one who is about to get university degree among 12 siblings. Before me, there wasn't any family member who experienced university education. This story has inspired many people in the village and my family. I know what it is to be successful in difficult conditions. I believe I will impress my students."* (P7).

One of the prominent findings related to "loss of control" ($\bar{x}$ = 3.91) exhibited the highest arithmetic mean among the dimensions of *feared possible selves* indicating that pre-service elementary teachers demonstrate some fears about managing classroom and instruction. Since items in the dimension regarding ineffective classroom and instructional management as well as losing control in managing pupils respectively, a higher arithmetic mean indicates they would experience difficulties in managing a classroom and instruction. Findings of the qualitative strand underpinned the findings of quantitative data as well. According to interviews, the theme participants focused on was "loss of control" which was mainly affected by an on-line education during COVID-19. They believe that experiencing an on-line teaching practicum course will affect their competencies on managing classroom and instruction negatively. Consequently, it is

possible to suggest that pre-service elementary teachers experience doubts in their management strategies. The narrative comments describing their concerns referred to as "loss of control" are as follow:

> *"I'm afraid of classroom management. Virtual classroom management is very difficult in online education as we experienced in teaching practicum course in the time of COVID-19. Duration of the lessons in public schools was limited with 30 minutes. It is also important to know technology. Sometimes I did screen sharing in my online teaching trial. Since, children were better than me in using technology, they drew something on the screen. For example, I could not solve this problem. I do not know how I will be able to manage classroom and instruction in face-to-face education. We will not have experienced face-to-face education when we start the profession." (P4)*

> *"I had fears about classroom management before teaching practicum course experience. However, I observed my teacher very well, during teaching practicum course. If I act like her, I believe that it would be better. Nevertheless, this is the course in online education because of COVID-19 pandemic. I don't know how it will be in face-to-face education. That's why I still have concerns about classroom and instruction management. Because we have never experienced the classroom environment in face-to-face education." (P5)*

> *"To be honest experiencing online teaching practicum course was not satisfying. We couldn't feel the warm atmosphere of the classroom. Face-to-face teaching practice could have been better. We could have been more effective in classroom management and teaching methods. I think we will feel the lack of this experience in our professional life. We would like to start the profession with more experience." (P12)*

> *"This is my 3rd year. The idea of experiencing online teaching practicum course in next year is horrible. I would like to have my teaching practicum course face-to-face with lots of interactions with my lovely students. My lessons and presentations will be more effective in face-to-face education and I will be able to overcome my doubts about classroom and instruction management." (P6)*

**Discussion**

In answering Research Question 3, the researcher reported the findings from both the quantitative and qualitative results by using a weaving approach and used joint-interpretation to compare results when analyzing the data. There was a convergence of data when comparing feelings of participants towards scores of *possible selves*. Jointly interpreted report of the research represents the participants' feelings based on each dimension and how they align with quantitative findings. When evaluating the key findings of the mixed-methods data, the researcher discovered numerous points representing various correlations from both the quantitative and the qualitative results. There was a convergence between pre-service teachers' future expectations and possible fears scores with statements of participants during the interviews.

Jointly interpreting quantitative and qualitative analyses reveal pre-service teachers indicate positive future orientations related to "professionalism" and "learning to teach," as expected *possible selves*. They stated that they expect collaboration with colleagues, peers, parents, and a willingness to learn new methodologies that refer to the "learning to teach" dimension. Another dimension evidencing the positive expectations of pre-service teachers regarding early years of the career was "professionalism" indicating self-confidence in their successful teaching profession. These current findings demonstrate congruence with the existing literature. Pre-service teachers evidence a high level of perception regarding their expected *possible selves* (Tatlı-Dalioglu, 2016; Tavsanli & Sarac, 2016; Olcer, 2019). Findings (Ng, 2019) also reveal teachers who indicate expected selves are more likely to look for a collegial collaboration and dialogue. Qualitative findings highlight high expectations of pre-service teachers on "professionalism" and "learning to teach." They believe that they will be able to build strong and collaborative relationships with parents and colleagues when they begin the profession. They indicate high expectation in their ability to plan and use new approaches in their initial years. Although they feel some personal inadequacies, they describe their experiences with new learning management systems in the time of COVID-19 (Zoom, Microsoft Teams, EBA, Google Classroom) which enabled them to think about more technology-driven educational environment probabilities.

The findings related to *feared possible selves* suggest pre-service teachers demonstrate no concerns about becoming uncaring teachers; this finding indicates a belief in their capacity to interact with future students with sensitivity and fairness. Regarded as an indicator of an inspired teacher, traits associated with "enjoyable and effective" become important in the learning process. Pre-service teachers do not express fears about being boring and ineffective at the beginning of the profession. These current findings are similar to other studies in the existing literature. For example, Babanoglu (2017), Tatlı-Dalioglu (2016), and Olcer (2019) describe how the arithmetic means of the subscales were low, indicating that pre-service teachers do not demonstrate fears regarding their becoming boring and ineffective. Qualitative findings triangulated well with the quantitative data phase by indicating pre-service teachers demonstrated almost no fears of becoming "uncaring teachers" or implementing "uninspired instruction." Pre-service teachers believe they will be "effective and enjoyable" educators that will inspire their students. They think fairness and equality are crucial in order to sustain peaceful learning environments. They also indicate self-confidence in their ability to be a role model for their students with respect to physical appearances, thoughts, behaviors, and attitudes. These current results align with the research of Shoyer and Leshem (2016). Pre-service teachers assumed good teachers should be knowledgeable, sensitive to students' instructional and emotional needs and as well as know how to conduct effective lessons. In sum, findings related to "uninspired instruction" and "uncaring teacher" dimensions of *feared possible selves*, "professionalism" and "learning to teach" dimensions of *expected possible selves* indicate pre-service teachers evidence self-confidence and positive thoughts regarding their initial years in the profession. Similarly, Shoyer and Leshem (2016) found that pre-service teachers expressed more hopes than fears on their future orientation. Their study described how out of 742 statements, 241 statements were related to fears; whereas, 501 statements were associated with hopes (Shoyer & Leshem, 2016).

However, among the *feared possible selves* of pre-service teachers, "loss of control," including classroom and instructional management processes represented the main dimension of focus. As widely known, classrooms are the places where children develop themselves and build their behavior, so effective classroom management is crucial. Hence, doubts and fears of pre-service teachers associated with classroom and instructional management processes regarding their initial career should be considered as integral toward their future successes with children. Findings related to the "loss of control" dimension support the existing literature (Babanoglu, 2017; Dalioglu & Adiguzel, 2016; Olcer, 2019). Existing research describes the fear pre-service teachers express in regard to classroom management in the initial years of the profession. The arithmetic mean of "loss of control" dimension, in this current study, is higher than the arithmetic mean reported in the Babanoglu study (2017) and the Olcer study (2019), indicating a higher level of pre-service teachers' fear with respect to classroom and instructional management. This may be the result of the COVID-19 process, which transferred the face-to-face teacher education program to an on-line teacher education delivery. Pre-service teachers, who experienced all of the courses including teaching practicum as on-line, may have developed more fears about "loss of control" in initial years of the profession. Current qualitative findings emphasize the impact of COVID-19 on teacher education, the process of which affected self-confidence, fears, and expectations of pre-service teachers. Pre-service teachers, in the last year of their university education, underscored the differences of experiences between the on-line teaching practicum course and the face-to-face school observation course that they practiced in their third year just before the COVID-19 pandemic. They discussed how their observation course in a real school and within a classroom context was more useful than their teaching practicum course in a virtual teaching context. They believed that they felt the energy of the classroom in a real context. They were able to observe the materials and methodologies used in the lesson in detail. They could understand reactions of teachers and students, and feel the emotional atmosphere in the classroom. Unlike a real context, an on-line teaching practicum was a far cry from providing the emotions and detailed practices. Pre-service teachers determined that having or lacking these in-class experiences as potentially significant in their future classroom practices. These findings remain consistent with the literature indicating that previous experiences of pre-service teachers influence the roles and *possible selves* they imagine for future professional targets (Miller & Shifflet, 2016). Moreover, the literature suggests experiences with feedback and close interaction in the classroom assist pre-service teachers to develop ideas to overcome existing fears and support their expectations (Sallı & Osam, 2018).

**Recommendations**

In the light of existing and current research, the reshaping of teacher education programs, specifically targeting teaching practicum and school observation courses, becomes a priority. Since the connection between theory and practice requires more practice in a real-life context (Flores & Gago, 2020), and teaching practices play a key role in developing pre-service teacher identity (Kavrayici, 2020), quality and density of practicum/observation courses should be developed in teacher education programs. Those pre-service teachers, lacking practicum experiences in a real-life context, may satisfy this genuine disparity by working in a nearby senior teacher's classroom who can provide real experiences with children for the pre-service teacher. In-class experiences for pre-service teachers may occur just before beginning their professional teaching. This in-class experience contributes to their understanding of children's

holistic learning and enhances their professional development. Additionally, teachers require ongoing support in technology tools and management systems in both pre-service education and in-service training.

**Limitations**

This current study evidences limitations. Sample size was relatively small and focused only on pre-service elementary school teachers. Future studies can be conducted on pre-service teachers enrolled in different programs and include larger samples. Longitudinal studies that may examine changes of pre-service teachers' *possible selves* across time can also be considered for future studies.

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