

---

# Pre-service English Language Teachers' Reflective Thinking Tendencies and Their Attitudes Towards Teaching Profession

İrem GÜRBÜZ

Çanakkale Onsekiz Mart University /Çanakkale/Turkey  
erozcanirem@gmail.com

ORCID: <https://orcid.org/0000-0002-3913-4685>

---

**Abstract:** As reflective thinking is regarded as a mental and affective process, reflective practices and tendencies toward it may have an impact on teacher candidates' mental and emotional attitudes towards the teaching profession during their teaching-learning processes. Therefore, this present study firstly aims to analyze pre-service teachers' reflective thinking tendencies and attitudes toward teaching profession, and then the relationship between these variables. The study was conducted in Çanakkale Onsekiz Mart University with English Language Teaching Department 3<sup>rd</sup> and 4<sup>th</sup> grade pre-service teachers during the 2018-2019 fall term. In accordance with the aim and research questions of study, the research study was designed as non-experimental with single and correlational scanning models. In this respect, data were collected through both "reflective thinking tendencies scale" and "attitudes towards teaching profession scale." For the analysis of the data, descriptive and correlational statistics were used, and results showed that there is a significant correlation between reflective thinking tendencies and attitudes towards teaching profession of participants. Also, gender is not a determinant for reflective thinking tendency; however, female pre-service teachers are more positive attitudes towards teaching profession than male counterparts.

**Keywords:** Attitude, pre-service teacher, reflective thinking, reflective thinking tendency, teaching profession.

## İngilizce Öğretmen Adaylarının Yansıtıcı Düşünme Eğilimleri ve Öğretmenlik Mesleğine Yönelik Tutumları

**Özet:** Yansıtıcı düşünme zihinsel ve duyuşsal bir süreç olduğu için, yansıtıcı uygulamalar ve buna yönelik eğilimler öğretmen adaylarının öğretme-öğrenme süreçleri sırasında öğretmenlik mesleğine yönelik zihinsel ve duygusal tutumlarını etkileyebilmektedir. Bu nedenle, bu çalışma öncelikle öğretmen adaylarının öğretmenlik mesleğine yönelik yansıtıcı düşünme eğilimlerini ve mesleğe karşı tutumlarını ve ardından bu değişkenler arasındaki ilişkiyi incelemeyi amaçlamaktadır. Çalışma, 2018-2019 güz döneminde Çanakkale Onsekiz Mart Üniversitesi İngilizce Öğretmenliği bölümü 3. ve 4. Sınıf öğretmen adayları ile gerçekleştirilmiştir. Araştırmanın amacı ve araştırma soruları doğrultusunda araştırma, deneysel olmayan, tek ve ilişkisel tarama modelleri ile tasarlanmıştır. Bu bağlamda, veriler hem 'Yansıtıcı Düşünme Eğilimleri Ölçeği' ve 'Öğretmenlik Mesleğine yönelik Tutumlar Ölçeği' aracılığı ile toplanmıştır. Verilerin analizi için, betimsel ve ilişkisel istatistikler kullanılmıştır. Verilerin analizi sonucunda, katılımcıların öğretmenlik mesleğine yönelik tutumları ile yansıtıcı düşünme eğilimleri arasında anlamlı bir ilişki olduğu görülmüştür. Ayrıca cinsiyet değişkeninin, yansıtıcı düşünme eğilimi için bir belirleyici olmadığı fakat kadın öğretmen adaylarının erkek meslektaşlarına göre öğretmenlik mesleğine yönelik daha olumlu tutumlar sergilediği ortaya konulmuştur.

**Anahtar Sözcükler:** Öğretmenlik adayı, öğretmenlik mesleği, tutum, yansıtıcı düşünme, yansıtıcı düşünme eğilimi.

## 1. Introduction

With some recent changes in current educational standards, there is a shift from positivist-oriented perspective to constructivist perspectives (Crandall, 2000). These constructivist perspectives have been shaped not only general education in schools but also teacher education in higher degree. At the same time, apart from curriculum designers, policy makers and even education authorities, teachers are also crucial agents of educational basis. According to this, teachers should be liberating for active teaching-learning processes. It is basically emphasized that by doing reflection of teaching-learning processes, teachers can gain the role of decision maker and teachers can make curriculum, classroom management, methodological, individual decisions about themselves and their teaching professions (Reagan and Osborn, 2001). Therefore, preparing pre-service teachers according to the constructivist point of views may lead them to reflect their experiences for generating new concepts and improving educational aims. With this way, it could be provided a bridge between theoretical and practical issues in education. Through this problem, reflective thinking practices can be a key for meeting teaching profession of pre-service teachers and current educational perspectives. From this perspective, there is a need for investigating their reflective thinking tendencies and its relation to their attitudes towards teaching profession.

### 1.1. Reflective Thinking

With various reforms of language education, there has been a debate among educators by questioning how language teachers should be master in their field and how can improve themselves and accordingly their teaching settings. This is highly important issue that some are gifted to be effective teacher however majority of them are not believably born teachers. For not born as a gifted, educational programs shape their professional knowledge and practice. In these teacher programs, it is expected that one teacher should be mastered on some knowledge basis. Schulman (1987) explains these master areas as: a) general pedagogical knowledge in terms of teaching, b) content knowledge about language, c) curriculum knowledge for a specific context, d) knowledge of target learners and their characteristics e) knowledge of educational contexts and their characteristics and cultures and finally, f) knowledge of education in general historical and philosophical grounds. On Schulman's perspectives, these are the basics for pedagogy. However, in current literature, it has been changed the role of teacher including new master areas by the help of constructivist theory. New attempts about education and teachers' role change have probably let them to change their ideas about teaching. Additionally, teachers are impacted by globalization and mobility aspects of language as socio-political faces (Kumaravadivelu, 2006). In this respect, engaging with these sources and forces has brought new concepts as "reflective practice."

With this concept, many educators made different studies about that how reflective thinking and practice occurs and affects learning-teaching situations with different definitions. Reflective thinking is a concept that has been done in recent years with a lot of research on Dewey's thinking. On account of Dewey (1933), reflective thinking is a problem-solving process in which it is focused on researching and reflecting. In depth, Dewey describes this practice-driven concept in his book 'How we think: a restatement of the relation of reflective thinking to the educative process' as "the active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it" (p. 9). Despite it might not be a clear cut for reflective thinking definitions, Jay and Johnson (2002) contribute reflective thinking concept with new broad aspects that it is a process in which no matter individual or collaborative, it involves experiences and uncertainty, additional perspectives, one's own values, beliefs and experiences, and the larger context in which the questions are boosted. In addition to these definitions, Schön (1983) relates the abstract definition of Dewey's to the concrete cycle of reflective thinking: appreciation, action and re-appreciation and lead "reflection-in-action" and "reflection-on-action" concepts by making distinction between them.

Apart from these two basic explanations about reflective thinking, many educators and researchers has probably made in-depth reviews about this issue. While doing this, context specifications could be taken into considerations. All in all, especially, for deeper understanding, it is possible that current language teacher candidates' education has been taken much more emphasis and has been made many studies about these higher education contexts.

### 1.2. Reflective Practices in Higher Education Contexts

Mostly in higher education contexts with the light of current studies about reflective thinking and practice are expected to give how pre-service teachers can be reflective practitioners in their future in-service practices. With proposed models of reflective practice, teacher training programs can support pre-service teachers' reflective thinking tendencies. To support this idea, it can be said that reflective thinking is often seen as the quality of a teacher that needs to be improved and there are many researches about the applications that develop reflective

thinking. Educational theorists suggest that educators should foster higher order thinking skills such as reflective thinking for the development of problem-solving (Kuhn, 1990, cited in Can, 2015). By doing this, in higher education contexts, it is expected from student teachers firstly to identify the problem that might be encountered and reflecting the solutions, after these, they should be designed planning for the process and then implement it. After implementation, they should evaluate by using reflection and do further reflection by restarting the process (Basol and Gencel, 2013). According to these sample stages, different contexts might have different route map and accordingly, they can make their researches about training program evaluation. In relevant literature, there are a few studies in order to understand the effects of reflective practices on pre-service teachers' professional quality. For instance, Walshe and Driver (2019) emphasized the importance of the video recording during micro-teaching practices that allowing pre-service teachers to re-experience the embodied teaching led them to support their self-efficacies toward teaching profession and understand their micro-teachings in a more detailed way. Additionally, Nagro (2020) pointed out that in a higher education context, reflective practices and activities implemented through pre-service teachers have a chance to give them to identify and analyze specific elements regarding teaching instructions by capturing on video and reflecting deeper dimensions of teaching profession.

In literature, reflective thinking tendencies' and skills of prospective teachers are examined in accordance with different variables. Köksal and Demirel (2008) emphasize the development of pre-service teachers' reflective thinking skills to planning, implementation and evaluation process of teaching and they concluded that reflective practices give positive results on teaching process. Beauchamp and Thomas (2010) combine imagination and reflective practice in higher education in terms of development of professional identity. Önen and Koçak (2014) try to analyze reflective thinking tendencies of pre-service teachers along with their openness to individual innovations. One another research study on reflective thinking is related with science student teachers' reflective thinking skills toward problem-solving (Can, 2015). Apart from these, there is another study held by Svojanovsky in which not only pre-service teachers but also mentors and supervisors are participants of this kind of researches and this study aims to support reflective practice on teaching practice with reflective seminar applications (2017). There are many other studies about this issue investigating teacher candidates' reflective thinking tendencies with different variables such educational backgrounds, gender, settlement and faculty-based (e.g., Karadağ & Sadık, 2012; Poyraz & Usta, 2013; Temel, 2017; Tican & Taşpınar, 2017). When all studies mentioned above are examined, it is observed that there are few studies examining the affective sides of reflective thinking concepts together such as pre-service teachers' reflective thinking tendencies, attitudes on teaching practice, motivation and so on. One study about reflective thinking-based practices and their effects on teaching profession shows that these practices improves reflective thinking in relation with pre-service teachers' positive attitudes on teaching (Tok, 2008). However, Yumuşak (2015) investigates the relationship between reflective thinking tendencies of pre-service teachers and their attitudes towards teaching profession in Necmettin Erbakan University as a special context. Therefore, it might be highlighted there should be more studies on this issue and for higher education contexts.

Briefly, in order to determine teacher characteristics associated with reflective thinking, it is crucial issue to guide reflective practices both for teacher education programs and in-service teaching programs. In this respect, this study aims to evaluate specific context, pre-service language teachers' reflective thinking tendencies and their attitudes towards teaching at Çanakkale Onsekiz Mart University English Language Teaching Training Program. At the same time, it will be investigated the level of reflective thinking and attitudes toward teaching with gender variable.

### **1.3. Attitudes Towards Teaching Profession**

Attitude is an essential concept in educational settings for understanding especially teachers' instructional practices, thoughts, and experiences, and through this, applying teacher education arranged to support pre- and in-service teachers' practices and thoughts. Because of the importance of this concept, firstly, it should be given definitions of the term for understanding it in depth. Attitude is generally defined as feelings and actions towards an idea, or an object. According to Thurstone (1931), attitude is a positive or negative intensity orders and gradation toward a psychological object. In addition to this, Allport (1935) includes the term in experience, directivity, and progress and describes as a state of mental and emotional preparedness that has the power to effect and guide people's behavior as a result of experiences. As it is understood by these definitions, attitude includes one's experiences shaped by mental and emotional status. In this respect, it should be noted that learning to teach is constructed by different experiences and teachers' mental and emotional readiness shaped by their experiences in teaching-learning processes and they are interrelated with each other.

On the other side, attitudes toward teaching profession affect the educational settings. Therefore, attitude toward teaching profession is important issue since it can directly influence the explanation of knowledge accordingly teaching profession (Andronache et al., 2014). At the same time, being reflective may be connected with

teaching profession. It could be mentioned that individuals have unique, personal experiences, and through them, teachers can assemble their own understandings about teaching by reflecting their experiences. Namely, teaching profession contains individuals who have experiences defined different time, context and with different manners and personally constructed understandings of how they can be professional and reflective teachers (Sellars, 2012). Henceforth, attitudes have been constructed by experience which can be the key factor for being reflective and they have an interconnection with each other.

## 2. Method

This part of the research paper aimed to give information about data collected through surveys mentioned above with different sections. With the aim of the study, it was answered to these questions:

1. What is the level of EFL pre-service teachers' reflective thinking tendencies and their attitudes toward teaching profession?
2. Are there any correlation between pre-service EFL teachers' current reflective thinking tendencies and their attitudes toward teaching profession?
3. Are there any significant difference between gender and reflective thinking tendency?
4. Are there any significant difference between gender and teaching professions of pre-service teachers?

### 2.1. Research Design

In this study, it was aimed to present the pre-service teachers' reflective thinking tendencies and their attitudes toward teaching profession with gender variable. Also, it aimed to analyze whether there is correlation between pre-service teachers' reflective thinking tendencies and their teaching professions. In accordance with the research study's questions and aim, this study was designed as non-experimental through both single and correlational scanning models. In the correlation type of a research, it is tried to find out whether the variables change together and if there is a change together, how this is (Karasar, 2009). Therefore, it was decided to use these types of research models. While searching for answers to the first question of the study, single scanning descriptive model was used, searching for answers to the second, third and fourth questions, the correlational survey model was used.

### 2.2. Participants

The population of the study consists of the third and the fourth-grade pre-service teachers who are studying at English Language Teaching Department, Education Faculty of Çanakkale Onsekiz Mart University. This is why; the third and fourth graders were pre-service teachers who received the field lessons under equal circumstances. Therefore, it was employed purposive sampling technique as a specific purpose for non-probability. The participants were 50 from the first graders and 21 from the fourth graders and as total were 71 participants. This study mostly included female participants with 50 and 21 of them were male participants. While participants' age range was between 20 and 29, more than half of the participants were 22 with 59.2%. In this frame, for data collection, it was received permission for ethical issues. With the aim of collecting data, after the researcher mentioned the scope of the research and data collection tools, data were collected.

### 2.3. Data Collection

Within the scope of the research, data were collected through two different data collection tools. One of them is "reflective thinking tendency scale" developed by Semerci (2007) to identify pre-service language teachers' dispositions to reflective thinking, other one is "attitudes toward teaching profession scale developed by Çetin (2006) to identify pre-service teachers' attitudes toward teaching profession. These instruments follow below in depth.

In order to determine the reflective thinking levels of teacher and teacher candidates and is based on the principle of providing information about the individual himself, Reflective Thinking Tendency Scale developed by Semerci (2007) was used in this study. For that scale, it got permission under ethical issues by contacting with the developer of it. To identify pre-service teachers' reflective thinking tendencies, it includes 35 items and 7 sub-scales: a) continuous and purposeful thinking (7 items) b) open-mindedness (6 items) c) continuous and purposeful thinking (5 items) d) teaching responsibility and scientific (5 items) e) analyst (6 items) f) foresight (4 items) g) point of view (2 items). From these items, while 20 of them were negative, 15 of them were positive items. It was examined to reversed items for the analysis of the data. The scale was included 5-point Likert type from "strongly disagree" to "strongly agree" and it were pointed from 1 to 5. In terms of reliability of the scale, Semerci (2007) analyze that scale's Cronbach Alpha reliability coefficient is .91. Therefore, it was applicable for this study in terms of reliability.

With the aim of identifying pre-service teachers' attitudes toward teaching profession, Teaching Profession Attitudes Scale developed by Çetin (2006) was used. From these items, while 20 of them were positive, 15 of them were negative items. The scale was included 5-point Likert type from "strongly disagree" to "strongly agree" and it were pointed from 1 to 5. It was examined to reversed items for the analysis of the data. Additionally, it included 3 components as: a) affection b) value and c) adjustment, and it gave both overall scores and different scores for each component. The scale Cronbach Alpha reliability coefficient for total is .95, for affection component is .95, for value component is .81, and for adjustment component is .76. For this respect, this scale was seen as reliable for using in relation to current research questions.

For data collection, the data collection tools used in the research was applied to the English teacher candidates in the classroom by the researcher in the fall semester of the 2018-2019 academic years. The aim of the study and how to apply to teacher candidates is explained. In addition, it was emphasized that this data collection tool is not a grade value and it is important for the researcher to reach the aim of the research. Although it was stated in the data collection tool, it was also stated that it is voluntary.

**2.4. Data Analysis**

The data obtained in this study were analyzed and evaluated by using SPSS Package Program v. 21.0. Research data in the context of research questions' normality distributions were analyzed. According to this analysis, data obtained from two scales' items were non-normally distributed with skewness of 3.94 (*SE* = 0.28) and kurtosis of 23.26 (*SE* = 0.54). Therefore, it was determined to outliers and transformed variables into normal distribution with skewness of 0.43 (*SE* = 0.28) and kurtosis of 0.42 (*SE* = 0.42) by the reference of Tabachnick and Fidell (2013) with the range of- + 1.5 of normality values. At the end, five data obtained were excluded and it was decided to use parametric tests. For the analysis of the first research question which is for describe pre-service students' reflective thinking tendency levels and their attitudes toward teaching profession, it was used descriptive statistics with mean, standard deviation and frequencies with ascending order. For the analysis of the second research question which is for finding the correlation between pre-service language teachers' reflective thinking tendencies and their attitudes toward teaching profession, it was used Pearson bivariate correlation. For the analysis of the third and fourth questions, it was utilized Independent Sample t-tests with the aim that whether there is a significant difference between female and male pre-service teachers' teaching professions and their reflective thinking tendencies. In brief, in data collection procedure followed this sequence above.

**3. Findings**

This part of the study deals with the results of the statistical analysis of the data collected through scales. In accordance with the research questions, it presents the analysis with related tables and its reports. In answer to the first research question related with the participants' level of reflective thinking tendencies and their attitudes towards teaching profession, it was utilized from descriptive statistics. Table 1 shows that the mean values of participants in both reflective thinking tendencies and attitudes toward teaching profession of pre-service teachers and indicates that while reflective thinking tendencies of them is very high (*M* = 4.46, *SD* = 0.34), their value of attitudes toward teaching profession is at average level (*M* = 3.97, *SD* = 0.67).

Table 1.

*Descriptive statistics on participants' value of reflective thinking tendencies and attitudes toward teaching profession (N=71)*

| Variables                            | <i>N</i> | <i>M</i> | <i>SD</i> |
|--------------------------------------|----------|----------|-----------|
| Reflective thinking tendency         | 71       | 4.46     | 0.34      |
| Attitudes toward teaching profession | 71       | 3.97     | 0.67      |

In response to the research question 2, it was utilized Pearson correlation statistics and with the results, it is determined that there is a statistically significant positive correlation between pre-service teachers' reflective thinking tendencies and their attitudes towards teaching profession on the level of  $p < 0.1$  ( $r = .409, p < .01$ ). Therefore, with regards to the correlational statistics, it can be said that as pre-service teachers' reflective thinking tendencies increase, their attitudes towards teaching profession can change positively.

Table 2.

*Independent sample t-test results according to gender (N = 71)*

| Variables                            | Gender | N  | M    | SD   | df | t     | p      |
|--------------------------------------|--------|----|------|------|----|-------|--------|
| Reflective thinking tendencies       | Female | 50 | 4.50 | 0.31 | 69 | -1.63 | .107   |
|                                      | Male   | 21 | 4.36 | 0.40 |    |       |        |
| Attitudes toward teaching profession | Female | 50 | 4.14 | 0.53 | 69 | -3.63 | .001** |
|                                      | Male   | 21 | 3.57 | 0.78 |    |       |        |

Note. \*\* p = .001

With the light of research questions 3 and 4 which are related with investigating whether there is a statistically significant difference between gender and two variables mentioned above. In this respect, table 2 shows *t*-test results that there is no statistically significant difference between female ( $M = 4.50, SD = 0.31$ ) and male ( $M = 4.36, SD = 0.40$ ) participants in terms of their reflective thinking tendencies [ $t(69) = 1.63, p = .107$ ]. However, when it is examined attitudes towards teaching profession in relation to participants' gender, there is a statistically significant difference between female ( $M = 4.14, SD = 0.53$ ) and male ( $M = 3.57, SD = 0.78$ ) participants [ $t(69) = 3.63, p = .001$ ] with small effect size ( $d = 0.4, r = 0.2$ ). It is clear that female participants' scores of attitudes towards teaching profession are higher than male participants' scores.

#### 4. Discussion and Conclusion

The purpose of the present study is to explore firstly, ELT pre-service teachers' reflective thinking reflective thinking tendencies and their attitudes towards teaching profession, and then analyze the relationship between these two variables with gender. With these aims, research questions analyzed in the findings section will be discussed and supported with related literatures.

When the first question is taken into consideration, results showed that while pre-service teachers' reflective thinking tendencies' level is very high, attitudes towards teaching profession is on the level of moderate. However reflective thinking tendencies of pre-service teachers may vary according to context, reflective practices and so on (Gür and Övez, 2012), in literature, there are other studies showing similarities on level of pre-service teachers reflective thinking (Hasırcı & Sadık, 2011; Pan & Say, 2018; Yorulmaz, 2006; Yumuşak, 2015; Yüksel, Uzun, & Dost, 2013; Zembat, Yılmaz & İlçi Küsmüş, 2018). However, Turan and Koç (2019) analyzed the relationship between pre-service teachers' teaching-learning conceptions and reflective thinking tendencies. According to them, their reflective thinking tendencies were on the level of moderate and reflective thinking sub-themes and constructivist teaching-learning conception has a strong relationship. In Roohani and Hasparast's study (2020), English language teachers did not reflect themselves as a reflective thinker, yet there is a relationship between their reflective thinking tendencies and pedagogical success. Nonetheless, it should be given more emphasis on this issue for contribution to the relevant study by including pre-service teachers more reflective thinking practices. On the other hand, in relevant studies about attitudes towards teaching profession indicates similar results with present study in which their attitude level is moderate, on the agree level (e.g., Andronache et al., 2014; Bulut, 2009; Güneşli & Aslan, 2009; Terzi & Tezci, 2007; Yumuşak, 2015; Zembat et al., 2018). Süzük and Akıncı (2019) stated pre-service teachers who were from different departments in the same educational context have positive attitudes towards teaching profession. However, the findings of other studies in literature (Şahin, 2010; Tok, 2012), in contrast to the present study, shows that pre-service teachers' attitudes are positive, on the level of high. Therefore, it can be mentioned that apart from pedagogical knowledge, it may be focused on more beliefs and attitudes.

Related to the second research question, considering the correlation between participants' reflective thinking tendencies and attitudes toward teaching profession, there is a significant, positive correlation between them. In literature, there are studies showing similar results (e.g., Oruç, 2000; Tok, 2008; Yumuşak, 2015; Zembat et al., 2018) with current study. Nonetheless, it should be mentioned that there is not much work on analyzing these two variables' correlation between them; even though, this means it can be given more emphasis on increasing teachers' abilities on teaching profession. Therefore, there is need for further studies on the effect of attitudes on reflective thinking tendencies.

Regarding the third research question, it reveals that there is no statistically significant difference between female and male participants in terms of their reflective thinking tendencies. The results of some studies to the purpose of this show consistency (Atalay & Karahan, 2016; Can, 2015) with this study. At the same time, there are also studies (Poyraz & Usta, 2013; Temel, 2017; Yumuşak; 2015) presenting that there is difference between male and female participants; accordingly, female participants outperformed their male counterparts regarding their scores of reflective thinking. However, there are other studies (Afshar & Farahani, 2015; Tekkol & Bozdemir, 2018) presenting opposite results as male participants' domination over female participants. When this study and other studies are considered together, it may not be possible to make common belief that reflective thinking tendency according to gender variable.

With the light of the fourth question, the results demonstrate that there is significant difference between male and female participants in terms of their attitudes towards teaching profession. According to this finding, the scores of the female participants are significantly higher than the male participants. There are many other studies supporting these findings (Alkan, 2018; Güneşli & Aslan, 2009; Htang, 2017; Terzi & Tezci, 2007; Üstüner, Demirtaş & Cömert, 2009) in both Turkish and other countries' context. Additionally, according to some studies' findings, there is no significant difference between male and female pre-service teachers (Bademcioğlu, Karataş & Alçı, 2014; Parvez & Shakir, 2013; Tok, 2012; Yumuşak, 2015). Apart from all these relevant findings in literature on gender issue, while there are studies about female domination on teaching profession, there are not common beliefs about gender issue. Therefore, no matter teachers' gender, the direction should be towards drawing attention to high quality profession (Drudy, 2008).

With the aims and the findings of the study, the following main conclusions can be drawn. According to the results of the study, pre-service teachers' reflective thinking tendencies are high and their attitudes towards the profession are moderate and on the 'agree' level. Through these findings, the analysis of the correlation of these variable scores of participants indicates that there is significant, positive correlation between them. Finding a statistically significant, positive correlation between reflective thinking and attitudes is a meaningful input for teacher educators about educating teacher candidates to be reflective and express more positive attitudes towards teaching profession. Furthermore, it can be ensured that teacher candidates cultivate positive attitudes toward teaching profession, and through reflective thinking and practices, they actively participate in this profession with self-improvement.

In this study, it was also analyzed whether gender variable is a determinant on teacher candidates' reflective thinking and attitudes. According to the findings of the study, while there is no significant difference between female and male pre-service teachers in terms of their reflective thinking tendencies, female pre-service teachers outperformed their male counterparts in terms of their attitudes towards teaching profession. Plus, these results are supported by relevant literature. However, there are other studies mentioning there is no significant difference between male and female participants. Therefore, it can be drawn conclusion as gender issue may not be an implication for this profession and no matter, they are male or female, it should be basically focused on the quality of teaching profession. Nonetheless, it can be context-based, and it should be investigated in different educational context. Therefore, there is a need for more sampling and different context-based studies for generalizability of studies.

In brief, with reference to pedagogical implications, the study can shed a light for both teacher educators and pre-service teachers to enhance their teaching-learning environments. To do this, teacher educators can integrate and impose their reflective practices to pedagogical courses, and they should support the field by revealing in what level they are using these practices. With this way, pre-service teachers can improve their teaching and develop more positive attitudes towards teaching profession.

## References

- Afshar, H. S., & Farahani, M. (2015). Reflective thinking and reflective teaching among Iranian EFL teachers: Do gender and teaching experience make a difference. *Procedia-Social and Behavioral Sciences*, 192, 615-620.
- Alkan, M., F. (2018). Investigation of pre-service teachers' attitudes towards teaching profession. *SDU International Journal of Educational Studies*, (5)1, 13-21.
- Allport, G. W. (1935). Attitudes. In *A Handbook of Social Psychology* (pp. 798-844). Worcester, MA, US: Clark University Press.
- Andronache, D., Bocoş, M., Bocoş, V., & Macri, C. (2014). Attitude towards teaching profession. *Procedia-Social and Behavioral Sciences*, 142, 628-632.
- Atalay, T., D., & Karahan, B., Ü. (2016). Türkçe öğretmen adaylarının yansıtıcı düşünme eğilimlerine yönelik bir değerlendirme. *Uluslararası Türkçe Eğitimi ve Öğretimi Dergisi: Kuram ve Uygulama*, 1(2), 18-27.

- Bademcioğlu, M., Karataş, H. & Alçı, B. (2014). The investigation of teacher candidates' attitudes towards teaching profession. *The International Journal of Educational Researchers*, 5(2), 16-29.
- Basol, G., & Evin Gencel, I. (2013). Reflective thinking scale: A validity and reliability study. *Educational Sciences: Theory and Practice*, 13(2), 941-946.
- Beauchamp, C., & Thomas, L. (2010). Reflecting on an ideal: Student teachers envision a future identity. *Reflective Practice*, 11, 631-643.
- Bulut, İ. (2009). Öğretmen adaylarının öğretmenlik mesleğine ilişkin tutumlarının değerlendirilmesi (Dicle ve Fırat Üniversitesi örneği). *Dicle Üniversitesi Ziya Gökalp Eğitim Fakültesi Dergisi*, 14, 13-24.
- Can, S. (2015). Pre-service science teachers reflective thinking skills toward problem solving. *Educational Research and Reviews*, 10(10), 1449-1457.
- Crandall, J. J. (2000). Language teacher education. *Annual Review of Applied Linguistics*, 20, 34-55.
- Çetin, 2006. Öğretmenlik Mesleği Tutum Ölçeğinin Geliştirilmesi (Geçerlik ve Güvenirlik Çalışması). *Gazi Üniversitesi Endüstriyel Sanatlar Eğitim Fakültesi Dergisi*. (18), 28-37.
- Dewey, J. (1933). *How We Think*. New York: D.C. Heath and Company.
- Drudy, S. (2008). Gender balance/gender bias: The teaching profession and the impact of feminisation. *Gender and Education*, 20(4), 309-323.
- Güneyli, A. & C. Aslan, 2009. Evaluation of Turkish prospective teachers' attitudes towards teaching profession (Near East University case). *Procedia-Social and Behavioral Sciences*, 1(1): 313-319. Available at: <https://doi.org/10.1016/j.sbspro.2009.01.059>.
- Gür, Ş., G. & Övez, F. T. D. (2012). An investigation of prospective teachers' reflective thinking tendency. *Procedia-Social and Behavioral Sciences*, 55, 568-574.
- Hasırcı, Ö. K., & Sadık, F. (2011). Sınıf öğretmenlerinin yansıtıcı düşünme eğilimlerinin incelenmesi. *Journal of the Cukurova University Institute of Social Sciences*, 20(2).
- Htang, L., K. (2017). Pre-service teachers' attitudes towards teaching profession in Myanmar. *Journal of Education and Practice*, 8(20).
- Jay, J. K., & Johnson, K. L. (2002). Capturing complexity: A typology of reflective practice for teacher education. *Teaching and teacher education*, 18(1), 73-85.
- Karadağ, M., & Sadık, F. (2012). Investigation of social studies teachers' reflective thinking levels in terms of socio-demographic characteristics. *Çukurova Üniversitesi Eğitim Fakültesi Dergisi*, 41(2), 29-42.
- Karasar, N. (2009). *Bilimsel araştırma yöntemleri* (19. baskı). Ankara: Nobel Yayıncılık.
- Köksal, N., Demirel, Ö. (2008). Yansıtıcı düşünmenin öğretmen adaylarının uygulamalarına katkıları. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, (34).
- Kumaravadivelu, B. (2006). *Understanding language teaching: From method to postmethod*. New Jersey: LE Associates, Publishers.
- Nagro, S. A. (2020). Reflecting on others before reflecting on self: Using video evidence to guide teacher candidates' reflective practices. *Journal of Teacher Education*, 71(4), 420-433.
- Oruç, İ. (2000). *Effects of reflective teacher training program on teachers' perception of classroom environment and on their attitudes toward teaching profession*. Master Thesis, Middle East Technical University, The Institute of Social Sciences: Ankara.
- Önen, A. S., & Koçak, C. (2014). Analysis on reflective thinking tendencies of student teachers according to their individual innovativeness and sociotropic-autonomic personality characteristics. *Procedia-Social and Behavioral Sciences*, 143, 788-793.
- Pan, V., L. & Say, S. (2018). Investigation of reflective thinking tendency of pre-service classroom teachers. Paper presented at the meeting of the 27th International Conference on Educational Science (ICES-UEBK): Antalya, Turkey.
- Parvez, M., & Shakir, M. (2013). Attitudes of prospective teachers towards teaching profession. *Journal of Education and Practice*, 4(10), 172-178.
- Poyraz, C., & Usta, S. (2013). Investigation of preservice teachers' reflective thinking tendencies in terms of various variances. *International Journal on New Trends in Education & their Implications (IJONTE)*, 4(2), 126-136.
- Reagan, T. G., & Osborn, T. A. (2001). *The foreign language educator in society: Toward a critical pedagogy*. Routledge.
- Roohani, A., & Haghparast, S. (2020). Relationship between critical pedagogy and reflective thinking with L2 teachers' pedagogical success. *Journal of Asia TEFL*, 17(1), 105.
- Schön, D. A. (2017). *The reflective practitioner: How professionals think in action*. Routledge.
- Sellars, M. (2012). Teachers and change: The role of reflective practice. *Procedia-Social and Behavioral Sciences*, 55, 461-469.
- Semerci, Ç. (2007). Öğretmen ve öğretmen adayları için yansıtıcı düşünme eğilimi (YANDE) ölçeğinin geliştirilmesi. *Kuram ve Uygulamada Eğitim Bilimleri Dergisi*. 7(3).

- Shulman, L. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57(1), 1-23.
- Süzük, E., & Akıncı, T., (2019). Investigating prospective teachers' attitudes towards teaching profession. *Route Educational and Social Science Journal*, 6, 792-803.
- Svojanovsky, P. (2017). Supporting student teachers' reflection as a paradigm shift process. *Teaching and Teacher Education*, 66, 338-348.
- Şahin, F. S. (2010). Teacher candidates' attitudes towards teaching profession and life satisfaction levels. *Procedia-Social and Behavioral Sciences*, 2(2), 5196-5201.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.), Boston: Allyn and Bacon.
- Tekkol, İ. A., & Bozdemir, H. (2018). An investigation of reflective thinking tendencies and critical thinking skills of teacher candidates. *Kastamonu Education Journal*, 26(6), 1897.
- Temel, Ş. (2017). *Sınıf öğretmenleri ve sınıf öğretmeni adaylarının yansıtıcı düşünme eğilimlerinin çeşitli değişkenler açısından incelenmesi*. Gaziantep Üniversitesi, Eğitim Bilimleri Enstitüsü. Gaziantep.
- Terzi, A.R. and Tezci, E., (2007). Attitudes of Necatibey education faculty students towards teaching profession. *Administrational Administration in Theory and Practice*, (52) 593-614.
- Thurstone, L. L. (1931). The measurement of social attitudes. *The Journal of Abnormal and Social Psychology*, 26(3), 249.
- Tican, C., & Taşpınar, M. (2017). The effects of reflective thinking-based teaching activities on pre-service teachers' reflective thinking skills, critical thinking skills, democratic attitudes and academic achievement. *The Anthropologist*, 20 1-2, 111-120.
- Tok, Ş. (2008). Yansıtıcı düşünmeyi geliştirici etkinliklerin öğretmen adaylarının öğretmenlik mesleğine yönelik tutumlarına, performanslarına ve yansıtımalarına etkisi. *Eğitim ve Bilim*, 33(149).
- Tok, T. N. (2012). Teacher candidates' attitudes towards the teaching profession in Turkey. *Alberta Journal of Educational Research*, 58(3), 381-403.
- Turan, M. B., & Koç, K. (2019). The analysis of the relationship between teaching/learning conceptions and reflective thinking in physical education teacher candidates. *International Education Studies*, 12(3), 116-123.
- Üstüner, M., Demirtas, H., & Cömert, M. (2009). The attitudes of prospective teachers towards the profession of teaching (The case of Inonu University, Faculty of Education). *Eğitim ve Bilim*, 34(151), 140.
- Walshe, N., & Driver, P. (2019). Developing reflective trainee teacher practice with 360-degree video. *Teaching and Teacher Education*, 78, 97-105.
- Yorulmaz, M. (2006). İlköğretim I. kademesinde görev yapan sınıf öğretmenlerinin yansıtıcı düşünmeye ilişkin görüş ve uygulamalarının değerlendirilmesi (Diyarbakır ili örneği). *Yüksek Lisans Tezi, Fırat Üniversitesi Sosyal Bilimler Enstitüsü, Elazığ*.
- Yumuşak, G. K. (2015) Öğretmen adaylarının yansıtıcı düşünme eğilimleri ve mesleğe yönelik Tutumları. *Bartın Üniversitesi Eğitim Fakültesi Dergisi*, 4(2), 466-481.
- Yüksel, N. S., Sarı Uzun, M., & Dost, Ş. (2013). Matematik öğretmen adaylarının eleştirel düşünme eğilimleri. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, Özel*, (1), 393-403.
- Zembat, R., Yılmaz, H., & İlçi Küsmüş, G. (2018). Okul öncesi öğretmenlerinin yansıtıcı düşünme eğilimleri ile sınıf yönetimi becerileri arasındaki ilişkinin incelenmesi. Paper presented at the meeting of 27. International Congress on Educational Sciences, Antalya.

#### Note on Ethical Issues

The author confirms that ethical approval was obtained from Çanakkale Onsekiz Mart University Institute of Educational Sciences (Approval Date: 17 /12 /2018).