Ed Process Int J | www.edupij.com
ISSN 2147-0901 | e-ISSN 2564-8020
2023 | ÜNİVERSİTEPARK

EDUCATIONAL PROCESS
INTERNATIONAL JOURNAL

ARTICLE HISTORY
Received *July 23, 2022*
Accepted *May 03, 2023*
Published Online *May 22, 2023*

CORRESPONDENCE
Özge Ceren Çelik
ocerencelik@gazi.edu.tr
Gazi University, Department of Educational Sciences, Ankara, Türkiye.

AUTHOR DETAILS
Additional information about the author is available at the end of the article.

How to cite: *Çelik, Ö. C., & Alpan, G. (2022). The Impact of an Effective Communication Course with Enhanced Student Engagement on Communication Skills and Empathic Tendency of Preservice Teachers. Educational Process: International Journal, 12(2): 33-58.*

OPEN ACCESS

Copyright *© 2023 by the author(s). This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License (CC-BY-4.0), where it is permissible to download and share the work provided it is properly cited.*

RESEARCH ARTICLE

The Impact of an Effective Communication Course with Enhanced Student Engagement on Communication Skills and Empathic Tendency of Preservice Teachers

Özge Ceren Çelik · Gülgün Alpan

ABSTRACT

Background/purpose – The purpose of this study was to examine the impact of an Effective Communication course with enhanced student engagement on preservice teachers' communication skills and empathic tendency levels.

Materials/methods – The study adopted a mixed-methods design where the one-group pretest–posttest design was used.

Results – It was found that the Effective Communication course with enhanced student engagement had a significant impact on the empathic tendency levels of preservice teachers, albeit with a small effect size. However, the impact of the course on communication skills was not statistically significant. The preservice teachers found the course efficient in contributing to their theoretical knowledge about communication and improving their attitudes and basic skills.

Conclusion – It was concluded that enhancing student engagement through an Effective Communication course had a limited contribution in optimizing the communication skills and empathic tendency levels of future teachers.

Keywords – preservice teacher education, mixed methods, student engagement, communication

To link to this article – https://dx.doi.org/10.22521/edupij.2023.122.3

1. INTRODUCTION

The importance of social and emotional skills in education was highlighted by John Dewey in 1933, having stated that, "There is no education when ideas and knowledge are not translated into emotion, interest, and volition" (as cited in Demetriou & Nicholl, 2021, p. 189). Over the past decade, research has similarly indicated that there is a recognition of the need for a broad educational agenda to develop students, not only in terms of their academic performance but also their socioemotional competence. This agenda focuses on both promoting students' academic achievement and preparing them to communicate effectively across a diverse and expansive range of opportunities, which can be considered one of the most critical functions of education (Al-Musalli, 2019; Jennings & Greenberg, 2009; Pennington et al., 2020). Accordingly, today's teaching profession has become more socially and emotionally demanding compared to the past (Jennings, 2011). Teachers are now expected to be socially and emotionally competent in order to create a positive classroom climate and to establish and foster healthy relationships with their students. Within this perspective, communication and empathy have become crucial skills that an effective and competent teacher must develop.

While empathy and communication training is necessary and beneficial for almost every profession, those working in many human-facing fields are in particular need for this type of training (Dökmen, 1988). For example, doctors, nurses, dentists, accountants, and engineers are some of the professions in which communication plays a vital role (Cheraghi et al., 2021; Moura et al., 2021; Özyürek, 2012; Riemer, 2007; Üstün, 2005). Another such profession is teaching, as its actors encounter multiple communication exchanges every working day with their students, as well as with other teachers, school administrators, and parents (Çalışkan & Ayık, 2015). As a necessary constituent of teacher effectiveness, effective communication is considered as important as content knowledge in defining the effectiveness of their teaching (Okoli, 2017). As the essence of education is communication, a critical foundation for teaching requires a solid grasp of core communication concepts, with an inadequate foundation potentially putting students' learning at risk (Hunt et al., 2002). Empathy is a powerful communication skill and one of the most important teacher competencies for the holistic development of students. Empathy is an essential skill that teachers need to develop in order to cope with the difficulties that students face in learning and to ensure the emotional well-being of their students (Hardee, 2003; Sezen-Balçıkanlı, 2009). Research indicates that enhancing teacher empathy is one of the key ways to improve school culture (Barr, 2010), student learning (Arghode et al., 2013), student motivation (Waxman, 1983), and the social and moral development of students (Eisenberg et al., 1991). As such, the educational field has begun to see the importance of incorporating empathy into the preparation of future teachers (Bouton, 2016). Furthermore, communication research has similarly indicated that teachers' communication behaviors have a strong relationship with instructional outcomes, student motivation, as well as affect toward the instructor, course content, and the overall course (Anderson et al., 1981; McCroskey et al., 2006). Hence, within this framework, it can be asserted that training teachers in the skills associated with communication and empathy should form an essential element of their initial preservice teacher training.

With a specific focus on communication training, the Effective Communication course formed part of Turkey's revised teacher education program implemented at the start of the 2006-2007 academic year. The Effective Communication course forms a constituent part of different teacher education programs in Turkey, either as a compulsory or an elective

theoretical course rated as either two or three credits (Deniz, 2015). One of the most effective ways to achieve this course's objectives is to facilitate student engagement, which has recently become a "buzzword" in higher education circles and has a recognized crucial effect on success and learning, as evidenced by increased research, theory, and discussions (Kahu, 2013). Student engagement has become associated with dynamic student involvement in academic activity (Carey, 2013), with active engagement in learning experiences typically shown to positively impact student satisfaction, as well as their persistence, academic achievement, and social engagement (Fadel et al., 2015; Kuh et al., 2008; McClenney et al., 2012; Trowler, 2010).

A review of the existing literature indicates that the number of studies focusing on teachers' competencies in communication has increased recently (Morreale & Pearson, 2008), and a large body of national and international research has been conducted to examine preservice teachers' communication skills (Ateş & Sağar, 2022; Baykara-Pehlivan, 2005; Beyaz, 2022; Burak & Durak, 2021; Çuhadar et al., 2014; Saunders & Mills, 1999) and empathic tendencies (Beyaz, 2016; Biçer & Başer, 2019; Cochran & Parker Peters, 2023; Ekinci & Aybek, 2010; Kula & Akbulut, 2020; Tettegah & Anderson, 2007; Wilson, 2020). Some studies have investigated the relationship between communication skills and empathic tendency levels of preservice teachers (Ahmetoğlu & Acar, 2016; Günönü-Kurt, 2019; Özgökman, 2019), whilst some have considered how training in communication can influence the communication skills and empathic tendency levels of preservice teachers. Yarar-Kaptan and Oğuz (2011) focused on examining the effectiveness of the aforementioned Effective Communication course on preservice teachers' communication skills. Similarly, Yüksel-Şahin (1998) examined the effect of a communication skills training program on university students' communication skills. In 2006, Karahan et al. analyzed the effect of a Human Relations and Communication course on preservice teachers' conflict resolution and empathic skills, whilst Elkatmış (2015) investigated the effects of the Turkish I: Written Expression and Turkish II: Spoken Expression and Effective Communication courses on the communication skills of preservice classroom teachers. Additionally, Arslan et al. (2010) revealed the effect of communication skills education integrated with creative drama on preservice teachers' communication skills.

However, it can be said that research that investigates the potential impact of student engagement on learners' communication skills and their levels of empathic tendency is limited in the literature (Derrick, 2006). In this sense, the current study aims to extend the current knowledge about the effect of communication courses, and to present a novel contribution by considering the influence of student engagement. Enhancing student engagement not only has academic outcomes but also social and emotional outcomes that include the relationship skills of learners (Appleton et al., 2006; Morgan et al., 2022). Since the Effective Communication course is a learning area with affective, cognitive, and behavioral dimensions that require the active engagement of preservice teachers as students, the influence of student engagement within this course deserves further attention and analysis. In this respect, it was considered that the current study, in exploring the impact of the Effective Communication course with enhanced student engagement on the communication skills and empathic tendency levels of preservice teachers, could yield significant contributions to the related theoretical framework and practices of enhancing communication and empathy in preservice teacher training.

1.1. Communication

It is has been well-established that teachers' social and emotional well-being is essential to how they function in the classroom, encompassing teachers' classroom management approaches, learning support, and learning environments (Collie, 2017). Teachers' socioemotional competence and well-being are elements that determine how their relationships with students are formed and hence have a sound impact on their students and the learning context. Classrooms, where warm teacher-student relationships are built, help to enhance students' deep learning and positive social and emotional development, while classrooms where the social and emotional demands of teaching are poorly met can damage both students' academic achievement and behavior (Schonert-Reichl, 2017). Supportive teacher–student relationships significantly contribute to a positive climate in both class and school, connectedness to school, and academic and socioemotional outcomes. Teachers who recognize and understand how students feel and the potential of teachers in developing students' behaviors can be more efficient in responding to the needs of students in addition to developing trust and respect in the classroom (Jennings, 2011). Teachers with social and emotional competencies can foster a classroom climate where they support and encourage students, and are able to consider the strengths and abilities of their students whilst planning lessons. These teachers prepare and apply rules that enhance students' intrinsic motivation, promote cooperation in the classroom, and model the behaviors necessary for effective communication (Jennings & Greenberg, 2009). Therefore, teachers' communication skills constitute an important dimension to consider among the skills, attitudes, and values that make teachers emotional and socially competent.

Griffin (2006) defined communication as a relational process during which individuals create and interpret messages that result in a response. As the driving force in any relationship or situation, communication is a continuous process of sending and receiving messages which enhances the dissemination of knowledge, attitudes, and skills (Johnson, 1999; Miller, 1988). Communication is both a personal and a social process, and a psychosocial process that builds a relationship between two people. Regardless of its content, people need to exchange ideas to solve a problem, in other words to communicate (Cüceloğlu, 2002). Throughout life, individuals psychologically need to declare their existence and be aware of it. People in this need inevitably resort to various verbal and non-verbal communication methods. In summary, communication is the result of a key human psychological need (Kuzu, 2003).

According to Dökmen (2002), who briefly defined communication as the exchange of information, all living creatures need to communicate in order to survive; however, communication has a completely different importance in terms of human life. As such, communication is the most important factor in education as the classroom is a complex communication space (Kurenkova & Shkineva, 2008; Muste, 2016). Effective communication is therefore essential for teachers as the achievement of teaching goals is only possible through successful communication in the classroom (Gelişli, 2019). Knowledge is shared with the help of effective communication and enriched when appropriate messages are sent and received. Effective teaching depends on successful communication, but in order to achieve effective communication in the classroom it is necessary to create "an open process" whereby accurate messages are sent and received by both parties, i.e., students and teachers (Johnson, 1999; Miller, 1988). Bender (2005) asserted that successful teachers are also effective communicators who are able to adapt how they communicate based on the context and to utilize various means considering the intended purpose. Therefore, effective

communication skills, which require interaction, the transmission of appropriate messages, and various transmission methods, are all essential elements that constitute good teaching practice (Saunders & Mills, 1999).

1.2. Empathy

While empathy was considered as a cognitive concept up until the late 1950s, by the 1960s it was emphasized that empathy also had an emotional aspect. Since then, for the development of empathy, it has been considered essential not only to get to know others and put oneself in the place of others but also to consider their feelings (Dökmen, 1988). Based on this perspective, empathy has been described according to two aspects: (a) empathy is the cognitive awareness regarding the thoughts, feelings, perceptions, and intentions of someone else; and, (b) empathy is the vicarious affective response that one person gives to another (Hoffman, 2000). According to Rogers (1975), whose definition of empathy is still used, empathy is the process of being sensitive to the changing emotions of people without judging them (as cited by Wilson, 2020).

Empathy is the ability to imaginatively enter and participate cognitively, affectively, and behaviorally in the world of others. Empathy helps people understand individuals with different values, views, and behaviors. From a macro perspective, it is considered the moral glue that helps civil society unite with the power of empathy (Calloway-Thomas, 2010). In this process, empathy is first experienced emotionally and instinctively when one encounters someone feeling anxiety or pain. This turns into a feeling when the person feels like this event happened to themselves. This feeling is then considered a skill when the individual is willing to help another; that is, the empathic process occurs when the first "emotional response" is turned into a "caring action" (Levine, 2005). Covey (2020), who mentioned empathy as being a process of listening with the intent to understand, stated that the difficulty of empathic listening in communication is the inevitability of being influenced whilst trying to understand others. In order to have influence, one first has to be influenced. Therefore, being influenced is an indicator of sensitivity and the beginning of being able to understand others.

Historically, the interest of educators in empathy has centered on teacher empathy, which refers to the competency of expressing concern and seeing something from the students' perspective. Teachers are required to perceive how their students feel and to consider and understand their viewpoints. In turn, teachers' empathic communication helps students to experience greater understanding and acceptance and can help improve their attitude towards their own identity and schooling (Feshbach & Feshbach, 2009; Tettegah & Anderson, 2007). Empathy helps teachers comprehend students' emotions, and to negotiate and react appropriately to those emotions (Huang et al., 2020). Empathy is one of the pieces of the student-teacher interaction puzzle that bridges teachers' knowledge about their students and how they fulfill their students' needs or the process by which they plan learning experiences (Warren, 2018). Empathy training is therefore crucial in the preparation of preservice teachers in terms of purposeful teaching and to inspire learning (Bouton, 2016; Boyer, 2010).

1.3. Student Engagement

For more than 70 years, student engagement has formed part of the search to understand and develop learning. The meaning of the construct has evolved over time. In the 1930s, Ralph Tyler conceptualized student engagement as the time on task, whereas in the 1970s, C. Robert Pace defined it as the quality of effort (Groccia, 2018; Kuh, 2009). On the other hand, many historians of education would concur with the idea that the student

involvement research of Alexander Astin had a profound influence on modern engagement research (Axelson & Flick, 2010). Astin (1999) argued that student involvement refers to students' energy devoted to the academic experience.

There are multiple interpretations of the concept of student engagement; however, the concept may be considered ambiguous, tangled, and even misleading (Vuori, 2014). According to Kuh (2003), student engagement is "the time and energy students devote to educationally sound activities inside and outside of the classroom, and the policies and practices that institutions use to induce students to take part in these activities" (p. 25). Similarly, Axelson and Flick (2010) described student engagement as "how involved or interested students appear to be in their learning and how connected they are to their classes, their institutions, and each other" (p. 38). Trowler (2010) argued that student engagement is based on the interaction between the time, effort, and other relevant resources invested by both students and their institutions that aim to amend students' experiences, attain the desired learning outcomes, and contribute to the reputation of the institution. According to Groccia (2018), the diversity in the definition of student engagement is indeed its strength as this diversity boosts the potential of student engagement to enhance learning. Based on a multidimensional conception of student engagement, Groccia (Burns et al., 2004) proposed a model which was later expanded by Groccia and Hunter (2012, as cited in Groccia, 2018). Figure 1 presents the model reflecting student engagement encompassing learning behaviors and various campus-based activities within and beyond the classroom.



Figure 1. Student engagement model (Burns et al., 2004; Groccia & Hunter, 2012, as cited in Groccia, 2018, p. 15)

This concept of student engagement in the model illustrated in Figure 1 puts forth how learners can be engaged during their academic experience, through teaching and learning, and through research with the community, students, and faculty. Moreover, the model works on three levels, cognitive, affective, and behavioral, upon which student engagement can occur within the specified six dimensions. According to the model, engagement with faculty and staff can be boosted by creating opportunities both in and outside of the class. To enhance engagement with other learners, it is first necessary to help students build community with others in various facilities, such as through learning teams or academic clubs.

It is therefore essential to help students participate in teaching activities and to conduct undergraduate research activities (Groccia, 2018).

The theoretical framework of the current study is based on Groccia and Hunter's (2012, as cited in Groccia, 2018) conception of student engagement. By integrating the theoretical framework and research base regarding the importance of teachers' communication skills and empathic tendencies in the classroom, the current study focuses on the impact of the Effective Communication course with enhanced student engagement. According to the self-determination theory, student engagement is a vital construct that needs to be facilitated by nurturing students' inner motivational resources in order to realize positive learning outcomes. These outcomes are not limited to academic achievement since high-quality student engagement contributes to the relationships in the classroom by enhancing the flow of instruction and responsiveness of the learning environment (Reeve, 2012). Thereby, although academic engagement is vital to academic achievement, individuals also engage in social interactions in the school, indicating that engagement includes both academic and social school contexts (Wang & Hofkens, 2020). Within this framework, the current study reasons that preservice teachers' communication skills and emphatic tendencies could be enhanced by enhancing student engagement in the Effective Communication course. The current study therefore aims to investigate the impact of the Effective Communication course with enhanced student engagement on the communication skills and empathic tendency levels of preservice teachers. In line with this primary objective, the study sought to answer to the following research questions:

(1) Does a significant difference exist between pretest and posttest scores in terms of communication skills of preservice teachers?

(2) Does a significant difference exist between pretest and posttest scores in terms of empathic tendency levels of preservice teachers?

(3) What are the opinions of preservice teachers about the impact of the Effective Communication course with enhanced student engagement?

(4) What are preservice teachers' suggestions for the Effective Communication course?

2. METHOD

To examine the impact of the Effective Communication course with enhanced student engagement on preservice teachers' communication skills and empathic tendencies, the current study adopted the embedded mixed-methods design, in which one or more forms of data are nested within a larger design (Creswell, 2014). The study was based on the one-group pretest–posttest design, whereby a single group was measured both before and after being exposed to the treatment (Fraenkel & Wallen, 2003). Within the experiment of the study, qualitative data were collected after the experiment had concluded. The independent variable of the study was the 14 weeks of the Effective Communication course with enhanced student engagement, whereas the dependent variables were the communication skills and empathic tendency levels of preservice teachers.

2.1. Participants

The study group consisted of 70 preservice teachers enrolled to the Department of Foreign Language Education at a public university in Turkey for the 2019-2020 academic year. The study group was chosen using the criterion sampling method, one of the purposive sampling methods, whereby participants were selected according to predetermined criteria (Gezer, 2021) of having been enrolled to the Effective Communication course. Two distinct

experimental groups were formed, which were composed of 34 and 36 preservice teachers taking the Effective Communication course.

2.2. Instruments

The Communication Skills Evaluation Scale (CSES), Empathic Tendency Scale (ETS), and an open-ended questions form were used to collect the study's data.

2.2.1. Communication Skills Evaluation Scale (CSES)

The CSES was developed by Korkut (1996) to evaluate the preservice teachers' communication skills at the individual level. The scale is formed as a 5-point, Likert-type scale composed of 25 items. The minimum score for the scale is 25, while the maximum is 125. Higher scores obtained from the CSES indicate that the participant perceives themself to be successful in their communication. In the scale's development process, an item pool was first developed, and following inter-item analysis, the number of items was reduced to 25. The test-retest reliability was found to be .76, and the Cronbach alpha coefficient was .80. The results showed that the scale could be used to collect data to evaluate individuals' perceptions regarding their communication skills. For the current study, the Cronbach alpha coefficient was calculated as .88 and .91, respectively, for the pretest and posttest data.

2.2.2. Empathic Tendency Scale (ETS)

The ETS was developed by Dökmen (1988) to evaluate individuals' potential to develop empathy in their daily lives. The ETS is formed as a 5-point, Likert-type scale composed of 20 items. The scale has eight negative items (3, 6, 7, 8, 11, 12, 13, and 14), a minimum score of 20, and a maximum of 100. An individual's total score indicates their empathic tendency, with higher scores indicating a higher level of empathic tendency. Reliability analysis performed during the scale's development showed that the test–retest correlation coefficient was .82 and that the split–half test correlation was .86. For validity, correlation between scores obtained from ETS and the "understanding emotions" part of the Edwards Personal Preference Schedule were calculated. Correlation between the two scores was found to be .68. The Cronbach's alpha coefficient for the ETS were .65 and .71, respectively, for the current study's pretest and posttest data.

2.2.3. Open-Ended Questions Form

The qualitative data of the current study were collected through an open-ended questions form which was developed by the researchers to identify the preservice teachers' opinions about the Effective Communication course conducted with enhanced student engagement. The form was prepared based on the literature and revised according to expert feedback. The final version consisted of three open-ended questions:

(1) How would you evaluate the Effective Communication course? What do you think about the contributions of the course? Did you notice any difference between your capacity before and after taking the course? How would you explain this difference (if any)?

(2) How would you evaluate the content and process of the Effective Communication course in terms of its contributions?

(3) What are your suggestions regarding the Effective Communication course in the future?

2.3. Procedures

After the required ethical and official permissions were obtained to apply the data collection tools, the preservice teachers, having been determined based on the criterion

sampling method, were informed about the aim and voluntary nature of the research. A total of 78 preservice teachers agreed to participate in the study. However, data from eight of the participants, who had only completed or partially completed either the pretest or posttest, were excluded from the analysis. In order to collect data from the experimental process, the preservice teachers were given the data collection tools prior to and also following their participation in the Effective Communication course. The participants each completed the data collection tools anonymously, and the pretest and posttest procedures each took approximately 35-40 minutes. The open-ended questions form was administered to preservice teachers as part of the posttest.

The Effective Communication course was a compulsory element of the curriculum during the 2019-2020 fall semester. It consisted of three 50-minute lectures each week for a total of 14 weeks. The course content included the definition of interpersonal communication, communication models, components and characteristics of communication, effective communication and feedback, factors that facilitate or hinder communication, the role and use of emotions in communication, conflict and resolution in communication, important points in communication with teachers, students, and families, and communication practices (Yükseköğretim Kurulu [Turkish Higher Education Council], 2007). The course was conducted according to a specific plan for each week. The overall aim of the course was to enhance the preservice teachers' readiness and motivation for the course and to increase their cognitive, affective, and behavioral engagement during teaching, learning, and research with the community, students, faculty, and staff. A sample course plan that was prepared based on the model of Groccia and Hunter (2012, as cited in Groccia, 2018) is presented in Figure 2.

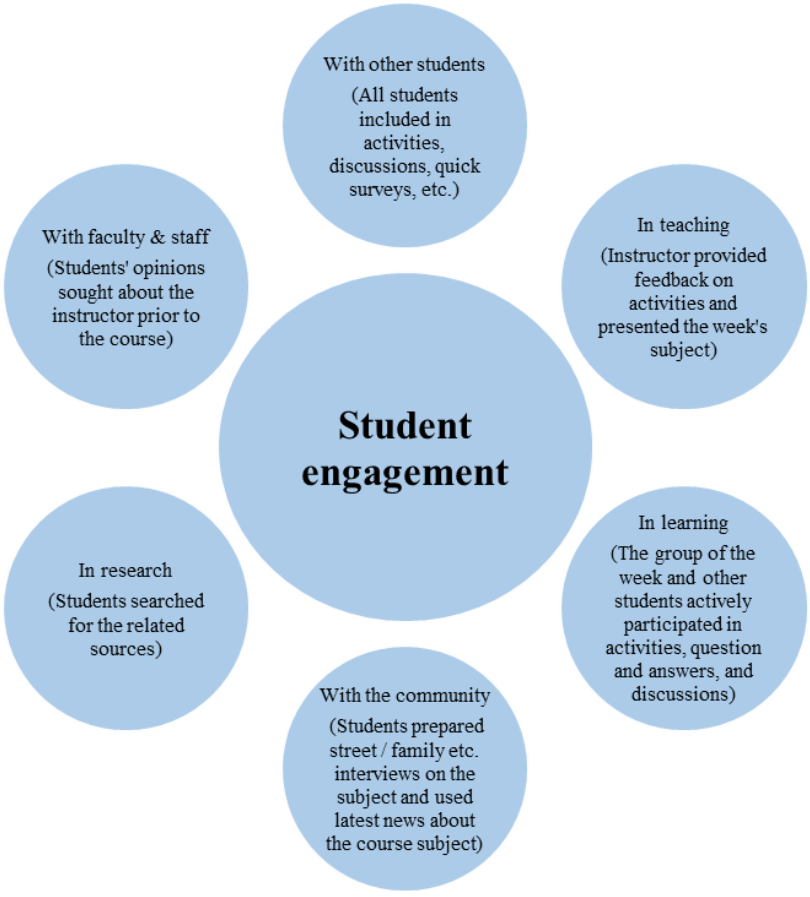


Figure 2. Sample course plan

For each week of the 14-week course, the preservice teachers were informed in advance about the upcoming week's course content and were tasked with preparing an activity. The preservice teachers were instructed to look beyond simply understanding and presenting the next week's content; instead, they were tasked with preparing creative and innovative classroom activities and discussions through collaboratively working in groups of three. Each week's lesson started with the activities prepared by the preservice teachers, followed by the instructor's presentation and summary regarding the week's content. The weekly course plan is presented in Figure 3.

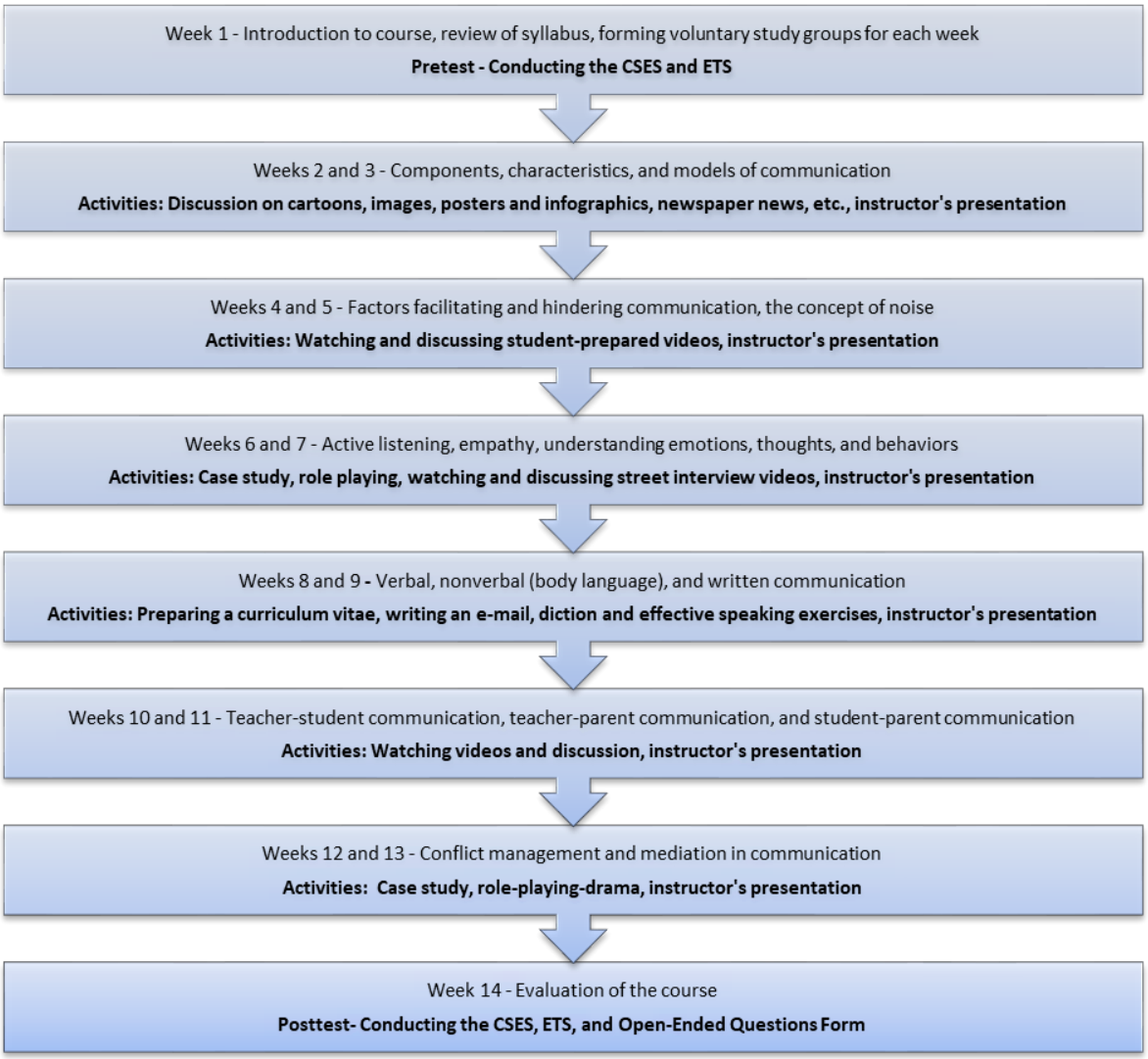


Figure 3. Experimental procedure

2.4. Data Analysis

The quantitative data were analyzed based on descriptive statistics and paired sample *t*-tests. To prepare the data for analysis, scans were conducted for incorrect or missing data. The level of missing data was found to be less than 10%, indicating that any imputation method could be utilized (Hair et al., 2010). Therefore, serial averages were assigned for any instances of missing data. In order to determine the statistical methods for data analysis, normal distribution was checked as an assumption of paired samples *t*-test. For performing a paired samples *t*-test, both measures of the dependent variable should be normally distributed (Taşpınar, 2017). Normality was checked through skewness and kurtosis values

and calculated *z*-scores. Skewness and kurtosis values that were between −1 and +1 and *z*-scores that did not exceed the value of 1.96 (at $p < .05$) were accepted as indicators of normal distribution (Field, 2009; Morgan et al., 2004).

As can be seen from Table 1, the pretest and posttest scores obtained from the CSES and ETS revealed normal distribution ($p > .05$). Hence, paired samples *t*-tests were performed to examine the impact of the treatment by comparing the mean pretest and posttest scores in terms of the preservice teachers' communication skills and empathic tendency levels. To this end, the statistical hypotheses for the first sub-problem were formulated as follows:

H_0 There is no significant difference between pretest and posttest scores in terms of the preservice teachers' communication skills.

H_1 There is a significant difference between pretest and posttest scores in terms of the preservice teachers' communication skills.

The statistical hypotheses for the second sub-problem were formulated as follows:

H_0 There is no significant difference between pretest and posttest scores in terms of the preservice teachers' empathic tendency levels.

H_1 There is a significant difference between pretest and posttest scores in terms of the preservice teachers' empathic tendency levels.

Based on the paired samples *t*-test results, the null hypotheses (H_0) were rejected, whilst the alternative (H_1) hypotheses were accepted at the significance level of .05. Cohen's *d* was calculated as the effect size index where the difference was shown to be significant. Index values of .2, .5, and .8 indicated small, medium, and large effect sizes, respectively (Cohen, 1988).

Table 1. Results for normality

Scale	Test	Skewness	*SE*	*z*-score	Kurtosis	*SE*	*z*-score
CSES	Pretest	-.439	.287	-1.530	.65	.566	1.148
	Posttest	-.072	.287	-0.251	-.015	.566	-0.027
ETS	Pretest	.163	.287	0.568	.368	.566	0.650
	Posttest	.242	.287	0.843	-.253	.566	-0.447

For the qualitative data analysis, content analysis was performed to group similar data according to concepts and themes, and the data were interpreted through its organization in an understandable way. Data were analyzed according to the following steps: coding, generating themes, organizing codes and themes, and defining and interpreting findings (Yıldırım & Şimşek, 2011). After the researchers had each individually created codes and themes, they were compared and organized to ensure consistency for the purpose of the study's dependability. The findings were defined and presented in tabular format with sample answers using codes in order to preserve the participants' anonymity.

3. RESULTS

In line with the first and second sub-problems of the study, the paired samples *t*-test was performed to investigate whether or not the preservice teachers' communication skills and empathic tendency levels significantly differed prior to and following completion of the

Effective Communication course with enhanced student engagement. Table 2 presents the results of the *t*-test.

Table 2. Paired samples *t*-test results for differences between pretest and posttest scores

Variable	Test	*n*	$\bar{X}$	*S*	*df*	*t*	*p*	*d*
Communication skills	Pretest	70	102.23	9.72	69	-1.690	.10	-
	Posttest	70	105.06	9.93				
Empathic tendency	Pretest	70	70.15	7.11	69	-2.249	.03	.40
	Posttest	70	72.95	7.01				

As Table 2 shows, the preservice teachers' posttest scores ($\overline{X}$ = 105.06) were higher than their pretest scores ($\overline{X}$ = 102.23) in terms of communication skills. Although their communication skills had increased by the end of the course, the difference between their pretest and posttest scores was not found to be statistically significant ($t(69) = -1.690$ $p > .05$). Based on the maximum and minimum scores obtainable from the scale, it was determined that the preservice teachers' level in terms of communication skills was "high" prior to taking the course, whilst their level was much closer to "quite high" after having attended the course.

Findings concerning the participants' empathic tendency indicate that their posttest scores ($\overline{X}$ = 72.95) were higher than their pretest scores ($\overline{X}$ = 70.15), and that the difference ($t(69) = -2.249$, $p < .05$) was found to be statistically significant. Cohen's *d* was calculated to interpret the effect size and was found to be small. Based on the maximum and minimum scores for the scale, the preservice teachers' empathic tendency level was shown to be "high" both before and after taking the course.

In line with the third sub-problem of the study, qualitative data were analyzed to examine the participant preservice teachers' opinions on the impact of the Effective Communication course carried out with enhanced student engagement. The findings are presented in Table 3.

Table 3. Opinions on the impact of the course

Code	*n*
Course had a significant influence	67
Course had no impact	3

The findings showed that 67 of the preservice teachers believed that the Effective Communication course had a significant impact on them, while three of them believed that the course did not make any difference. The expressions written by some of the participant preservice teachers regarding the effectiveness of the course are as follows:

> I think the course positively influenced me as I realized my mistakes in my daily life. I now understand how behaviors that seem to be unimportant can influence our lives. The course had such a real effect on me that my behaviors changed. The course contributed to my personal development. (Preservice teacher [PST]-17)
>
> The course created a difference. My point of view towards life and people has changed. I believe that I gained experience about life and also about others. I learned how effective communication is established and maintained. (PST-31)

The participants who believed that the course had not significantly impacted them indicated that the course content was composed of everyday knowledge and skills. Two of the preservice teachers' views on this are as follows:

> The course did not result in a difference for me because before taking the course, I was able to reasonably distinguish between what might be right and wrong in terms of communication and acted accordingly. (PST-19)
>
> It was like a repetition of the events, feelings, and behaviors that we encounter on a daily basis. Although the course contributed in terms of activities in the class and student-teacher communication, I did not see much difference from my own perspective. (PST-29)

A summary of the preservice teachers' opinions regarding the contributions of the course are presented in Table 4. The results show that the contributions of the course could be examined under the categories of knowledge, attitude, and skills developed within the course.

Table 4. Opinions regarding course contributions

Category	Code	*n*
Knowledge	Teacher-student communication	21
	Teacher-parent communication	7
	Body language	7
	Student-parent communication	4
Attitude	Increased awareness	14
	Different point of view	7
	Less prejudice	6
	More self-confidence	5
	More tolerance	1
	More motivation to be a teacher	1
	More self esteem	1
Skill	Identifying communication mistakes	11
	Listening with empathy	6
	Expressing myself	6
	Effective listening	5

Table 4 indicates that according to the preservice teachers, the Effective Communication course contributed the most to their knowledge about communication. Within this framework, their knowledge regarding teacher and student communication was the most frequently highlighted contribution of the course. Two of the participants' opinions are as follows:

> This was the most productive and enjoyable pedagogy course I've ever taken. It answered the question, 'How can I be more constructive in communication?', and I also learned what body language and gestures mean in communication. (PST-30)

> Considering that we will soon be educators ourselves, it was a very useful course. We covered every aspect of communication and learned a lot about communication that we hadn't already known. The course certainly made a huge contribution to me. (PST-49)

The preservice teachers who focused on course contributions in terms of their attitude emphasized changes in their awareness and point of view. They also highlighted that their prejudices decreased whilst their self-confidence in communication increased. The following two statements are examples of the preservice teachers' opinions:

> I realized that I used to be more biased toward people, but now I'm trying to overcome my prejudices. (PST-45)

> For a teacher to do their job best, they must communicate well with their students and understand them. The course taught us how to do this. Before taking the course, I was unaware of how communication influences our lives, but thanks to this course, I now realize how important it can be. (PST-65)

According to the participant preservice teachers, the skills they acquired or improved during the course were identifying communication mistakes, listening with empathy, self-expression, and effective listening. Some of their opinions on this are as follows:

> A good teacher communicates effectively and makes the lesson effective. Considering this, the Effective Communication course is both unavoidable and essential for education faculty. I can now express my thoughts and feelings more easily and can empathize more after having taken the course. (PST-44)

> Now I can communicate more effectively, and have also come to realize that communication is not a one-way but a two-way, mutual process. (PST-55)

Table 5 presents the preservice teachers' opinions on the components of the Effective Communication course that they considered beneficial to their development, considering the effect and contributions of the course.

Table 5. Opinions regarding effective course components

Code	*n*	Code	*n*
Student activities	57	Videos	19
Content	39	Images (pictures, cartoons etc.)	13
Examples	30	Instructor's attitudes	13
Instructor's presentations	24	Drama	8

The participants' evaluation of the Effective Communication course indicated that activities were the most frequently emphasized component that enhanced their own capacities. They believed that the activities helped them prepare for the weekly course content, gave them opportunity to be active, made the course more enjoyable, and made the content more understandable and easy to remember. The course content and the examples used by the instructor during instruction were also considered beneficial components of the course. The preservice teachers also regarded the instructor's presentations as having been well-prepared and effective, with useful and interesting videos and images used during their instruction. Some of the preservice teachers emphasized the instructor's attitudes and approach, both to them as student teachers and also to the course. Drama was also one

component that was considered the most effective in terms of their communication skills enhancement. The following are some of their sample statements:

> The course content was quite related to the events we encounter daily, so it had a remarkable aspect. The course was full of examples. Since it is a factor affecting retention, the examples our teacher gave, and citing events from her own life were important factors that helped me stay focused on the lesson. As the activities we prepared were preliminary preparation for the upcoming lecture, and were supported with role play and drama, the course became more enjoyable. (PST-43)
>
> The content was understandable and necessary. Since the examples were plentiful, the course was conducted effectively. Our instructor's enthusiasm and willingness resulted in a positive impact. Since the activities were related to the subject, the topics were easier to understand and remember. (PST-50)
>
> My activity study was enjoyable, and through these activities it became easier to remember things we had learned. The instructor gave real-life examples, which was a reason for me to attend the class with pleasure. (PST-62)
>
> The design of the course was very effective. We learned by having fun, and therefore without getting bored. Our instructor explained the topics to us very clearly, communicating well with us, and making the lesson enjoyable. Having to perform in front of a group also helped us in terms of our own self-confidence. The course content has also helped since it contributed to our communication, which is the most important thing in this profession. (PST-65)

In line with the fourth sub-problem of the study, preservice teachers' suggestions for the Effective Communication course were investigated. As presented in Table 6, the suggestions were examined under three categories; the course's process, content, and evaluation.

Table 6. Preservice teachers' suggestions about the course

Category	Code	*n*
Process	Preservice teachers should be more active	5
	Drama should be used more frequently	3
	Presentations should be made prior to student activities	2
	All preservice teacher course attendees should make short videos	2
	In-class discussions should be used more frequently	2
	Extracurricular activities should be used	2
	Problem-based activities should be used	1
	Research-based activities should be used	1
	There should be more material development studies	1
	There should be more group work	1
Content	There should be more theoretical knowledge	3
	There should be more emphasis on student-teacher communication	1
Evaluation	Peer evaluation should include both written and oral form	1
	Self-critique and self-reflection should be used	1

Considering findings about these suggestions, it can be asserted that the participants mostly focused on the process of the course. They believed that those taking the course needed to be more active in order to achieve better learning outcomes. They also found drama to be effective and suggested that it be used more frequently during the course. Some of the preservice teachers criticized the order of course activities and suggested that it would be more useful to listen to the instructor's presentation before undertaking the student activities. Moreover, some of the participants also suggested that all preservice teachers should be required to prepare short videos, and that in-class discussions and extracurricular activities should be used more frequently. In terms of the course content, the participant preservice teachers indicated that it would be more beneficial if there was more theoretical knowledge included in the course. One participant pointed to more theoretical knowledge about student-teacher communication. Regarding evaluation, the preservice teachers suggested that there may be opportunities for peer evaluation, self-criticism, and for reflection as ways to further improve their communication capacity. Some sample statements on this are as follows:

> In class, students may be asked to use videos in their presentations, and in-class discussions may be used to increase student participation. If interesting topics are used in these types of activities, the students will naturally participate more willingly. (PST-45)
>
> There could be some time set aside for self-criticism and discussion about the course content. (PST-58)
>
> The activities conducted by the students could be increased. Apart from those prepared by the students related to the subject, additional activities could also be included. In this way, the student's attention can be completely focused on the course. (PST-59)

Overall, the results of the current research have shown that the quantitative and qualitative data provided parallel and consistent results. The participant preservice teachers' opinions about the contributions and the instructional process and their suggestions for the course indicated that they were generally content with the Effective Communication course. It was evident that the course conducted with enhanced student engagement contributed to the preservice teachers' capacity in terms of empathy and communication. Concerning the level of this contribution, it may be asserted that the impact of the course was statistically significant for empathic tendency levels, but was not significant for communication skills. The significant impact of the course on empathic tendency levels can also be deduced from the participant preservice teachers' opinions noted on the contributions of the course. Although there was no direct or frequent focus on the concept of "empathy" in the preservice teachers' recorded opinions, analysis of the most frequently emphasized contributions of the course revealed that most were concerned with the crucial knowledge, skills, and attitudes for the development of empathy. In order to improve empathic tendency levels, it is important to learn about teacher-student, teacher-parent, and student-parent communication, to become aware of the characteristics of communication, adopt different viewpoints, have fewer prejudices and more tolerance, and to express oneself and listen more effectively, which also substantially correspond to the items of the ETS.

4. RESULTS, DISCUSSION, AND CONCLUSION

The current study evaluated the impact of Turkey's education faculty Effective Communication course delivered with enhanced student engagement on the communication skills and empathic tendency levels of preservice teachers. The results showed that the difference between the participants' pretest and posttest scores in terms of empathic tendency was statistically significant, which indicates that the Effective Communication course with enhanced student engagement significantly influenced the preservice teachers' empathic tendency levels. This finding concurs with that of Karahan et al. (2006), who determined that the empathic skill levels of preservice teachers before and after attending a Human Relations and Communication course were significantly different. On the other hand, the current study showed that although the level of the preservice teachers' communication skills at the end of the course were higher than prior to its start, the difference between the pretest and posttest scores was not found to be statistically significant. This can be said to be a finding consistent with that of Yarar-Kaptan and Oğuz (2011), who also indicated that the Effective Communication course did not significantly impact preservice teachers' communication skills. Similarly, Yüksel-Şahin (1998) found that the communication skills of students who attended a communication skills training program were higher than those who had not. In another study with comparable findings, Elkatmış (2015) reported a significant difference having been established between the communication skills of preservice teachers before and after taking the Turkish I: Written Expression and Turkish II: Spoken Expression and Effective Communication courses. Furthermore, Arslan et al. (2010) evaluated the impact of communication skills education integrated with creative drama, and found that preservice teachers' communication skills were enhanced when developed through creative drama.

The current study's results indicated that the preservice teachers' communication skills and empathic tendency levels were high prior to attending the Effective Communication course. After having taken the course, their level of empathic tendency was still found to be "high," whereas their communication skills were much closer to the level of "quite high." These findings parallel some of the previous research that also determined preservice teachers' communication skills (Beyaz, 2022; Çuhadar et al., 2014; Günönü-Kurt, 2019; Ocak & Erşen, 2015) and empathic tendency levels (Beyaz, 2016; Kula & Akbulut, 2020; Pala, 2008; Yaşar & Erol, 2015; Yılmaz & Akyel, 2008) to be high. Such findings indicate the need for enhanced communication and empathy, particularly within the teaching profession (Engin & Genç, 2015; Pala, 2008). It is reasonable, therefore, to view the preservice teachers' high levels as promising since both communication and empathy are crucial components of the teaching and learning process. However, considering the uniqueness of the teaching profession, it is worth noting that teachers' capacity for communication and empathy levels need to be enhanced in order to achieve better learning outcomes.

According to the analysis of the qualitative data, most of the preservice teachers in the current study believed that the course they attended was effective since it contributed to their knowledge regarding essential communication components between students, teachers, and parents, who are the key stakeholders of the education system. The course also increased the participant preservice teachers' awareness and self-confidence, helped them to evaluate communication processes from a different perspective, and to realize and overcome their prejudices. These results parallel those of Mersin (2017), who investigated students' views of a communication course. According to the opinions analyzed in that study, the participant students believed that after having taken the course, their viewpoints about people changed,

and that they were able to overcome their prejudices which were regarded as an important reason for conflicts in communication (Mersin, 2017).

The current study's preservice teachers' opinions related to the contributions of the course and the process, content, and evaluation in the instructional process were evaluated based on the student engagement model of Groccia and Hunter (2012, as cited in Groccia, 2018). On this, it may be asserted that student engagement occurred on all levels depicted in the conception of student engagement in the model, since the preservice teachers indicated that the course contributed to their development in terms of knowledge, attitude, and skills. On the course, the preservice teachers were engaged in all six dimensions of the model, including teaching, learning, and research with the community, students, faculty, and staff. They were also included in a wide range of activities with the help of the course instructor and performed specific tasks by researching the given topic each week. From this, the students built effective relationships with their other members, their classmates, course instructor, the community, and the faculty in their preparation of activities as required for the course.

Overall, the results of the current study offer certain implications for practice and research in teacher training. The findings demonstrate that although the Effective Communication course with enhanced student engagement improved both the participants' communication skills and empathic tendency levels, its effect on communication was not found to be significant, and was small in terms of their empathic tendency levels. Hence, it can be concluded that the Effective Communication course and the level of student engagement may not be sufficient to optimize the communication skills and empathic tendency levels of future teachers. However, it should be noted that student engagement is a multidimensional and complex concept that may occur on cognitive, affective, and behavioral levels. That is, students should engage with the learning process on behavioral, affective, and cognitive levels in order for better learning outcomes to be realized. On the other hand, learners can engage positively along one or more of the three dimensions of engagement whilst engaging negatively along others (Groccia, 2018). Therefore, it can be concluded that a need exists for further investigation into the level of student engagement, and to how and to what extent these levels can influence learning outcomes. As in the case of academic achievement, social and emotional outcomes of student engagement should be investigated. By adopting the self-determination theory, some studies have investigated the role of engagement on academic achievement (Schnitzler et al., 2021), whilst others have opted to examine how students' social skills and relationships in the classroom influence student engagement (Kiema-Junes et al., 2020; Mallik, 2023). As such, the influence of student engagement on learners' social and emotional skills needs to be sought based on empirical data.

The results can also be partially associated with the course design, as the limited number of suggestions offered by some of the participant preservice teachers indicated. Although the course was designed as a learner-centered course that aimed to utilize the potential of student engagement to achieve the objectives of the course, due to the insufficient time, it was mainly delivered as a theoretical course. Instead, it could be more beneficial if the course also offered preservice teachers planned opportunities to reflect critically on their communication skills and empathic tendencies towards fostering these skills. The course would perhaps be more effective if the content were integrated with reflections and personal experiences of the preservice teachers attending the course. Additionally, more emphasis could be placed on the more frequent use of student-centered in-class activities, such as role-

playing with peers and using video models that can contribute to the students' communication skills (Gartmeier et al., 2015). Furthermore, the tone of the syllabus and course policies could be arranged to communicate empathy and to better reflect the instructor's understanding of their students. Therefore, the course syllabus and policies for course assignments and exams could be used as a tool to develop the empathy of preservice teachers (Meyers et al., 2019).

Finally, the Effective Communication course lasted for a single semester (14 weeks), and the frequency of suggestions put forward by the participants indicates that many of them felt contentment with the current course content and design. Hence, apart from the design of the course itself, considering that the time was insufficient to create a better and more significant impact on the attending preservice teachers, it could also be suggested that the number of courses that aim to boost preservice teachers' capacity in communication and empathy could be increased within undergraduate teacher training programs.

In terms of the limitations, it should be noted that the current study measured a single group based on the single-group pretest–posttest design. In order to enrich students' activities and experiences during the semester-long course, two groups attending the Effective Communication course were included in the experimental group. If two more groups had also taken the same course at the same time, they could have formed a control group for the study. Research employing true experimental designs could also provide deeper analysis and additional insight based on the inclusion of both experimental and control groups. Based on the results of a control group, i.e., one that did not aim to enhance student engagement, the true influence of the treatment would be more clearly identifiable. Additionally, there may also be merit in investigating the effects of different treatments on communication and empathy in teacher training. Therefore, further research is necessary which aims to test which types of coursework and course activities used in teacher training programs may best foster preservice teachers' communication skills and empathic tendencies.

DECLARATIONS

Author Contributions: The authors contributed equally to the study.

Conflicts of Interest: The authors declare no potential for conflict of interest with respect to the research, authorship, and/or publication of the article.

Funding: No funding was received for the research, authorship, and/or publication of the article.

Ethical Approval: Ethical procedures for research performed with human subjects were undertaken in accordance with the IRB (International Review Board) guidelines. The process was conducted considering the participants' voluntariness, anonymity, and informed consent.

Data Availability Statement: The data that supports the findings of this study are available from the corresponding author upon request.

Acknowledgments: None.

REFERENCES

Ahmetoğlu, E., & Acar, I. H. (2016). The correlates of Turkish preschool preservice teachers' social competence, empathy and communication skills. *European Journal of Contemporary Education*, *16*(2), 188-197. https://doi.org/10.13187/ejced.2016.16.188

Al-Musalli, A. (2019). Rethinking business communication skills education: Are communication courses preparing students for the workplace? *College Quarterly, 22*(2). https://collegequarterly.ca/2019-vol22-num02-spring/rethinking-business-communication-skills-education.html

Anderson, J. F., Norton, R. W., & Nussbaum, J. F. (1981). Three investigations exploring relationships between perceived teacher communication behaviors and student learning. *Communication Education, 30,* 377-392. https://doi.org/10.1080/03634528109378493

Appleton, J. J., Christenson, S. L., Kim, D., & Reschly, A. L. (2006). Measuring cognitive and psychological engagement: Validation of the student engagement instrument. *Journal of School Psychology, 44*(5), 427-445. https://doi.org/10.1016/j.jsp.2006.04.002

Arghode V., Yalvac, B., & Liew, J. (2013). Teacher empathy and science education: A collective case study. *Eurasia Journal of Mathematics, Science & Technology Education, 9*(2), 89-99. https://doi.org/10.12973/eurasia.2013.921a

Arslan E., Erbay F., & Saygın, Y. (2010). An investigation about the effect of communication skills education integrated with creative drama on students of departments of child development and education. *The Journal of the Institute of Social Sciences 23*, 1-8. https://dergipark.org.tr/en/pub/susbed/issue/61800/924420

Astin, A. W. (1999). Student involvement: A developmental theory for higher education. *Journal of College Student Development, 40*(5), 518-529. https://psycnet.apa.org/record/1999-01418-006

Ateş B., & Sağar M. E. (2022). The predictive role of psychological flexibility, self-efficacy and communication skills on life satisfaction in teacher candidates. *Cumhuriyet International Journal of Education, 11*(1), 219-227. https://doi.org/10.30703/cije.1007362

Axelson, R. D., & Flick, A. (2010). Defining student engagement. *Change: The Magazine of Higher Learning, 43*, 38-43. https://doi.org/10.1080/00091383.2011.533096

Barr, J. J. (2010). The relationship between teachers' empathy and perceptions of school culture. *Review of Educational Research, 77*(1), 113-143. https://doi.org/10.1080/03055698.2010.506342

Baykara-Pehlivan, K. (2005). A study on perception of communication skills of preservice teachers. *Elementary Education Online, 4*(2), 17-23. https://ilkogretim-online.org/index.php?mno=121185

Bender, Y. (2005). *The tactful teacher: Effective communication with parents, colleagues, and administrators.* Nomad Press.

Beyaz, Ö. (2016). *Evaluation of empathic tendency and empathic skill levels of pre-service teachers who study in Physical Education and Sports Department: The case of Anadolu University* (Unpublished master's thesis). Anadolu University, Eskişehir.

Beyaz, Ö. (2022). *Examining preservice teachers' communication skills in terms of different variables* [Master's thesis, Gaziantep University, Turkey]. https://www.proquest.com/openview/c97a281276222123df8ba8cb8c453af9/1?pq-origsite=gscholar&cbl=2026366&diss=y

Biçer, B., & Başer, E. (2019). Examining predictive role of preservice teachers' empathic tendency on social entrepreneurship characteristics and factors affecting empathic tendencies and social entrepreneurship characteristics. *Anemon Journal of Social Sciences of Mus Alparslan University, 7*(5), 235-243. http://dx.doi.org/10.18506/anemon.520986

Bouton, B. (2016). Empathy research and teacher preparation: Benefits and obstacles. *Southeastern Regional Association of Teacher Educators Journal, 25*(2), 16-25. https://www.srate.org/JournalEditions/Volume25-2/Bouton.pdf

Boyer, W. (2010). Empathy development in teacher candidates. *Early Childhood Education Journal, 38*, 313-321. http://dx.doi.org/10.1007/s10643-010-0419-8

Burak, S., & Durak, S. T.(2021). Media literacy and communication skills of pre-school pre-service teachers. *The Journal of International Education Science, 28*(8), 102-136. http://dx.doi.org/10.29228/INESJOURNAL.52145

Calloway-Thomas, C. (2010). *Empathy in the global world: An intercultural perspective*. Sage.

Carey, P. (2013). Student engagement: Stakeholder perspectives on course representation in university governance. *Studies in Higher Education, 38*(9), 1290-1304. https://doi.org/10.1080/03075079.2011.621022

Cheraghi, F., Hooshangian, M., Doosti-Irani, A., & Khalili, A. (2021). The effect of peer support approach on communication skills of nursing students in pediatric clinical setting. *Nurse Education in Practice, 52*, Article 102984. https://doi.org/10.1016/j.nepr.2021.102984

Cochran, L. M., & Parker Peters, M. (2023). Mindful preparation: An exploration of the effects of mindfulness and SEL training on pre-service teacher efficacy and empathy. *Teaching and Teacher Education, 123*, Article 103986. https://doi.org/10.1016/j.tate.2022.103986.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences.* Erlbaum.

Collie, R. J. (2017). Teachers' social and emotional competence: Links with social and emotional learning and positive workplace outcomes. In E. Frydenberg., A. J. Martin., & R. J. Collie (Eds.), *Social and emotional learning in Australia and the Asia Pacific* (pp. 167-184). Springer. https://doi:10.1007/978-981-10-3394-0

Covey, S. R. (2020). *The 7 habits of highly effective people.* Simon & Schuster.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches.* Sage.

Cüceloğlu, D. (2002). *Yeniden insan insana* [Person to Person Again] (27th ed.). Remzi Kitabevi.

Çalışkan, N., & Ayık, A. (2015). Parent-teacher association (PTA) and communication with parents. *Ahi Evran University Institute of Social Sciences Journal Institute, 1*(2), 69-82. https://dergipark.org.tr/en/pub/aeusbed/issue/1446/17439

Çuhadar, C., Özgür, H., Akgün, F., & Gündüz, Ş. (2014). Teacher candidates' communication skills and communicator styles. *Ahi Evran University Journal of Kırşehir Education Faculty, 15*(1), 295-311. https://dergipark.org.tr/en/pub/kefad/issue/59467/854536

Demetriou, H., & Nicholl, B. (2021). Empathy is the mother of invention: Emotion and cognition for creativity in the classroom. *Improving Schools, 25*(1), 4-21. https://doi.org/10.1177/1365480221989500

Deniz, K. (2015). Expectations of Turkish teacher candidates about the effective communication course. *Journal of Mother Tongue Education, 3*(2), 63-80. https://doi.org/10.16916/aded.55185

Derrick, E. J. (2006). Tools for student engagement that facilitate development of communication skills. In K. Elleithy, T. Sobh, A. Mahmood, M. Iskander, & M. Karim, (Eds.), *Advances in Computer, Information, and Systems Sciences, and Engineering,* (pp. 481-484*).* Springer. https://doi.org/10.1007/1-4020-5261-8_74

Dökmen, Ü. (1988). Empatinin yeni bir modele dayanilarak ölçülmesi ve psikodrama ile geliştirilmesi [A new measurement model of the empathy and developing empathy by using psychodrama]. *Ankara University Journal of Faculty of Educational Sciences, 21*(1-2), 155-190. https://doi.org/10.1501/Egifak_0000000999

Dökmen, Ü. (2002). *İletişim çatışmaları ve empati* [Communication conflicts and empathy]. Sistem.

Eisenberg, N., Shea, C. L., Carlo, G., & Knight, G. (1991). Empathy-related responding and cognition: A chicken and the egg dilemma. In W. Kurtines & J. Gewirtz (Eds.), *Handbook of moral behavior and development research* (pp. 63-68). Erlbaum.

Ekinci, Ö., & Aybek, B. (2010). Analysis of the empathy and the critical thinking disposition of the teacher candidates. *Elementary Education Online, 9*(2), 816-827. https://www.ilkogretim-online.org/index.php?fulltxt=122959&fulltxtj=218&fulltxtp=218-1596894999.pdf

Elkatmış, M. (2015). The effect of effective communication courses with written and spoken expression on communication skills of pre-service teachers. *Elementary Education Online, 14*(4), 1341-1351. https://doi.org/10.17051/io.2015.58970

Engin, G., & Genç, S. Z. (2015). The empathic tendency of pre-service primary school teachers (The sample of Çanakkale 18 Mart University). *International Journal of Language Academy, 3*(2), 116-123. http://dx.doi.org/10.18033/ijla.217

Fadel, C., Bialik, M., & Trilling, B. (2015). *Four dimension education. The competence learner need to succeed.* The Center for Curriculum Redesign.

Feshbach, N. D., & Feshbach, S. (2009). Empathy and education. In J. Decety & W. Ickes (Eds.), *The social neuroscience of empathy* (pp. 85-98). MIT Press.

Field, A. (2009). *Discovering statistics using SPSS.* Sage.

Fraenkel, J. K., & Wallen, N. E. (2003). *How to design and evaluate research in education* (5th ed.). McGraw-Hill.

Gartmeier, M., Bauer, J., Fischer, M. R., Hoppe-Seyler, T., Karsten, G., Kiessling, C., Möller, G. E., Wiesbeck, A., & Prenzel, M. (2015). Fostering professional communication skills of future physicians and teachers: effects of e-learning with video cases and role-play. *Instructional Science, 43*(4), 443-462. http://dx.doi.org/10.1007/s11251-014-9341-6

Gelişli, Y. (2019). Eğitim, öğretim, öğrenme ve değerlendirme sürecinde etik ilkeler [Ethical principles in education, instruction, learning and evaluation process]. In B. Oral, A. Çoban, & M. Bars (Eds.), *Eğitimde ahlak ve etik* [Morals and ethics in education] (pp. 91-120). Pegem Academy.

Gezer, M. (2021). Örneklem seçimi ve örnekleme yöntemleri [Sample selection and sampling methods]. In B. Çetin, M. İlhan, & M. G. Şahin (Eds.), *Eğitimde araştırma yöntemleri* [Research methods in education] (pp. 102-132). Pegem.

Griffin, E. (2006). *A first look at communication theory*. McGraw-Hill.

Groccia, J. E. (2018). What is student engagement? *New Directions for Teaching and Learning, 154*, 11-20. http://dx.doi.org/10.1002/tl.20287

Günönü-Kurt, S. (2019). *The relationship between primary school teacher candidates' communication skills and empathetic tendency levels* [Master's thesis, Pamukkale University, Denizli, Turkey]. https://search.trdizin.gov.tr/tr/yayin/detay/375532/

Hair, J., Black, W., Babin, B., & Anderson, R. (2010). *Multivariate data analysis* (7th ed.). Prentice-Hall.

Hardee, J. T. (2003). An overview of empathy. *The Permanente Journal, 7*(4), 51-54. https://doi.org/10.7812/TPP/03-072

Hoffman, M. L. (2000). *Empathy and moral development: Implications for caring and justice.* Cambridge University Press.

Huang, H., Liu, Y., & Su, Y. (2020). What is the relationship between empathy and mental health in preschool teachers: The role of teaching experience. *Frontiers in Psychology, 11*(1366). https://doi.org/10.3389/fpsyg.2020.01366

Hunt, S., Simonds, C., & Cooper, P. (2002). Communication and teacher education: Exploring a communication course for all teachers. *Communication Education, 51*(1), 81-94. https://doi.org/10.1080/03634520216497

Jennings, P. A. (2011). Promoting teachers' social and emotional competencies to support performance and reduce burnout. In A. Cohan & A. Honigsfeld (Eds.), *Breaking the mold of preservice and inservice teacher education: Innovative and successful practices for the 21st century* (pp. 133-143). Rowman & Littlefield.

Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research, 79*, 491-525. https://doi.org/10.3102/0034654308325693

Johnson, M. B. (1999). *Communication in the classroom*. Guides Non-Classroom (055) Opinion Papers (120). https://eric.ed.gov/?id=ED436802

Kahu, E. R. (2013). Framing student engagement in higher education. *Studies in Higher Education, 38*(5), 758-773. https://doi.org/10.1080/03075079.2011.598505

Karahan, T. F., Sardoğan, M. E., Güven, M. Ç., Özkamalı, E., & Dicle, A. N. (2006). İnsan ilişkileri ve iletişim dersi'nin öğretmen adaylarının çatışma çözme ve empatik beceri düzeylerine etkisi [The Effect of Human Relations and Communication Course on the Conflict Resolution and Empathic Skill Levels of Prospective Teachers]. *Eurasian Journal of Education Research, 23*, 127-136. https://ejer.com.tr/wp-content/uploads/2021/01/ejer_2006_issue_23.pdf

Kiema-Junes, H., Hintsanen, M., Soini, H., & Pyhältö, K. (2020). The role of social skills in burnout and engagement among university students. *Electronic Journal of Research in Educational Psychology, 18*(50), 77-100. https://doi.org/10.25115/ejrep.v18i50.2728

Korkut, F. (1996). İletişim becerilerini değerlendirme ölçeğinin geliştirilmesi: Güvenirlik ve geçerlik çalışmaları [Development of a communication skills assessment scale: Reliability and validity study]. *Psikolojik Danışma ve Rehberlik Dergisi, 2*, 18-23.

Kuh, G. D. (2003). What we're learning about student engagement from NSSE. *Change 35*(2), 24-32. https://doi.org/10.1080/00091380309604090

Kuh, G. D. (2009). The national survey of student engagement: Conceptual and empirical foundations. *New Directions for Institutional Research, 141*, 5-20. https://doi.org/10.1002/ir.283

Kuh, G., Cruce, T., Shoup, R., Kinzie, J., & Gonyea, R. (2008). Unmasking the effects of student engagement on first-year college grades and persistence. *The Journal of Higher Education, 79*(5), 540-563. https://doi.org/10.1080/00221546.2008.11772116

Kula, S. S., & Akbulut, O. F. (2020). The relationship between pre-service teachers' sensitivity to violence against children and empathic tendencies. *Trakya Journal of Education, 10*(3), 917-932. https://doi.org/10.24315/tred.658597

Kurenkova, R., & Shkineva M. (2008). Communication in the teacher training university. In A. T. Tymieniecka (Ed.), *Education in human creative existential planning. Analecta Husserliana (The yearbook of phenomenological research)* (pp. 419-421). Springer.

Kuzu, T. S. (2003). Eğitim-öğretim ortamında etkili sözel iletişim [Effective verbal communication in the educational environment]. *Milli Eğitim Dergisi, 158*, 14-24. http://dhgm.meb.gov.tr/yayimlar/dergiler/milli_egitim_dergisi/158/kuzu.htm

Levine, D. (2005). *Teaching empathy: A blueprint for caring, compassion, and community.* Solution Tree.

Mallik, B. (2023). Teacher-student relationship and its influence on college student engagement and academic achievement. *Anatolian Journal of Education, 8*(1), 93-112. https://doi.org/10.29333/aje.2023.817a

McClenney, K., Marti, C. N., & Adkins, C. (2012). *Student engagement and student outcomes: Key findings from CCSSE validation research.* Community College Survey of Student Engagement.

McCroskey, C. J., Richmond, P. V., & Bennett, E. V. (2006). The relationships of student end-of-class motivation with teacher communication behaviors and instructional outcomes. *Communication Education, 55*(4), 403-414. https://doi.org/10.1080/03634520600702562

Mersin, S. (2017). The views of students regarding the communication lesson. *Sağlık Akademisyenleri Dergisi, 4*(4), 249-252. https://dergipark.org.tr/tr/pub/sagakaderg/issue/46723/585991

Meyers, S., Rowell, K., Wells, M., & Smith, B. C. (2019). Teacher empathy: A model of empathy for teaching for student success. *College Teaching, 67*(3), 160-168. https://doi.org/10.1080/87567555.2019.1579699

Miller, P. W. (1988). *Nonverbal communication: what research says to the teacher.* National Educational Association.

Morgan, G. A., Leech, N. L., Gloeckner, G. W., & Barrett, K. C. (2004). *SPSS for introductory statistics: Use and interpretation.* Erlbaum.

Morgan, L. Close, S., Siller, M., Kushner, E., & Brasher, S. (2022). Teachers' experiences: social emotional engagement – knowledge and skills. *Educational Research, 64*(1), 41-59. https://doi.org/10.1080/00131881.2021.1988865

Morreale, S. P., & Pearson, J. C. (2008). Why communication education is important: The centrality of the discipline in the 21st century. *Communication Education, 57*, 224-240. https://doi.org/10.1080/03634520701861713

Moura, D., Costa, M. J., Pereira, A. T., Macedo, A., & Figueiredo-Braga, M. (2021). Communication skills preparedness for practice: Is there a key ingredient in undergraduate curricula design? *Patient Education and Counseling, 105*(3), 756-761. https://doi.org/10.1016/j.pec.2021.06.034

Muste, D. (2016). The role of communication skills in teaching process. *The European Proceedings of Behavioral and Social Sciences EpSBS, 18*, 430-434. https://www.futureacademy.org.uk/files/images/upload/ERD2016FA052F.pdf

Ocak, G., & Erşen, Z. B. (2015). Examination of perception of preservice teachers on communication skills. *Mehmet Akif Ersoy University Journal of Education Faculty, 33*, 1-19. https://dergipark.org.tr/en/pub/maeuefd/issue/19406/206288

Okoli, A. C. (2017). Relating communication competence to teaching effectiveness: Implication for teacher education. *Journal of Education and Practice, 8*(3), 150-154. https://iiste.org/Journals/index.php/JEP/article/view/35109

Özgökman, Ş. (2019). *Investigation of the relationship between present teachers' communication skills and empathetical trends (Afyonkarahisar sample)* [Master's thesis, Afyon Kocatepe University, Turkey]. http://www.acikerisim.aku.edu.tr/xmlui/handle/11630/7182

Özyürek, H. (2012). Qualifications required for accountants. *Hukuk ve İktisat Araştırmaları Dergisi, 4*(1), 139-148. https://dergipark.org.tr/en/pub/hiad/issue/7651/100152

Pala, A. (2008). A research on the levels of empathy of prospective teachers. *Pamukkale University Journal of Education, 23*(1), 13-23. https://dergipark.org.tr/en/pub/pauefd/issue/11120/132986

Pennington, R. C., Walker, V. L., & Tapp, M. C. (2020). Teacher preparation in communication instruction for students with extensive support needs. *Teacher Education and Special Education, 44*(3), 239-254. https://doi.org/10.1177/0888406420978606

Reeve, J. (2012). A self-determination theory perspective on student engagement. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 149-172). Springer. https://doi.org/10.1007/978-1-4614-2018-7_7

Riemer, M. J. (2007). Communication skills for the 21st century engineer. *Global Journal of Engineering Education, 11*(1), 89-100. http://www.wiete.com.au/journals/GJEE/Publish/vol11no1/Riemer.pdf

Saunders, S., & Mills, M. A. (1999, November 29 – December 2). *The knowledge of communication skills of secondary graduate student teachers and their understanding of the relationship between communication skills and teaching* [Conference presentation]. NZARE/AARE Conference, Melbourne.

Schnitzler, K., Holzberger, D., & Seidel, T. (2021). All better than being disengaged: Student engagement patterns and their relations to academic self-concept and achievement. *European Journal of Psychology of Education, 36*, 627-652. https://doi.org/10.1007/s10212-020-00500-6

Schonert-Reichl, K. A (2017). Social and emotional learning and teachers. *The Future of Children, 27*(1), 137-155. https://doi.org/10.1353/foc.2017.0007

Sezen-Balçıkanlı, G. (2009). Fair play and empathy: A research study with student teachers. *Journal of US-China Public Administration, 6*(4), 79-84. https://doi.org/10.17265/1548-6591/2009.04.010

Taşpınar, M. (2017). *Sosyal bilimlerde SPSS uygulamalı nicel veri analizi* [Quantitative data analysis with SPSS in social sciences]. Pegem.

Tettegah, S., & Anderson, C. J. (2007). Pre-service teachers' empathy and cognitions: Statistical analysis of text data by graphical models. *Contemporary Educational Psychology, 32*(1), 48-82. https://doi.org/10.1016/j.cedpsych.2006.10.010

Trowler, V. (2010). *Students engagement literature review.* The Higher Education Academy.

Üstün, B. (2005). Because communication has more changed. *Journal of Anatolia Nursing and Health Sciences, 8*(2), 88-94. https://dergipark.org.tr/en/pub/ataunihem/issue/2630/33836

Vuori, J. (2014). Student engagement: buzzword of fuzzword? *Journal of Higher Education Policy and Management, 36*(5), 509-519. https://doi.org/10.1080/1360080X.2014.936094

Wang, M. T., & Hofkens, T. L. (2020). Beyond classroom academics: a school-wide and multi-contextual perspective on student engagement in school. *Adolescent Research Review, 5*, 419-433. https://doi.org/10.1007/s40894-019-00115-z

Warren, C. A. (2018). Empathy, teacher dispositions, and preparation for culturally responsive pedagogy. *Journal of Teacher Education 69*(2), 169-183. https://doi.org/10.1177/0022487117712487

Waxman, H. C. (1983). Effect of teachers' empathy on students' motivation. *Psychological Reports, 53*(2), 489-490. https://doi.org/10.2466/pr0.1983.53.2.489

Wilson, A. (2020). *A study of empathy and teacher self-efficacy among preservice early childhood educators* [Master's thesis, East Tennessee State University]. https://www.proquest.com/openview/25438a5311fa52525e24f564c25a99af/1?pq-origsite=gscholar&cbl=18750&diss=y

Yarar-Kaptan, S., & Oğuz, A. (2011, September 8-10). *Etkili iletişim dersinin sınıf öğretmeni adaylarının iletişim becerilerine etkisi* [The effect of effective communication course on communication skills of primary school preservice teacher]. [Conference presentation]. 20th Ulusal Eğitim Bilimleri Kurultayı, Mehmet Akif Ersoy University, Burdur, Turkey.

Yaşar, M., & Erol, A. (2015). Determination of relationship between the empathic tendency levels and thinking styles of preschool teacher candidates. *International Journal of Assessment Tools in Education, 2*(2), 38-65. https://dergipark.org.tr/en/pub/ijate/issue/22372/239561

Yıldırım, A., & Şimşek, H. (2006). *Sosyal bilimlerde nitel araştırma yöntemleri* [Qualitative research methods in social sciences]. Seçkin.

Yılmaz, İ., & Akyel, Y. (2008). Examination of emphatic tendency levels of physical education candidates teacher in terms of different variables. *Ahi Evran University Kırşehir Faculty of Education Journal, 9*(3), 27-33. https://dergipark.org.tr/en/pub/kefad/issue/59524/855994

Yükseköğretim Kurulu. (2007). *Eğitim fakültesi öğretmen yetiştirme lisans programları* [Edducation faculty teacher training undergraduate programs]. YÖK. https://www.yok.gov.tr/Documents/Yayinlar/Yayinlarimiz/egitim-fakultesi-ogretmen-yetistirme-lisans-programlari.pdf

Yüksel-Şahin, F. (1998). Effect of communication skills training within a group upon communication skill levels of university students. *Education and Science, 22*(110), 12-19.

ABOUT THE CONTRIBUTORS

Özge Ceren Çelik: Department of Educational Sciences, Gazi Faculty of Education, Gazi University, Ankara, Turkey.
Email: ocerencelik@gazi.edu.tr
ORCID ID: http://orcid.org/0000-0003-3280-0654

Gülgün Alpan: Department of Educational Sciences, Gazi Faculty of Education, Gazi University, Ankara, Turkey.
Email: bangir@gazi.edu.tr
ORCID ID: http://orcid.org/0000-0003-4652-7652

Publisher's Note: *ÜNİVERSİTEPARK Limited remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.*