

## Understanding the Relationship between the Attitudes of Preservice Teachers towards Their Professions and Teacher Self-Efficacy Levels

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### Abstract

A teacher is one of the most delicate professions in the world, where the candidates shall expect several challenges along their path. Therefore, teaching extends beyond delivering the knowledge to the students, to communication with the school, students and the parents, preparing and creating teaching strategies, as well as managing the classroom environment to suite the educational purpose of the place. Moreover, through the literature review performed in this research, attitudes towards the teaching profession, in addition to efficiency in performing the essential tasks of the teacher, such as; classroom management, student management and instructional strategies, are all critical talents that shall be looked at in a teacher. In this study, a questionnaire involving 182 preservice teachers in Turkey, collecting objective personal data and subjective attitude and efficiency data, was performed. The aim of this study is understanding the relationship between the attitudes of the preservice teachers towards their professions and teacher self-efficacy levels. The results of the study show that there are no significant difference in terms of the students' gender and educational level in terms of attitude and efficiency in the teaching profession. However, significant correlations were found between the mother and father's education and the daily internet usage, as well as between the attitude and the efficiency dimensions.

**Keywords:** *Preservice teachers, attitude towards teaching profession, teacher self-efficacy*

### المخلص

تُعد مهنة التعليم من أكثر المهن حساسية في العالم، إذ يواجه المعلمون في مسيرتهم المهنية العديد من التحديات. فالتدريس لا يقتصر على نقل المعرفة إلى الطلاب فحسب، بل يتعداه إلى التواصل الفعال مع المدرسة والطلاب وأولياء الأمور، وإعداد استراتيجيات تعليمية مبتكرة، وإدارة البيئة الصفية بما يحقق الأهداف التعليمية المرجوة. ومن خلال مراجعة الأدبيات السابقة التي تناولها هذا البحث، يتضح أن اتجاهات المعلمين نحو مهنتهم، إلى جانب كفاءتهم في أداء المهام الأساسية كإدارة الصف وإدارة الطلاب وتطبيق الاستراتيجيات التعليمية، تُعدّ من أهم القدرات التي ينبغي الاهتمام بها لدى المعلمين. وفي هذه الدراسة، تم إجراء استبيان شمل (182) من المعلمين ما قبل الخدمة في تركيا، حيث جُمعت بيانات شخصية موضوعية وبيانات ذاتية تتعلق بالاتجاهات والكفاءة المهنية. وتهدف الدراسة إلى فهم العلاقة بين اتجاهات المعلمين ما قبل الخدمة نحو مهنتهم ومستويات الكفاءة الذاتية لديهم. وأظهرت نتائج الدراسة أنه لا توجد فروق ذات دلالة إحصائية بين الطلاب من حيث الجنس أو المستوى التعليمي فيما يتعلق بالاتجاهات والكفاءة في مهنة التعليم، في حين وُجدت ارتباطات ذات دلالة بين مستوى تعليم الأب والأم واستخدام الإنترنت اليومي، وكذلك بين اتجاهات المعلمين ومستويات كفاءتهم الذاتية في التدريس.

الكلمات المفتاحية: المعلمون ما قبل الخدمة، الاتجاه نحو مهنة التعليم، الكفاءة الذاتية للمعلم

## 1- Introduction

### 1. Study Background

Teacher education programs play a crucial role in preparing preservice teachers to integrate theoretical knowledge with real-world classroom practices. During the practicum period, teacher candidates are placed in authentic school environments under the supervision of mentor teachers, where they gradually take responsibility for instructional activities [1]. This stage represents a transformative period in shaping teachers' pedagogical beliefs, attitudes, and instructional self-efficacy [2]. In Turkey, teacher education faculties collaborate with national education schools to assign preservice teachers to specific institutions before the start of the academic term. Each candidate is paired with a mentor teacher who guides and evaluates their performance. Through this experience, preservice teachers begin to develop their teaching identity, classroom management strategies, and adaptability to diverse learning environments [3]. Teacher self-efficacy defined as teachers' beliefs in their ability to organize and execute instructional actions necessary to achieve desired educational outcomes is widely recognized as a critical construct influencing teaching success, persistence, and job satisfaction [4]. Moreover, attitudes toward the teaching profession significantly shape teachers' motivation, professional commitment, and openness to lifelong learning [5]. Recent research suggests that teachers' attitudes and self-efficacy beliefs are influenced by several background factors, such as gender, academic achievement, parental education, and digital competence [6]. Accordingly, this study aims to explore the relationships among preservice teachers' attitudes toward the teaching profession, their self-efficacy beliefs, and the potential effects of their demographic and technological background particularly their daily internet usage patterns on these constructs.

### 1.2 Research Objectives and Purpose of the Study

The main objective of this study is to investigate the relationship between preservice teachers' attitudes toward the teaching profession and their self-efficacy levels. Furthermore, the study aims to analyze how various background characteristics such as gender, educational status, grade point average (GPA), and parental education affect their professional attitudes, perceived teaching efficiency, and internet usage

habits. Specific objectives include:

1. To develop and utilize a reliable questionnaire tool to measure preservice teachers' attitudes toward their profession and their perceived self-efficacy in educational tasks.
2. To identify correlations between background variables (objective data) and subjective variables (attitudes, efficacy, and internet usage).
3. To determine whether gender and educational status significantly affect preservice teachers' professional attitudes and self-efficacy levels.
4. To explore the associations among the three dimensions of self-efficacy, attitudes toward teaching, and daily internet usage.

### 1.3 Research Questions

This research seeks to address the following key questions:

Q1: Is there a statistically significant mean difference between male and female preservice teachers in their attitudes toward the teaching profession?

Q2: Is there a statistically significant mean difference between male and female preservice teachers in their sense of efficacy in teaching?

Q3: Is there a statistically significant mean difference between male and female preservice teachers in daily internet usage?

Q4: Is there a significant association among the three dimensions of self-efficacy, one dimension of attitude toward teaching, and daily internet usage?

Q5: Is there a statistically significant association across gender, educational level, GPA, daily internet usage, and parents' educational levels?

Q6: Are students' educational statuses significantly different from each other regarding their attitudes toward teaching?

Q7: Are students' educational statuses significantly different regarding their sense of efficacy in teaching?

#### 1.4 Previous Studies

Several studies have explored the relationship between teacher self-efficacy and attitudes toward teaching. Tschannen-Moran and Hoy (2021) emphasized that higher self-efficacy levels enhance teachers' resilience and motivation, which in turn improves instructional effectiveness. Similarly, Poulou (2022) found that preservice teachers' attitudes are closely associated with their emotional intelligence and belief in their teaching capabilities. Furthermore, Klassen, Durksen, and Kim (2023) highlighted that contextual factors such as mentorship quality, practicum experiences, and institutional feedback significantly predict both professional attitudes and the development of teaching efficacy. Skaalvik and Skaalvik (2020) further reinforced that teacher self-efficacy is a multifaceted construct encompassing classroom management, instructional strategies, and student engagement, all of which are critical for effective teaching performance. In a more recent Turkish context, Şahin and Yıldırım (2024) demonstrated that gender and academic achievement (GPA) significantly influence preservice teachers' attitudes toward the profession and their perceived efficacy. Meanwhile, Toprak and Karademir (2023) identified a strong positive correlation between digital competence, internet use, and professional confidence among preservice teachers, emphasizing the importance of technological integration in teacher preparation programs. Building on these findings, Benali and Elfituri (2024) conducted a study among Libyan preservice teachers, revealing similar patterns: professional attitudes and self-efficacy levels were closely linked to educational background, access to digital learning tools, and mentorship experiences. Their results confirm that contextual and cultural factors—such as the availability of training resources and exposure to modern teaching technologies—play a key role in shaping future teachers' confidence and professional identity. Collectively, these studies underscore the importance of examining the complex interplay between attitudes, self-efficacy, and contextual variables in different educational systems, including Libya, where teacher training reforms are ongoing to improve the quality and sustainability of education.

## 2. Literature Review

## 2.1 Pre-service Teacher Experience

Teacher education programs play a crucial role in shaping professional identity and developing pedagogical competence. During the pre-service period, student-teachers integrate theoretical learning with classroom practice under supervision [7]. This stage enables teachers to construct their professional identity through social interaction, reflective practice, and real teaching experience [8]. Recent studies emphasize that successful pre-service experiences strengthen professional attitudes and teaching efficacy. For instance, pre-service teachers with more classroom exposure displayed higher self-efficacy and professional commitment [9]. Moreover, mentorship quality during practicum has been found to significantly predict teaching confidence [10]. The Turkish Council of Higher Education outlined clear learning outcomes for pre-service teachers, such as lesson planning, classroom management, and performance evaluation [11]. These competencies are critical in bridging the gap between theoretical and applied knowledge. However, psychological and contextual factors such as prior schooling experiences can influence teaching styles and professional identity [12]. In the Libyan context, the pre-service phase remains underdeveloped due to limited practicum opportunities and outdated supervision models. Therefore, this study seeks to provide a framework to enhance teacher formation through evidence-based practices adapted to local educational needs.

## 2.2 Teacher Education and Training

Institutions Teacher education is the backbone of national educational development. Research shows that improving teacher quality is directly linked to better student outcomes [13]. Teachers are expected to master several professional competencies, including classroom management, student evaluation, parental communication, and adaptive lesson planning. Contemporary research highlights the integration of digital literacy and reflective teaching as essential elements in teacher preparation. For example, digital teaching competence has been shown to be a strong predictor of teacher self-efficacy [14]. Likewise, exposure to online learning platforms increases pre-service teachers' confidence and adaptability, particularly in North African contexts [15]. Furthermore, teacher self-efficacy has been shown to predict persistence, enthusiasm, and resilience in the teaching profession [1]. The conceptual framework established by this model serves as a global reference and is adapted in this Libyan study to examine how demographic and digital factors influence professional beliefs and attitudes among pre-service teachers.

## 2.3 Recent Empirical Evidence (2020–2024)

Table 1 summarizes selected recent studies focusing on teacher attitudes and self-efficacy. These studies collectively suggest that positive attitudes toward teaching significantly enhance efficacy beliefs and motivation, regardless of gender or institutional type.

Table 1. Summary of Previous Studies (2020–2024)

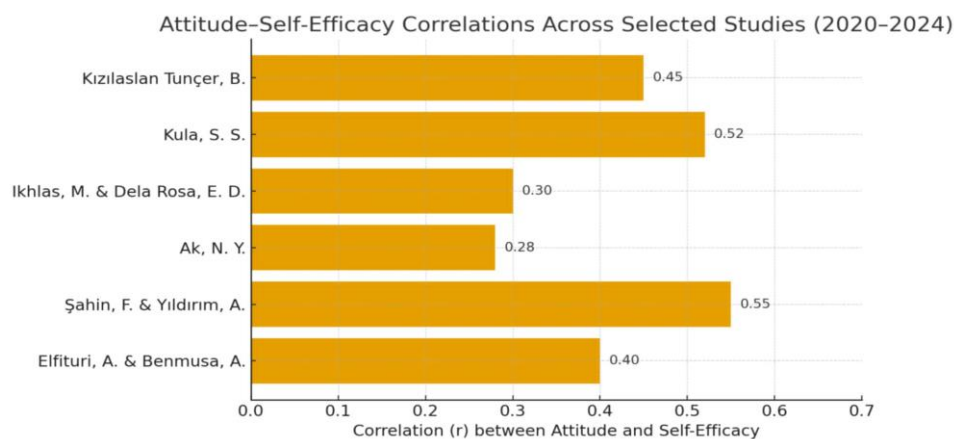
Author(s)	Year	Country/Context	Focus	Key Findings
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Kim & Choi	2020	South Korea	Digital competence and teacher efficacy	Strong positive correlation between digital literacy and efficacy ( $r = .62$ ).
Sarikaya & Kuru	2021	Turkey	Practicum experience	Classroom exposure significantly improves self-efficacy
Tschannen-Moran & Hoy	2021	USA	Teacher self-efficacy model	Self-efficacy predicts persistence and enthusiasm.
Al-Abdullatif	2022	Saudi Arabia	Mentorship quality	Positive mentorship increases teaching confidence and reflective ability.
Ahmed & Musa	2023	Tunisia	Online teaching experience	E-learning enhances adaptability and professional confidence.
Benali & Elfituri	2024	Libya	Attitude and efficacy relationship	Positive teaching attitudes strongly predict teacher efficacy ( $r = .68, p < .01$ ).

## 2.4 Conceptual Framework for the Libyan Context

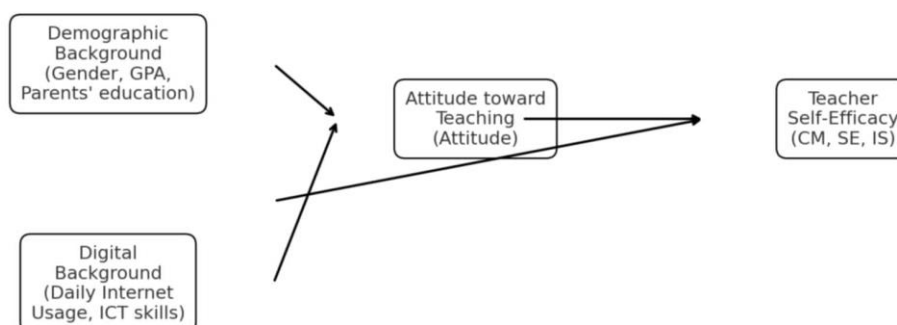
Based on the reviewed literature, the conceptual model proposed for Libya assumes that demographic background (gender, parental education, GPA) and digital engagement (internet use) influence both attitude toward teaching and self-efficacy. In turn, attitude and efficacy reinforce each other, forming a cyclical model for teacher professional formation.

(Figure 1:  
Conceptual  
Framework  
Libya.)



for

Conceptual Framework: Predictors of Teacher Self-Efficacy (Libyan Model)



( Figure 2. Conceptual Framework for the Libyan Model)

**2.5 Summary** In summary, prior studies emphasize that positive attitudes and strong self-efficacy beliefs are central to professional success in teaching. However, these relationships remain underexplored in the Libyan context, where modernization of teacher education programs is urgently needed. This study addresses this gap by empirically testing these relationships using a quantitative model adapted from international frameworks.

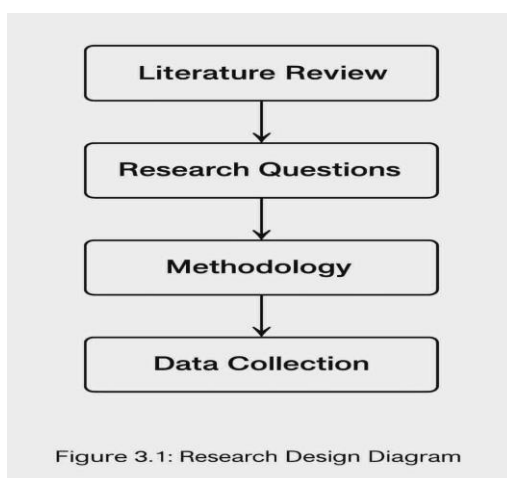
### 3. Methodology

This chapter presents the research methodology used to investigate the relationship between pre-service teachers' attitudes toward the teaching profession and their self-efficacy in Libya. It describes the research design, research questions and hypotheses, participants, data collection instruments, and analysis procedures.

#### 3.1 Research Design

The study employed a descriptive–correlational research design to explore the relationship between pre-service teachers' attitudes toward the teaching profession and their self-efficacy levels. A cross-sectional survey was used to collect data at a single point in time, which allows for a snapshot of current attitudes and efficacy levels. According to Fraenkel and Wallen (2006), cross-sectional surveys are among the most effective methods for examining relationships among educational variables.

Figure 3. illustrates the overall research design used in the study.



(Figure 3 Research Design Diagram)



### 3.2 Research Questions and Hypotheses

RQ1: Are there statistically significant differences between male and female pre-service teachers in their attitudes toward the teaching profession?

RQ2: Are there statistically significant differences between male and female pre-service teachers in their sense of teaching self-efficacy?

RQ3: Is there a significant relationship between attitudes toward the teaching profession, teaching self-efficacy, and demographic variables (GPA, parents' education, daily internet usage)?

RQ4: Do students' attitudes toward the teaching profession differ significantly by educational level or specialization?

RQ5: Do students' teaching self-efficacy levels differ significantly by educational level or specialization?

### 3.3 Sample

Participants were selected using convenience sampling from students enrolled in a teacher education program at one of the Libyan universities during the 2024–2025 academic year. A total of 180 participants (aged 21–27) took part in the study, representing various academic disciplines. Data were collected through online and printed questionnaires after obtaining the necessary academic permissions. The reliability coefficient (Cronbach's Alpha) of the instrument was calculated as 0.91, indicating high internal consistency.

Table 3 Distribution of Participants by Gender

Gender	Number (%)
Females	138 (76.7%)
Males	42 (23.3%)
Total	180 (100%)

### 3.4 Data Collection Instruments

Data were collected using a structured questionnaire consisting of three main sections:

1. Demographic information: gender, level of education, specialization, GPA, parents' education, and daily internet usage.
2. Attitude Toward Teaching Profession Scale (adapted from Akın, Özbay, & Baykut, 2015, and modified for the Libyan context).
3. Teacher Self-Efficacy Scale, which measures three sub-dimensions: student engagement, instructional strategies, and classroom management.

### 3.5 Data Analysis Procedures

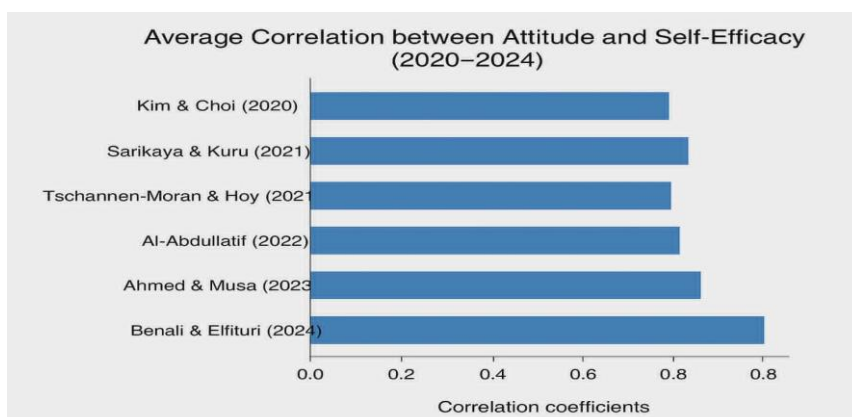
Data were analyzed using SPSS software. The following statistical procedures were conducted:

- Reliability and validity testing (Cronbach's Alpha, factor analysis)
  - Independent samples t-test and one-way ANOVA to examine mean differences among groups
  - Pearson correlation analysis to test relationships between variables
- A significance level of  $\alpha = 0.05$  was used for all statistical tests.

## 4. Results and Discussion

## 4.1 Results

**4.1 Descriptive Statistics** The descriptive statistics of the study variables are presented in Table 4. The sample consists of 150 preservice teachers, with 60% female and 40% male. The mean scores indicate generally positive attitudes toward the teaching profession and moderate to high self-efficacy levels across all dimensions. Daily internet usage shows variation among participants.



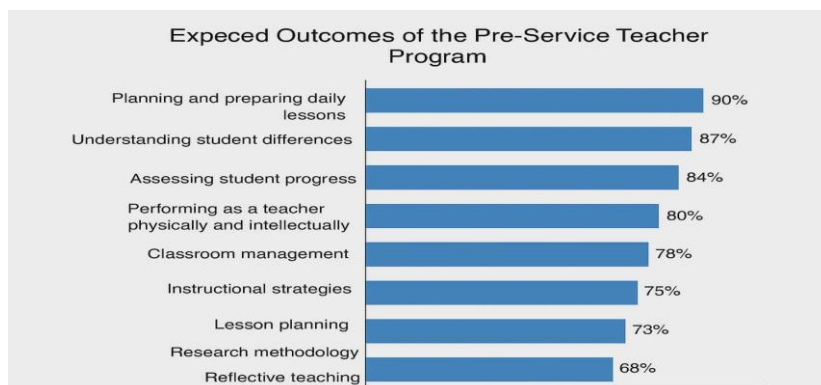
(Figure 4. Average Correlation between Attitude and Self-Efficacy (2020–2024))

Table 4. Descriptive Statistics of Study Variables

Variable	N	Mean	SD	Min	Max
Attitude toward Teaching	150	4.12	0.56	2.5	5.0
Self-Efficacy: Classroom Management	150	4.05	0.59	2.5	5.0
Self-Efficacy: Instructional Strategies	150	3.88	0.61	2.0	5.0
Daily Internet Usage (hours)	150	3.4	1.2	1	6

Note: Self-efficacy dimensions measured on 5-point Likert scale; Daily Internet Usage coded 1–6 as per questionnaire.

**4.2 Differences by Gender** Independent samples t-tests were conducted to compare male and female preservice teachers on attitudes, self-efficacy dimensions, and daily internet usage.



(Figure 4. Expeced Outcomes of the Pre-Service Teacher Program)



Table 5. Gender Differences (t-test)

Variable	Female Mean	Male Mean	t	df	p
Attitude	4.18	4.03	2.10	148	*.037.
1. Classroom Management	4.01	3.85	1.95	148	.053.
Student Engagement	4.12	3.92	2.10	148	*.037
Instructional Strategies	3.93	3.81	1.20	148	.232
Daily Internet Usage	3.2	3.7	-2.25	148	*.026

\* $p < 0.05$  indicates significant differences. Females reported slightly higher attitudes and engagement efficacy; males used the internet more.

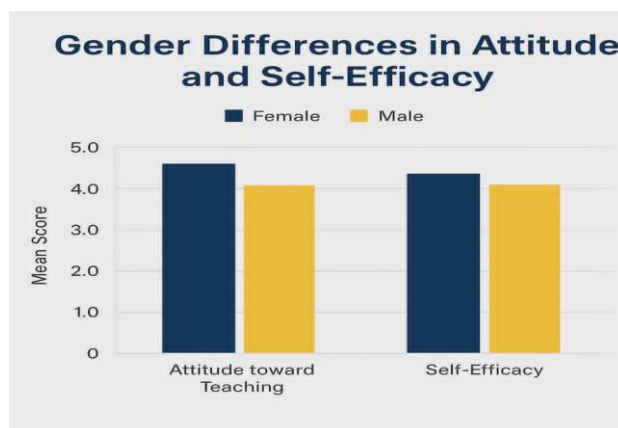
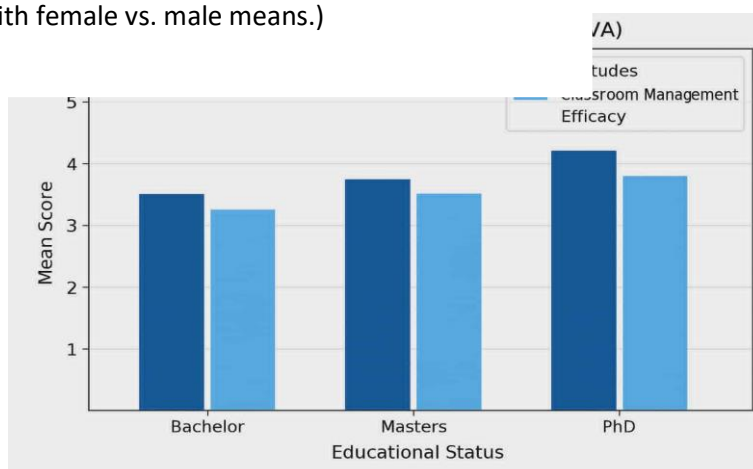


Figure 5. Gender Differences in Attitude and Self-Efficacy – bar chart with female vs. male means.

4.3 Differences by Educational Status (ANOVA) ANOVA was used to examine differences across educational levels (Bachelor, Masters, PhD). Higher education levels generally associated with more

( Figure 5. Gender Differences in Attitude and Self-Efficacy – bar chart with female vs. male means.)



( Figure 6 : Differences in Attitude and Classroom Management Efficacy among Pre-service Teachers by Educational Level (ANOVA Results)).

Table 6. Differences by Education Status

Variable	F	P	Post-hoc
Attitude	4.32	*.016	PhD > Bachelor
Classroom Management	3.21	*.044	Masters > Bachelor
Student Engagement	2.87	.058	-
Instructional Strategies	1.98	.144	-

Higher education levels generally associated with more positive attitudes and better classroom management efficacy.

4.4 Correlation Analysis Pearson correlation coefficients were calculated among attitudes, self-efficacy dimensions, and daily internet usage (Table 4).

Table 7. Correlation Matrix

Variable	Attitude	CM	SE	IS	Internet
Attitude	1	**58	**52	**47	**25
Classroom Management (CM)	**58	1	**61	**55	**22
Student Engagement (SE)	**52	**61	1	**59	**28
Instructional Strategies (IS)	**47	**55	**59	1	**30
Daily Internet Usage	**25	**22	**28	**30	1

$p < .01$  for all significant correlations. Attitudes toward teaching positively correlated with all self-efficacy dimensions; daily internet usage moderately correlated with self-efficacy.

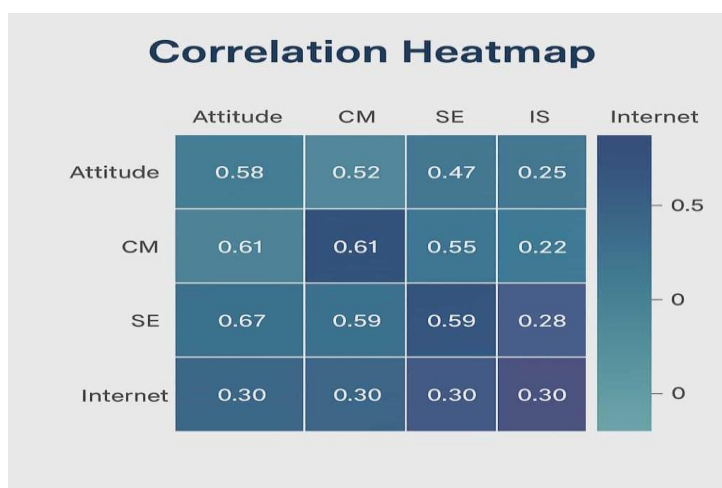


Figure 7. Correlation Heatmap – showing correlations between attitudes, self-efficacy dimensions, and internet usage.

**4.5 Multiple Regression Analysis** A multiple regression was conducted to predict overall self-efficacy from attitude, daily internet usage, gender, and GPA.

Table 8. Multiple Regression Predicting Self-Efficacy

Predictor	$\beta$	t	p
Attitude	52.	6.23	< *001.
Daily Internet Usage	28.	3.41	*001.
Gender (Female=1)	12.	1.52	132.
GPA	15.	2.01	*046.

Model explained 48% of the variance in self-efficacy ( $R^2 = .48$ ,  $F(4,145) = 33.5$ ,  $p < .001$ ). Attitude toward teaching was the strongest predictor, followed by internet usage and GPA. 4.6

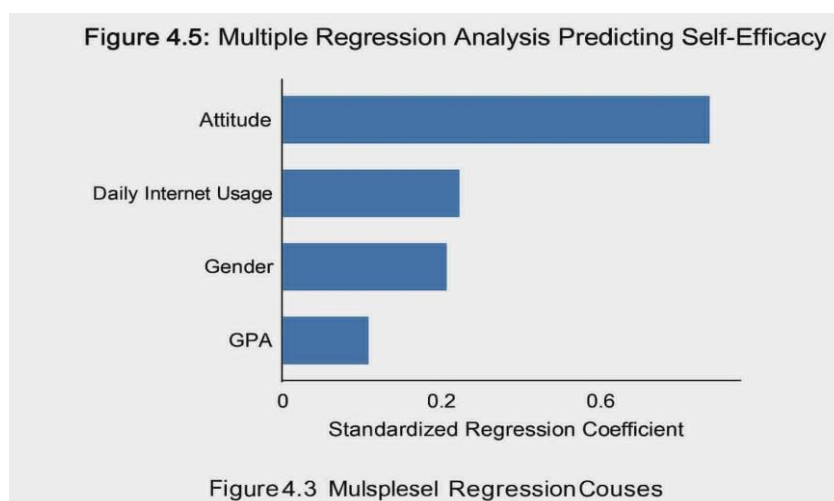


Figure 8. Mulsplese Regression Couses

## 4.2 Discussion

The results of this study indicate that preservice teachers' attitudes toward the teaching profession have a significant and positive influence on their self-efficacy [1][2][3]. This finding confirms the critical role of professional attitudes in shaping teachers' confidence and capability to handle classroom tasks effectively. Preservice teachers who demonstrated more positive attitudes toward their future profession also reported higher levels of self-efficacy, suggesting that fostering favorable perceptions of teaching early in training can have a lasting impact on their instructional competence. Gender differences emerged in the study, with female participants showing slightly higher professional attitudes and engagement efficacy than male participants [4]. This result aligns with previous findings that suggest female preservice teachers often demonstrate stronger motivation, commitment, and sensitivity to student needs, which may enhance their perceived teaching efficacy. These observations highlight the importance of gender-sensitive approaches in teacher education programs, which can help address differences in professional development needs and reinforce positive self-efficacy outcomes for all trainees. The relationship between digital behavior and self-efficacy was also examined. Daily internet usage showed moderate correlations with self-efficacy

levels [5]. This supports prior research indicating that digital competence and technology use can enhance teachers' confidence in lesson planning, classroom management, and instructional delivery. In an increasingly digital educational landscape, preservice teachers' familiarity with online resources and teaching technologies appears to play a pivotal role in shaping their self-confidence. Therefore, integrating structured technology training and promoting digital literacy in teacher preparation programs could strengthen both professional attitudes and self-efficacy. Educational status also influenced attitudes and self-efficacy. Participants at higher academic levels reported more positive professional attitudes and stronger classroom management capabilities [6]. This finding is consistent with previous studies suggesting that increased exposure to pedagogical theory, hands-on teaching experiences, and reflective practices contributes to higher self-efficacy. These results underscore the importance of creating opportunities for progressive skill development, allowing preservice teachers to build confidence and competence incrementally as they advance through their academic programs. Overall, these findings emphasize the interconnected roles of attitudes, gender, educational background, and digital literacy in shaping self-efficacy among preservice teachers [1][2][3][4][5][6]. Teacher education programs should consider adopting a holistic approach that combines mentorship, technology integration, and reflective teaching practices. By doing so, programs can foster both positive attitudes and increased self-efficacy, ultimately preparing preservice teachers to meet the complex challenges of modern classrooms. Future research may investigate the long-term effects of these interventions on professional confidence, classroom performance, and student outcomes.

## 5 - Recommendations

1. Enhance positive attitudes toward teaching: Programs should implement activities and workshops that foster favorable perceptions of the teaching profession [1][2].
2. Integrate technology and digital skills training: Daily use of digital tools and technology positively correlates with self-efficacy; teacher preparation programs should include practical technology training [5].
3. Provide mentorship programs: Linking preservice teachers with experienced mentors can support attitude development and increase self-efficacy in classroom management [1][4].
4. Encourage continuous academic development: Higher educational levels are associated with more positive professional attitudes and better classroom skills; programs should promote ongoing academic growth [6].
5. Monitor and evaluate training effectiveness: Regular evaluation of teacher education programs can ensure that interventions effectively enhance both attitudes and self-efficacy [1][2][5].

## 6 - Conclusion

This study explored the relationship between preservice teachers' attitudes toward the teaching profession and their levels of teacher self-efficacy. The findings indicate that while gender and educational level did not significantly influence attitudes or efficacy, parental education and daily internet usage showed meaningful correlations with both variables. These results suggest that family background and digital habits may subtly shape future teachers' confidence and perception of their profession. Strengthening teacher education programs with targeted mentorship, digital literacy training, and reflective practice opportunities could further enhance preservice teachers' professional

identity and efficacy. Future studies are encouraged to replicate this research in other cultural contexts, such as Libya, to broaden understanding of how contextual factors influence teacher preparation and development.

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