



The Degree of Digital Reading Utilization and Its Relationship with Attitudes Toward It Among Female Students in the Teacher Preparation Program at the University of Nizwa, Sultanate of Oman

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ABSTRACT: This study aimed to explore the degree of digital reading utilization and its relationship with attitudes toward it among female students enrolled in the Teacher Preparation Program for the first and second field at the University of Nizwa, Sultanate of Oman. The study sample consisted of 140 students, equally divided between the first (70 students) and the second field (70 students). A questionnaire was used to measure both the degree of digital reading utilization and students' attitudes toward it. The instrument consisted of (27) items, and its validity and reliability were confirmed using exploratory factor analysis (EFA). The findings revealed that the students demonstrated a low level of digital reading utilization, with an overall mean of (2.33). Responses to individual items ranged from very low (1.60) to moderate (3.54). Similarly, students' attitudes toward digital reading were weak, with a mean score of (2.18); responses ranged from very weak (1.70) to moderate (2.56). The study also found a statistically significant positive correlation between digital reading utilization and attitudes toward it, with a Pearson correlation coefficient of (0.511) at the (0.001) significance level. The study concluded with several recommendations aimed at enhancing digital reading practices and promoting positive attitudes among future teachers.

KEYWORDS: Digital reading, attitudes toward reading, teacher preparation, University of Nizwa.

INTRODUCTION

Reading has always been a fundamental tool for acquiring knowledge and learning across all educational stages—from kindergarten to university-level studies. Over time, the sources of reading have diversified, shifting from traditional printed formats to modern digital modes accessible via computers, smartphones, e-books, and the Internet. It is no exaggeration to say that electronic reading—also known as digital reading—has increasingly become a dominant mode, often replacing printed sources due to the rapid advancement of communication technologies.

Sidhom and Miloud (2018) pointed out two main factors that contributed to the emergence of digital reading: the development of modern technologies such as computers and smartphones, and the decline in interest in print-based reading materials.

Most sources agree on a similar definition of digital reading. For example, Al-Mustarihiy and Tashman (2020) define it as free reading conducted through the use of modern digital tools such as computers and mobile phones, enabling students to access knowledge via the Internet, including social media platforms like Facebook and Twitter.

Digital reading has brought numerous benefits to both teachers and students. For instance, Hassan (2021) highlighted that digital reading is particularly valuable for teachers, as it helps them stay current in their fields and reinforces principles of lifelong and self-directed learning. Hassan recommended equipping learning resource rooms in colleges of education with Internet access to help students access needed knowledge and promote the digitization of education through electronic courses and digital reading platforms.

Similarly, Al-Masoud (2018) emphasized that digital texts—such as digital stories—offer many advantages, especially for children. These texts incorporate multimedia elements such as sound, visuals, motion, and interactive design, which help engage learners cognitively and increase their interaction.



The topics of reading and digital reading—along with related variables such as attitudes, tendencies, and reading preferences—have garnered considerable interest from researchers over the years. For example, Al-Mustarihiy and Tashman (2020) explored the status of electronic free reading among students at Isra University using a questionnaire to examine reading sources, goals, and types. Their findings indicated that students highly engaged in electronic reading compared to print reading. The most preferred reading domains were social, economic, religious, and political, while scientific reading was of moderate interest. Students' primary goals were acquiring information and engaging in self-learning.

In contrast, Mahboub (2021) aimed to investigate reading practices among students at the Basic Education College in Kuwait. The study sample included 1,191 students who responded to a questionnaire. Findings showed that 59.88% preferred print reading, while 40.12% engaged in digital reading. Mobile phones were the most frequently used devices (55.55%).

Similarly, Allaan (2019) examined the effectiveness of digital storytelling in developing oral reading skills among 44 second-grade students. Using a quasi-experimental design, the study found statistically significant improvements in favor of the experimental group, which was attributed to the use of digital stories.

Akhazebi, Delibe, and Keke (2023) investigated the reading preferences of 50 randomly selected university students through a five-item questionnaire. Results showed that 96% preferred print reading materials, while only 4% preferred digital formats. Literary and artistic subjects were the most favored in printed form (88%), while 63% of students reported downloading digital content and printing it for reading.

Finally, Asan and Sahan (2023) studied the attitudes of 100 teachers majoring in mathematics and social studies at the University of Central Anatolia toward digital and print reading. Using the "Attitude Toward Digital Reading Scale for Pre-Service Teachers" developed by Yurdakul and Susar Karamzi (2021), the study found statistically significant differences based on daily print reading time, types of digital devices used, and the number of books read annually.

All these studies highlight the growing importance of digital reading for both students and teachers. The present study focuses on pre-service teachers at the University of Nizwa, aiming to examine the current status of digital reading among female students enrolled in the first and second Field specializations.

Problem Statement:

The University of Nizwa, as one of the private institutions operating in the Sultanate of Oman, consistently emphasizes to its students the importance of leveraging various digital resources—both within and beyond the university—for academic and scientific knowledge development. Digital reading, in particular, is regarded as one of the essential tools for learning. This is reinforced by Ben Shuraik, Mona, and Dhaifi (2022), who argue that effective e-learning cannot be achieved without strong digital competencies, including digital reading skills.

Sheikh, Nadhir, and Abdul-Mahdi (2015) conducted a study in Algeria that emphasized the importance of digital reading skills among university students. Their investigation into the digital reading practices of library science students at Abdelhamid Mehri University in Constantine revealed that students did engage in digital reading, but not sufficiently—an issue that negatively impacted their graduate profile.

Similarly, Mahboub (2021) examined the extent of digital reading practices among students at the College of Basic Education in Kuwait. Based on responses from 1,193 students, the study found that 60% preferred traditional print reading, while 40% leaned toward digital reading.

In the context of Oman's educational field, there is currently no standardized instrument for assessing digital reading, which highlights the need for empirical exploration—an objective at the heart of the current study.

Ibrahim (2022) investigated digital reading among students at Beni Suef University in Egypt using a self-developed questionnaire. Her findings revealed that 77% of the students viewed digital reading as a secondary activity—an outcome that raises concern in today's increasingly digital world.

Given the growing interest in this domain, many researchers have worked on developing tools to assess digital reading and attitudes toward it—especially at the university level. For example, Berker and Nuri (2018) from Adnan Menderes University in Turkey developed a scale to measure digital reading comprehension. They applied the scale to 80 university students and used both exploratory and confirmatory factor analysis. Their study was primarily driven by the institution's need to understand the extent of students' digital reading utilization.

In another Turkish study, Amin, Abdelmalek, and Akakaya (2021) developed a digital reading scale based on six dimensions and 26 items, involving 394 students from various universities under the Turkish Ministry of Higher Education. The scale's validity and reliability were verified using factor analysis.

Likewise, Amin, Maya, and Akaya (2021) created a digital reading scale for Pakistani universities. The instrument consisted of 36 items across nine dimensions and underwent both exploratory and confirmatory factor analysis to establish its final validated form.

In Indonesia, multiple efforts were also made to develop and validate digital reading tools. Anwar, Henrowan, Sashonia, and Sitiwati (2023) confirmed the reliability of their digital reading scale for university students using similar analytical steps. Similarly, Alia et al. (2024) designed a digital reading scale for elementary education, based on seven UNESCO literacy dimensions.

While the review above may not capture the full breadth of the issue, it presents clear indicators of the need to examine digital reading among university students in Oman. Student-teachers must constantly enhance their academic and instructional skills, as classroom instruction alone may be insufficient—particularly in teacher education programs characterized by limited time and large class sizes (Hassan, 2021).

In this context, reading—especially digital reading—plays a critical role. It enables student-teachers to access additional content for lesson planning and to formulate educational objectives. Furthermore, digital reading provides creative strategies for motivating students and introduces teaching techniques that are often absent in traditional instructional methods courses. Notably, digital reading played a crucial role during the COVID-19 pandemic in introducing student-teachers to educational technologies, making it a vital part of their digital literacy in teaching.

To date, no study has investigated the status of digital reading among students at the University of Nizwa, nor examined its relationship with attitudes toward digital reading. As faculty members in the College of Arts and Sciences at the University of Nizwa—directly involved in preparing future teachers within the Department of Education and Human Sciences—we believe that exploring digital reading practices and attitudes will be valuable both academically and institutionally, particularly given the university's abundant digital resources.

Research Questions:

1. What is the degree of digital reading utilization among female student teachers from the first and second field specializations at the University of Nizwa?
2. What are the attitudes of female student teachers from the first and second field specializations at the University of Nizwa toward digital reading?
3. Are there statistically significant differences at the level of ($\alpha = 0.05$) between female student teachers from the first and second field specializations in their use of digital reading, attributable to their specialization?
4. Are there statistically significant differences at the level of ($\alpha = 0.05$) between female student teachers from the first and second field specializations in their attitudes toward digital reading, attributable to their specialization?
5. Are there statistically significant correlations at the ($\alpha = 0.05$) level between the degree of digital reading utilization and attitudes toward it among the female student teachers in the first and second field at the University of Nizwa?

Study Objectives:

This study aims to:

1. Identify the degree of digital reading utilization among female pre-service teachers in the first and second field at the University of Nizwa in their academic studies, from their own perspectives.
2. Determine the nature of attitudes toward digital reading among female pre-service teachers in the first and second field at the University of Nizwa, from their own perspectives.
3. Examine whether there are statistically significant differences at the ($\alpha = 0.05$) level in the degree of digital reading utilization and attitudes toward it between female pre-service teachers in the first and second field, attributable to specialization.
4. Investigate whether there is a statistically significant relationship at the ($\alpha = 0.05$) level between the degree of digital reading utilization and attitudes toward it among female pre-service teachers in the first and second field at the University of Nizwa.



Significance of the Study:

The significance of this study lies in its potential to:

1. Support faculty members in the Department of Education and Human Sciences at the University of Nizwa in improving the teacher preparation program by integrating courses that develop digital reading skills and encourage their application in subject-specific teaching practices.
2. Encourage the university library to design programs that connect digital reading resources with academic and extracurricular activities, which may help foster more positive attitudes toward using these resources effectively.
3. Draw faculty members' attention to the importance of incorporating digital reading into assessment tools and classroom activities, making reading an active component of both learning and evaluation.
4. Contribute to the development of teacher preparation in Oman by promoting digital literacy as a key element in professional growth and instructional innovation, especially for pre-service teachers in the first and second field.
5. Guide efforts to revise academic curricula in line with the evolving educational environment and the increasing reliance on digital resources in teaching and learning.

Study Variables:

The current study included the following variables:

1. Degree of digital reading utilization
2. Attitudes toward digital reading
3. Specialization, which includes:
 - First field specialization, focusing on teaching humanities subjects such as Arabic language, Islamic education, and social studies.
 - Second field specialization, focusing on teaching science and mathematics.

Study Delimitations:

This study was delimited in terms of topic, place, time, and population as follows:

Topical and temporal delimitations: The study focused on identifying the degree of digital reading utilization and the attitudes toward it among female pre-service teachers specializing in the first field (Arabic Language, Islamic Education, and Social Studies) and the second field (Mathematics and Science) at the University of Nizwa during the 2024–2025 academic year.

Geographical and population delimitations: The study was limited to a sample of female students enrolled in the first field and second field specializations at the University of Nizwa.

Operational Definitions

The study includes several key terms that are defined operationally as follows:

• Digital Reading

• Theoretical Definition:

Hassan (2021, p. 8) defines digital reading as:

“The student’s ability to comprehend, infer, investigate, connect, and benefit from what they have read by utilizing technological tools.”

• Operational Definition:

In this study, digital reading refers to the skill of using modern digital resources to read texts, as opposed to traditional print-based reading methods.

• Teacher Preparation Program for the First and Second Field

• Operational Definition:

In this study, the *Teacher Preparation Program for the First and Second Field* refers to an academic program accredited by the Ministry of Higher Education in the Sultanate of Oman. The program prepares teachers to work in public and private schools for grades 1 through 4. According to the Basic Education framework introduced in 1998, female teachers are assigned to this stage.

- Teachers in the *first* field are responsible for teaching Islamic education, Arabic language, and social studies.
- Teachers in the *second* field are responsible for teaching science and mathematics.



RESEARCH METHODOLOGY

The researchers adopted the **descriptive-analytical approach**, which focuses on examining the phenomenon as it exists in the real context by collecting relevant data and analyzing it scientifically.

This study investigates the digital reading skills of female pre-service teachers in both the first field and second field specializations in the Sultanate of Oman. It also examines their reading attitudes and how these relate to professional development. The study aims to draw conclusions that may contribute to improving teacher preparation programs in Oman and enhancing teaching competencies by integrating digital reading skills into professional development practices.

Population and Sample of the Study:

The population of this study consisted of all female pre-service teachers enrolled in the Teacher Preparation Program for the first field and second field at the University of Nizwa, Sultanate of Oman, during the second semester of the 2023–2024 academic year. The total number of students in the population was 600.

A random sample of 140 students—representing 30% of the population—was selected. The sample was equally divided, with 70 students from first field specialization and 70 students from the second field specialization participating in the study.

Study Instrument

To achieve the objectives of the study, the researchers developed a **questionnaire** as the primary instrument for data collection. The questionnaire was designed to assess the following:

1. The degree of digital reading utilization among female pre-service teachers in the First and second field at the University of Nizwa.
2. Their attitudes toward digital reading.

To ensure the **content validity** of the instrument, it was reviewed by a panel of experts in education and teacher preparation at the University of Nizwa. Based on their feedback, several items were modified in terms of wording, while others were either removed or added accordingly.

The development of the questionnaire followed several structured stages, as detailed below.

First: Exploratory Factor Analysis (EFA)

Table 1: KMO and Bartlett's Test

Test	Value
Kaiser-Meyer-Olkin (KMO) Measure	0.664
Bartlett's Test of Sphericity Approx. Chi-Square	883.707
Degrees of Freedom	351
Significance Level	0.000

To conduct exploratory factor analysis (EFA) for the scale measuring the degree of student teachers' use of digital reading and their attitudes toward it, the researchers applied the first version of the instrument to a randomly selected sample of 70 female students enrolled in the "Field Teacher Preparation Program" within the education major. This test primarily aims to identify the number of underlying dimensions potentially captured by the scale, determine whether they align with the expected dimensions, and assess whether any items need modification or deletion, in addition to examining the inter-item correlations to ensure their appropriateness for measuring variance among the sample responses.

The exploratory factor analysis was applied to the 27 items of the scale using the Principal Component Analysis extraction method. The results, using Varimax rotation with Kaiser Normalization, revealed a Kaiser-Meyer-Olkin (KMO) value of 0.664, which is statistically significant at the 0.05 level. Based on Kaiser's (1974) guidelines, KMO values between 0.5 and 0.7 are considered acceptable.



Table 2: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.378	27.328	27.328	7.378	27.328	27.328	6.644	24.608	24.608
2	2.227	8.249	35.576	2.227	8.249	35.576	2.961	10.968	35.576
3	1.977	7.322	42.898						
4	1.945	7.202	50.101						
5	1.404	5.201	55.302						
6	1.275	4.722	60.024						
7	1.169	4.329	64.353						
8	1.089	4.033	68.386						
9	1.028	3.808	72.195						
10	0.971	3.596	75.79						
11	0.938	3.474	79.264						
12	0.71	2.629	81.893						
13	0.684	2.534	84.428						
14	0.57	2.11	86.538						
15	0.536	1.984	88.522						
16	0.502	1.858	90.379						
17	0.414	1.532	91.911						
18	0.399	1.479	93.39						
19	0.305	1.129	94.52						
20	0.293	1.086	95.606						
21	0.261	0.966	96.572						
22	0.23	0.852	97.423						
23	0.211	0.781	98.204						
24	0.16	0.592	98.797						
25	0.143	0.528	99.325						
26	0.117	0.433	99.758						
27	0.065	0.242	100						

The table above confirms that the 27 items of the instrument can be classified into two factors that together explain approximately 36% of the total variance. To determine the loading of each item onto the extracted factors, the items were rotated using Varimax rotation, as shown in the following table.



Table (3): Rotated Component Matrix

Item	Component 1	Component 2
Q1	-.001-	0.549
Q2	-.004-	0.503
Q3	0.472	0.15
Q4	0.31	0.263
Q5	0.117	0.469
Q6	0.4	0.452
Q7	0.148	0.479
Q8	-.171-	0.554
Q9	0.262	0.302
Q10	0.047	0.516
Q11	0.579	0.317
Q12	0.442	0.493
Q13	0.527	0.277
T1	0.592	0.206
T2	0.598	0.145
T3	0.367	0.579
T4	0.554	0.259
T5	0.53	0.235
T6	0.642	0.078
T7	0.664	-.063-
T8	0.544	0.028
T9	-.222-	-.092-
T10	0.752	-.010-
T11	0.834	-.074-
T12	0.526	0.088
T13	0.718	-.040-
T14	0.733	0.146

The matrix above indicates the alignment of each item with one of the two extracted factors:

- **Factor 1:** Degree of Use of Digital Reading (Items Q1–Q13)
- **Factor 2:** Attitudes Toward Digital Reading (Items T1–T14)

The items of each factor were arranged in descending order based on their loading values, as shown in the next two tables.



Table (4): Ranking of Digital Reading Usage Items (Descending by Loading)

No.	Item	Loading
1	I believe that using digital tools such as e-reading enhances my teaching strategies.	0.579
2	I prefer reading articles or books on-screen rather than on paper.	0.554
3	I participate in reading all types of digital content, such as articles and e-books.	0.549
4	I usually take notes or highlight key points while engaging in digital reading.	0.527
5	I am skilled at finding academic or educational resources online.	0.516
6	I use e-books and digital articles as a main source of information.	0.493
7	I believe that digital reading provides more diverse and useful sources than traditional.	0.479
8	I regularly use digital educational materials like e-books and scholarly articles.	0.472
9	I believe that digital reading offers easy and instant access to information.	0.469
10	I frequently use multimedia content such as videos and links during digital reading.	0.452
11	I find digital reading helps me better understand my university lectures.	0.4
12	I use digital devices like laptops, tablets, or smartphones to read educational material.	0.31
13	I will definitely use digital materials in education to deliver content creatively.	0.302

Table (5): Ranking of Attitudes Toward Digital Reading Items (Descending by Loading)

No.	Item	Loading
1	If I had the choice, I would prefer digital sources over printed ones.	0.834
2	Reading from e-books is more exhausting than from printed books.	0.752
3	I feel that digital reading is more effective in delivering information than traditional.	0.733
4	I feel comfortable when reading from digital sources.	0.718
5	I tend to read electronically in my free time.	0.664
6	I enjoy learning through electronic resources.	0.644
7	I find digital reading more engaging for students than traditional methods.	0.642
8	I enjoy browsing while reading digital sources.	0.598
9	I feel that using digital reading in teaching increases student interaction.	0.592



No.	Item	Loading
10	As a student, I believe integrating digital content into the curriculum is necessary.	0.579
11	I believe digital reading improves my research and analytical skills.	0.554
12	I follow social media like Twitter to access information for study and life.	0.544
13	Audio-visual elements attract me to read digital resources.	0.53
14	I spend more time reading digital content such as articles.	0.526

The researchers employed a five-point Likert scale to measure levels of agreement with the items in both subscales, defined as follows:

- **Very high** (5 = 4.20–5.00),
- **High** (4 = 3.40–4.19),
- **Moderate** (3 = 2.60–3.39),
- **Low** (2 = 1.80–2.59), and
- **Very low** (1 = 1.00–1.79).

To further assess the instrument's applicability, Pearson correlation coefficients were calculated to determine the correlation between each subscale and the overall score. The internal consistency coefficient for the "Digital Reading Utilization" subscale was 0.84, and for the "Attitudes Toward Digital Reading" subscale, it was 0.90.

Moreover, the overall reliability of the study instrument was confirmed using Cronbach's alpha, yielding a coefficient of 0.826. This reliability test was conducted on a pilot sample of 31 female student teachers from outside the main study sample, drawn from both the first and second field specializations. These results indicate that the questionnaire is both reliable and valid for achieving the objectives of the current study.

Data Analysis

After collecting and organizing the responses of the study participants, the data were coded, entered, and analyzed using the Statistical Package for the Social Sciences (SPSS). The following statistical methods were employed:

- Means and Standard Deviations to analyze and rank the responses of the sample regarding the two subscales: Digital Reading Utilization and Attitudes Toward Digital Reading among female student teachers from the first and second field specializations at the University of Nizwa.
- Independent Samples T-test to examine the significance of differences in responses based on the variable of field specialization.
- Pearson Correlation Coefficient to identify the relationship between digital reading utilization and attitudes toward digital reading.

Study Results

Question One:

What is the degree of digital reading utilization among female student teachers from the first and second field specializations at the University of Nizwa?

To answer this question, the researchers calculated the overall mean score for the digital reading utilization subscale and ranked the items in descending order based on their means. The five-point Likert scale mentioned earlier was used to interpret the responses.



Table 6: Ranking of Sample Responses on the Digital Reading Utilization Subscale (Descending by Mean)

No.	Item	Mean	Std. Deviation	Agreement Level
1	I participate in reading all types of digital materials such as articles and e-books.	3.5429	1.22398	Moderate
2	I prefer reading articles or books on-screen rather than on paper.	3.4	1.2672	Moderate
3	I usually take notes or highlight key points while engaging in digital reading.	3.4	1.1086	Moderate
4	I use e-books and digital articles as a main source of information.	2.3429	0.96137	Low
5	I am skilled at finding academic or educational resources online.	2.3429	0.67857	Low
6	I believe that digital reading provides more diverse and useful sources than traditional reading.	2.2571	2.40582	Low
7	I regularly use digital educational materials like e-books and scholarly articles.	2.0714	0.78614	Low
8	I believe that digital reading offers easy and instant access to information.	1.9714	0.88418	Low
9	I frequently use multimedia content such as videos, links, or interactive features during digital reading.	1.9571	0.73101	Low
10	I find digital reading helps me better understand my university lectures.	1.8286	0.83356	Low
11	I use digital devices like laptops, tablets, or smartphones to read educational material.	1.8286	0.9776	Low
12	I believe that using digital tools such as e-reading enhances my teaching strategies during school training.	1.8	0.80937	Low
13	I will definitely use digital materials in education to deliver content creatively.	1.6	0.7303	Very Low
Overall Mean		2.3341	0.50989	Low

The results of the first research question clearly show that the overall level of digital reading utilization among female student teachers in the Field Teacher Preparation Program (both first and second specializations) was low, with an overall mean of 2.3341. The responses to individual items on this subscale ranged between very low and moderate; ten items were rated as low or very low, while only three items were rated as moderate.

This outcome sends an important message to stakeholders in teacher preparation programs—both at the University of Nizwa and other institutions—highlighting the need to place greater emphasis on integrating digital reading into program activities. These universities, as is well known, invest considerable resources in subscribing to digital libraries and databases to make them accessible to students and faculty. Moreover, scientific research and its development are among the universities’ core goals, which require students to be familiar with how to navigate and benefit from online sources.

Digital reading remains the foundational skill for engaging with these resources. Therefore, the current results are unsatisfactory given the efforts and financial investments made by universities to provide such electronic resources.



Question Two

What are the attitudes of female student teachers from the first and second field specializations at the University of Nizwa toward digital reading?

To answer this question, the researchers calculated the mean scores for each item on the attitudes subscale, ranking them in descending order based on the mean. The five-point Likert scale previously presented was used to interpret the responses.

Table 7: Ranking of Sample Responses on the Attitudes Toward Digital Reading Subscale (Descending by Mean)

No.	Item	Mean	Std. Deviation	Agreement Level
1	I spend more time reading digital content such as articles.	2.5571	1.08529	Moderate
2	If I had the choice, I would prefer digital sources over printed ones.	2.4857	1.04594	Moderate
3	I feel that digital reading is more effective in delivering information than traditional.	2.4857	1.03199	Moderate
4	Reading from e-books is more exhausting than from printed books.	2.4429	0.97261	Moderate
5	I tend to read electronically in my free time.	2.4143	1.04247	Moderate
6	I feel comfortable when reading from digital sources.	2.2857	0.83654	Moderate
7	I find digital reading more engaging for students than traditional methods.	2.2857	1.0376	Moderate
8	I enjoy learning through electronic resources.	2.1286	0.79712	Moderate
9	I feel that using digital reading in teaching increases student interaction.	2.0857	1.00351	Moderate
10	I enjoy browsing while reading digital sources.	2.0286	0.81599	Moderate
11	As a student, I believe integrating digital content into the curriculum is necessary.	1.9571	0.69022	Moderate
12	I follow social media like Twitter to access information for study and life.	1.9286	0.98277	Moderate
13	I believe digital reading improves my research and analytical skills.	1.7714	0.74545	Very Low
14	Audio-visual elements attract me to read digital resources.	1.7	0.84012	Very Low
Overall Mean		2.1827	0.54025	Low

The findings for question two, which addresses the attitudes of the sample toward digital reading, show a clear correlation between digital reading utilization and attitudes toward this practice. The overall mean score was 2.1827, classified as low according to the study’s predefined Likert scale.



In general, the responses ranged between very low and moderate, with no item receiving a high or very high level of agreement. This result may explain the outcome of the first question—suggesting that the low level of digital reading utilization could be attributed to the participants’ weak attitudes toward this form of reading.

Once again, this result calls for serious consideration of this weakness, despite the availability of digital resources within and beyond the university, and despite the importance of digital reading in developing essential skills for future teachers. These skills range from lesson preparation to applying various instructional strategies and conducting diverse forms of student assessment—all of which are richly supported by digital content. Hence, digital reading should be recognized as a core competency in teacher preparation, and its current low level of adoption is unsatisfactory in light of the university’s efforts and investments in providing access to digital sources.

Question Three

Are there statistically significant differences at the level of ($\alpha = 0.05$) between female student teachers from the first and second field specializations in their use of digital reading, attributable to their specialization?

To answer this question, the researchers calculated the means and standard deviations of the student teachers’ responses in both specializations regarding their level of digital reading utilization. An independent samples t-test was conducted to determine whether the observed differences between means were statistically significant. The results are presented in Table (8).

Table 8 : Independent Samples t-test Results for Differences in Digital Reading Utilization Based on Field Specialization

Specialization	N	Mean	Std. Dev.	t	df	Sig.
First Field	70	2.3934	0.47921	0.973	68	0.334
Second Field	70	2.2747	0.53920			

The results in Table (8) indicate that there are no statistically significant differences in the level of digital reading utilization between student teachers in the first and second fields, as the p-value (0.334) exceeds the significance level of 0.05.

However, the data show apparent (non-significant) differences in favor of the first field specialization, with a higher mean score (2.3934) compared to the second field (2.2747). The researchers interpret the lack of statistical significance as being potentially due to the similar learning conditions experienced by both groups of students, as well as their comparable attitudes toward digital reading.

From the researchers’ perspective, attitudes play a critical role in driving the adoption of digital reading practices. This interpretation is further supported by the findings of Question Four, which demonstrated the similarity in attitudes across both groups.

Question Four:

Are there statistically significant differences at the level of ($\alpha = 0.05$) between female student teachers from the first and second field specializations in their attitudes toward digital reading, attributable to their specialization?

To answer this question, the researchers calculated the means and standard deviations of the student teachers’ responses in both specializations regarding their attitudes toward digital reading. An independent samples t-test was performed to test the significance of the differences between the means. The results are shown in Table (9).

Table 9 : Independent Samples t-test Results for Differences in Attitudes Toward Digital Reading Based on Field Specialization

Specialization	N	Mean	Std. Dev.	T	df	Sig.
First Field	70	2.2490	0.53519	1.028	68	0.308
Second Field	70	2.1163	0.54483			

As shown in Table (9), there are no statistically significant differences between the two groups of student teachers in their attitudes toward digital reading. The p-value (0.308) is greater than the alpha level (0.05), indicating that the observed difference is not statistically significant.



Nonetheless, the results reveal slight apparent differences in favor of the first field specialization, which had a higher mean score (2.2490) compared to the second field (2.1163).

According to the researchers, the absence of significant differences may be attributed to the limited integration of digital reading into the academic requirements of university courses. Most courses rely on traditional assessment methods such as summative tests, and students are often provided with printed course materials, which reduces the perceived necessity of engaging with digital reading platforms.

Question Five:

Are there statistically significant correlations at the ($\alpha = 0.05$) level between the degree of digital reading utilization and attitudes toward it among the female student teachers in the first and second field at the University of Nizwa?

To answer this question, the Pearson correlation coefficient was calculated to examine the relationship between the participants' responses regarding the degree of digital reading utilization and their attitudes toward it.

Table 10 : Pearson Correlation Coefficient between Digital Reading Utilization and Attitudes

Variables	N	Pearson's Correlation Coefficient	Sig. (2-tailed)
Utilization & Attitudes	70	0.511**	0.001

The results presented in Table (10) indicate a statistically significant positive correlation between digital reading utilization and attitudes toward it, with a Pearson correlation coefficient of (.511) and a p-value of (.001), which is lower than the significance level ($\alpha \leq 0.05$). This reflects a moderate relationship, suggesting that increased use of digital reading is associated with more positive attitudes among the female student teachers in both the First and second field.

Study Recommendations

In light of the findings derived from the research questions, the study recommends the following:

1. Integrating digital reading skills into the curriculum plans of teacher preparation programs across all public and private teacher education institutions in the Sultanate of Oman.
2. Strengthening the connection between digital reading and the activities of the teacher preparation program for Field 1 and Field 2 specializations, particularly in course assessments and graduation projects.
3. Enhancing the role of university libraries in raising awareness about the digital resources provided by the university and promoting their effective use during students' academic studies.

Suggestions for Future Research

In light of the findings of the study questions, the researchers propose the following areas for future research:

1. Investigating digital reading preferences among female student teachers enrolled in the Field Teacher Preparation Program at the University of Nizwa.
2. Examining the relationship between students' academic performance at the University of Nizwa and their level of digital literacy skills.
3. Developing a proposed program and assessing its impact on enhancing digital reading skills among student teachers at the University of Nizwa.

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