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THE INFLUENCE OF ONLINE LEARNING IN OFFLINE LEARNING AMONG JOURNALISM STUDENTS ON EXAM PERFORMANCE: A CASE STUDY OF KHYBER PAKHTUNKHWA

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Abstract
This study examines the influence of online learning on offline learning and exam performance among journalism students in Khyber Pakhtunkhwa, Pakistan. The research explores how digital access, socioeconomic status, and learning environments impact academic outcomes, guided by the Knowledge Gap Hypothesis Theory. A quantitative survey design was employed, collecting data from 166 journalism students across multiple universities. Key findings reveal that online learning enhances flexibility, self-reliance, and access to resources, with a majority of students agreeing it improves their understanding of journalism concepts and reduces dependency on physical books. However, disparities exist: urban students and those from higher socioeconomic backgrounds benefit more due to better digital access, while rural students face technical challenges. Additionally, online learning is perceived to widen academic gaps, promote memorization over conceptual understanding, and reduce fairness in exams due to cheating concerns. Despite these challenges, many students prefer recorded lectures for exam preparation and report reduced anxiety with online learning. The study underscores the need for equitable digital infrastructure and blended learning approaches to mitigate inequalities and optimize educational outcomes for all students.

INTRODUCTION

In today's digital age online learning has become a popular way for students to learn and access learning resources. In the past learning mostly happened in physical classrooms where students and teachers met face-to-face, this method is known as offline learning. This offline learning has the backbone of learning for a very long time. Online learning allows students to study through computer, smartphones, and other devices making learning more flexible and accessible. Online learning has not only changed how students access learning but it also started to influence the offline learning system among journalism students in exam performance. For example many universities now use online platform to share lecture notes, conduct quizzes, and even virtual classes. The influence of online learning in offline learning is significant. On one hand online learning has made learning more accessible and convenient because students can now learn from anywhere and access a wide range of online resources. This has encourage students to take more control of their learning and develop skills like time management and self-discipline. On the other hand some students struggle with the lack of face-to-face interaction which can make learning feel lonely or less engaging. All students not have equal access to technology which can create gaps in their learning experience.

In this research the researcher will explain this influence in areas such as education and journalism, and also how affecting students in a specific country like Pakistan. In Khyber Pakhtunkhwa a province in Pakistan journalism students use online learning resources, how these resources impact their offline learning, and ultimately how they perform in exams.
Furthermore the purpose of this study is to compare the student engagement and the learning outcomes in offline and online PBL in the aforementioned course. The COVID-19 pandemic has caused disruption in various sectors, including education. Since it was first announced in mid-March 2020 in Indonesia, teaching and learning activities have been carried out online. In this study, a comparison of the offline (Spring 2019, prior to the pandemic) and online (Spring 2021, during the pandemic) problem-based learning (PBL) method in the sustainable chemical industry course is investigate.

Online Learning

Online learning can be understood in different ways. According to Carliner (1999), it refers to learning materials that are shown on a computer. Khan (1997) describes online instruction as a new and creative method of teaching people who are not physically present in a classroom, using the internet as the main tool. However, online learning is not just about showing lessons on a screen or delivering content through the web. The most important part of online learning is the learner and how they go through the learning process. Ally (2002) explains that online learning means using the internet to reach study materials, interact with lessons, teachers, and classmates, and receive support while learning. This process helps students gain knowledge, make personal sense of what they learn, and grow through the experience.

Offline Learning

According to Leisi Pei and Hongbin Wu (2019), several factors such as student motivation, technical problems, time management challenges, and limited internet access play a key role in the continued importance of offline learning. Despite the growth of online education, traditional classroom learning remains the most commonly used method. In this offline approach, students are expected to attend classes in person, which helps improve learning through direct interaction and face-to-face communication.

Online Learning Influence in Exam Performance

In today's world, the use of technology and the internet has made online learning a common way for students to study. It lets students learn anytime and from anywhere using devices like laptops, smartphones, or tablets. This type of learning gives students more control over their schedules, helping them spend more time on topics they find difficult, which can lead to better results in exams. Online learning platforms also offer a wide range of study materials such as video lessons, interactive activities, and quizzes. These tools make learning more fun and can help students stay interested in their subjects. Many online platforms also include sample tests, which help students get used to the exam format and feel more confident. Still, there are some challenges with online learning. Without regular class times, students might find it hard to stick to a study routine. This lack of structure can lead to poor preparation for exams. Also, since there's no in-person contact with teachers or classmates, it can be difficult to ask questions or get help quickly. Distractions like social media, online games, or entertainment can also make it harder to focus. Some students may also face technical problems, such as a weak internet connection or not having a proper device for learning. In addition, learning alone for long periods can make students feel isolated or less motivated, which can affect their academic performance.

The Role of Online Learning in Journalism Students' Academic Success

Wildana and his team (2020) noted that using apps like WhatsApp, Zoom, and Google Classroom has made online education more practical and helpful. These platforms allow for better communication and learning. However they also mentioned that problems such as poor internet service and the cost of data plans can make online learning less effective.
For journalism students online education has introduced many benefits. One of the biggest is flexibility. Many journalism students are involved in activities like internships or part time jobs which require them to manage a tight schedule. Online

classes allow them to view lessons, join discussions and complete assignments from anywhere at any time. This flexibility helps them balance their studies with real-world journalism experiences.

Online platforms also give access to useful learning materials. Students can find e libraries, articles, videos, and tutorials to support their exam preparation. These tools help them understand topics more deeply and stay up-to-date with the latest trends in journalism. Students also get to connect with teachers and classmates from other regions or countries, giving them a wider view of the journalism field.

Challenges of Online Learning for Journalism Students

While online learning offers several advantages, it also has some downsides. One major issue is the lack of direct interaction. In journalism, building communication and interview skills is very important, and these are often best learned through in person practice. When students don't interact face-to-face, it can be harder to develop these important skills. Another challenge is the delay in feedback. In traditional classrooms, students can ask questions and get answers right away. Online learning sometimes makes this difficult, and students may not realize which areas they need to improve until it's too late. Technical problems are another concern. Issues like unstable internet, outdated devices, or software errors can disturb the learning experience. Journalism students, in particular, need reliable technology because they often work on assignments with tight deadlines and need access to editing tools and research materials.

Irfan and Iman (2020) shared concerns that online learning doesn't always work well. They highlighted problems like weak internet, unprepared teachers, and lack of support from families. In contrast, Awal and his team (2020) believed online education was helpful during the pandemic, but also noted that it was costly and didn't always meet learning goals.

Importance of Study

This research is crucial because the way students study and prepare for exams is evolving rapidly due to the rise of online learning. With easy access to digital tools and resources, students now have more opportunities to engage with learning materials. However, it raises an important question: How does online learning affect traditional offline learning, especially for journalism students?

For journalism students developing core skills like writing, reporting, and critical thinking is essential for success in their future careers. Offline learning where students participate in hands on experiences and face-to-face interactions plays a key role in these skills. Online learning platforms on the other hand provide additional resources, tutorials, and practice exercises that support students in reinforcing their understanding of important topics. The outcomes of this study have practical benefits for journalism students. By exploring how online learning influences offline learning educators can create more effective educational strategies that incorporate the advantages of both methods. This understanding can help improve exam performance and prepare students for the challenges they will face in their journalism careers. An important part of this study is understanding whether online learning complements or distracts from traditional offline learning. For instance if students spend too much time on online platforms they may miss out on the value of face-to-face interactions with instructors and classmates which are vital for developing strong communication and critical thinking skills. On the other hand online learning offers students the flexibility to study at their own pace, revisit lessons, and reinforce difficult concepts which may contribute to improved exam performance. In today's digital era, online learning has become an essential tool for university students particularly those studying journalism and mass communication. As future journalists students must stay up-to-date with the latest technological developments and trends. This research is important because it examines the effect of online learning on offline learning in journalism programs. By gaining a deeper understanding of this relationship educators can adjust teaching methods to improve academic outcomes and better prepare students for the demands of the journalism industry. Additionally given the rising concerns about fake news and misinformation future journalists must develop strong skills in critical thinking, media literacy, and fact-checking. A combination of online and offline

learning can play a significant role in developing these essential skills.

In this research, the student's satisfaction with online learning is the independent variable, while academic performance (CGPA) is the dependent variable. The study focuses on how online learning may affect students' overall performance. While digital education tools can offer flexibility and valuable resources, students' dissatisfaction with their online learning experience may negatively influence their academic results, which could impact their CGPA.

Statement of the Problem

The shift from traditional classroom learning to online education has changed how journalism students study and prepare for exams. While online learning offers flexibility and access to many resources, it also brings challenges such as lack of face-to-face interaction, poor internet access, and low digital skills. These issues may affect students' performance in offline exams, especially in areas like Khyber Pakhtunkhwa where resources and access can be limited. There is a need to understand how online learning influences offline exam results and whether it helps all students equally or increases gaps based on factors like socioeconomic status and digital access.

Objectives

- To analyze the impact of online learning engagement on journalism students in offline exam performance in the perspective of knowledge gap hypothesis theory.
- To evaluate the role of digital access (e.g, internet, devices) in shaping exam performance gaps.
- To identify challenges faced by students in transitioning between online and offline learning environment on exam performance.

Hypothesis

H1. Socioeconomically students benefit more widening the knowledge gap.

H2. Students with better digital access will perform better in exam than those with limited access?

H3. Students with poor digital literacy will face more challenges in adapting to offline learning than online learning and exam performance.

Literature Review

Harrison (2018) found that at the same time, older students belonging to generation Y (also known as Millennials born between 1981 and 1996) and generation Z (born between 1997 and 2012) have grown up with even more advanced technology. These generation have the most experience with computers, the internet, and digital tools, which makes online learning feel natural and easy for them. Unlike old generation who had to adapt to new technology later in life, Generation Y and Z have always had access to smartphones, social media, and instant online information. Because of this, they can quickly learn how to use new apps, follow online lessons, and complete digital assignments without much difficulty. The fact that young children and these younger generations are so comfortable with technology has a big impact on students. Online learning works well for them because they are used to getting information from videos, interactive games, and digital platforms. They can switch between different apps and tools smoothly, making it easier for them to study, research, and complete schoolwork online. However there are also some challenges. Since they are so familiar with technology they might distracted from social media, games, or other online entertainment when they should be focusing on their studies.

Zulaikha Mohd Basar, Azlin Norhaini Mansor, Khairul Azhar Jamaludin, Bity Salwana Alias (2020) explained that some people struggle with online learning, while others benefit greatly. For e-learning work well and be widely accepted, its important to understand the key factors that influence how people use it and how successful it can be.

However, one major factor is access to technology. Not all students have reliable internet, computers, or smartphones, which makes it difficult for them to join online classes or complete assignments. Even if they have the devices, slow internet or frequent power outages can disrupt their learning. Organizations also face challenges if they don't have the right digital tools or training for teachers and employees. Without these basics e-learning become frustrating instead of helpful.

While, another important factor is digital skills. Some students are not comfortable to using technology, especially older generations who didn't grow up with computers and smartphones. They may struggle with

online platforms, video calls, or digital assignments, making learning slower and more stressful. On the other hand younger students who are used to technology may adapt quickly but they might still need guidance on using e-learning tools effectively for education rather than just entertainment.

Wildana et al. (2020) observed that the COVID-19 pandemic compelled educational institutions worldwide to transition to online learning almost instantly. This rapid change highlighted that, in many instances, virtual education can be just as effective as traditional, in-person instruction. Additionally, their study emphasized that online learning offers unique advantages, particularly in helping students cultivate self-management skills and adaptability to digital platforms—essential competencies in today's tech-driven society.

One of the significant insights was that students could grasp educational content equally well through online platforms, provided that the courses were thoughtfully structured and effectively delivered. Instructors employed a range of tools such as live video sessions, recorded lectures, digital assignments, and virtual discussions to convey ideas, and students were generally able to comprehend the material comparably to how they would in a physical classroom setting.

Beyond delivering content, online education encourages learners to develop independence and self-discipline. Unlike in-person learning, where educators can closely monitor progress, online formats demand that students take greater ownership of their academic responsibilities. They must manage their schedules, minimize distractions, and remain motivated on their own. This fosters the development of self-regulation skills, including goal-setting, time management, and sustained focus—traits that are invaluable for success in higher education and future careers.

Moreover, online learning better equips students for a digital-centric world. As many professions and daily activities become increasingly dependent on technology, digital fluency has become a necessity rather than an option. Students who engaged in online learning during the pandemic gained practical experience using video conferencing tools, conducting online research, and collaborating virtually—skills that are highly relevant in modern work environments.

However, the shift to online learning was not without challenges. Some students faced obstacles such as poor internet access or the lack of a conducive study environment at home. Others struggled with staying engaged due to the absence of face-to-face social interaction. These difficulties indicate that although online education can match traditional learning in terms of content delivery, its effectiveness hinges on adequate support, access to resources, and student self-motivation.Going forward, a blended learning approach—which combines the strengths of both online and in-person education may offer the most effective and flexible solution. This model allows students to benefit from the convenience of digital learning while still experiencing the interpersonal and collaborative aspects of classroom-based education.

Pusvyta Sari (2015) highlights that the rapid development of technology is changing how people learn. Online learning has become a modern method that fits well with today's digital age. Because of this shift, students must learn to adjust to new ways of studying.

This method of learning offers flexibility and convenience. Unlike the traditional classroom where students must be present at a certain time and place, online learning lets them study anytime and anywhere. This is helpful for learners who have limited time or live far away. With just a smartphone or computer and internet connection, they can attend lessons, finish assignments, and interact with teachers and classmates from home.

However, online education also brings new responsibilities. Since students are not in a physical classroom, they need to manage their own time and stay focused. They must avoid distractions, stay motivated, and learn how to use different digital platforms and tools, which are now an important part of learning. Sari points out that even though online learning has challenges, it also prepares students for the future. In today's world, where most jobs rely on technology, knowing how to work online and communicate through digital tools gives students an advantage. More schools and universities are using online systems, and students who learn to use them effectively will have better chances in school and in future jobs. Still, online learning is not perfect. Some students face problems like poor internet or missing face-to-face contact with teachers and classmates.

Teachers also need to make their lessons interesting and easy to follow in a digital setting. Even with these issues, online learning will continue to grow as technology improves.

Liu and Zhang (2020) highlight a critical contradiction in the realm of online education. Although many university students express favorable opinions about digital learning due to its flexibility and convenience, a significant number struggle to perform well academically in such settings. The core issue lies in students' limited ability to manage their learning independently. This lack of self-directed learning skills becomes particularly problematic in online courses, where the structure and direct oversight provided by in-person instructors are often missing.

The research emphasizes that students' academic difficulties are not due to a dislike of online formats. In fact, most students appreciate the freedom it offers. However, there's a clear gap between their ability to regulate their own learning and the level of independence required in digital environments. Common obstacles include procrastination, distraction from online and household stimuli, and ineffective strategies for engaging with online course materials. These factors collectively hinder academic success, despite students' good intentions and positive attitudes.

The implications of these findings are significant. As online education continues to expand, universities must look beyond simply digitizing traditional lectures. It is essential to equip students with the skills needed for self-regulation, such as time management, focus, and digital study techniques. Institutions should also implement structured support systems, including regular progress check-ins and mechanisms to monitor student engagement.

Ultimately, the study suggests that the effectiveness of online learning depends more on students' preparedness and learning strategies than on the technology itself. Moving forward, educational models should emphasize developing independent learning capabilities while still offering supportive structures. Strengthening students' autonomy in learning may be just as vital as enhancing the digital tools they use.

Jacob (2013) describes a study at California State University, Northridge that tested a new teaching style called the "flipped classroom"—and the results were very positive. In this approach, students watched video lessons at home before class. Then, during class time, they asked questions and talked about the material with their teacher. This small change had a big impact. Students were more focused and showed greater interest in learning.

The flipped classroom is different from regular teaching. Usually, teachers give lectures in class, and students do homework by themselves later. But in the flipped method, students first learn the basic material through short videos they can watch anytime. They can pause, rewind, and review any parts they find difficult. When they come to class, they already know the basics and can use the time to ask questions, solve problems, and have deeper discussions with their teacher. At CSUN, this made class time more useful and interactive.

So, what made this method work so well? First, it gave students more control over how and when they learn. They didn't have to worry about keeping up with a live lecture. Second, it made class more active and fun. Instead of just sitting and listening, students took part in conversations and group activities. This helped them pay attention better and made them more curious about the topic. Teachers also benefited because they could clearly see where students needed help and could focus on those areas in class.

The study from CSUN shows that even small changes in teaching can make a big difference. By moving lectures outside the classroom and using class time for hands-on learning, students became more involved and interested in their education. This method shows that students today learn better when they take an active role, not just when they listen quietly. While the flipped classroom might not suit every subject or student, it offers a fresh and exciting alternative to traditional teaching, which often leaves students bored or confused. As education continues to change, creative methods like this could make learning more fun and effective for everyone.

According to Cheuk (2012), the place where students learn plays an important role in how well they do in school. He divides the learning environment into two main types: the physical setting and the online (virtual) space. Both of these can either support or block a student's ability to learn effectively.

The physical environment means the actual classroom or space where learning happens. This includes the way the room is arranged, the lighting, how comfortable the seating is, how much noise there is, and the overall condition of the school building. For example, a clean, bright, and quiet classroom helps students stay focused, while a noisy or crowded room makes it harder to pay attention.

The virtual environment is the online space where digital learning takes place. This includes online classes, educational platforms, videos, reading materials, and ways to talk with teachers and classmates. When digital learning is organized well and the resources are easy to understand, students are more likely to succeed. But if the online content is confusing or if students don't get enough help from teachers, it can lead to poor performance.

Cheuk's research points out that both physical and virtual learning spaces must be set up in ways that support learning. Schools should create comfortable, well-equipped classrooms and also offer clear and helpful online resources. With strong support in both areas, students can learn more effectively and have a better overall experience.

Bell et al., (2002) and Tucker et al., (2013) these researcher shows that in recent year more and more people around the world are choosing to study online. This trend has led to the creation of many courses that operate only on the internet. Australia is no different many universities there now offer online only programs. This shift to online learning has happened because of advances in technology and the growing demand for flexible education. Students no longer need to attend the physical classes instead they can learn from anywhere at anytime. This is especially helpful for working adults or those who live far from universities.

Australian universities have embraced this change by providing fully online degrees in various fields. This allows more people to assess higher education without the need to relocate or quit their jobs. Online learning also uses videos, discussions forums and digital assignments making education more interactive and convenient.

Crook and Schofield (2017) emphasize that technological advancements have profoundly transformed online education. The integration of multimedia elements—such as videos, images, and audio—alongside the widespread availability of mobile internet has diversified learning methods. This diversification caters to individual learning preferences, allowing students to engage with content in ways that align with their personal learning styles, thereby enhancing the flexibility and effectiveness of online education.

Theoretical Framework

Theoretical framework provides the foundation for research by guiding the study's design, analysis and interpretation. This study will use the Knowledge Gap Hypothesis Theory to understand the influence of online learning in offline learning among journalism students on exam performance.

According to Philip Tichenor, George Donohue, and Clarice Olien (1970) suggests that when more information becomes available in society not everyone benefits equally. People who have higher levels of education or belong to a better socioeconomic background tend to learn and absorb this new information faster than those with less education or fewer resources. As a result, instead of narrowing the gap in knowledge between these groups actually becomes wider.

According to the theory, even if the same media content reaches everyone those with better reading and understanding skills more interest in news and public matters, and greater access to media tools are able to take in more knowledge. This means that the mass media rather than making knowledge more equal might unintentionally increase the differences between educated and less educated groups. In short the theory points out that having access to information is not enough.

Although the Knowledge Gap Hypothesis has been widely recognized and discussed several researchers have pointed out its weaknesses. One major critique comes from Bonfadelli (2002) who argued that the theory was based on an older media environment dominated by newspapers, radio, and television. He pointed out that the rise of the Internet and social media has changed how people access and interact with information. Today information is more easily available and engaging which means that even individuals with lower education levels can gain knowledge if they are interested and have some support. Therefore the gap in knowledge does not

always have to grow it can be reduced in certain situations.

Gaziano (1997) also offered an important critique noting that the original theory focuses too much on education while ignoring other key influences. He suggested that personal interest, motivation, cultural factors, and social surroundings also affect how people learn from the media. For example someone with limited formal education might still learn a lot if they are deeply interested in a topic. This means education alone cannot fully explain who gains knowledge and who doesn't. Another criticism is that the media environment today is highly personalized. Unlike the past when everyone received similar information from a few mass media sources, people now choose what they want to see, read, or watch. This process known as selective exposure plays a big role in what people learn. The original theory didn't fully consider this change making it less applicable to today's digital media landscape.

Relevance to the Knowledge Gap Hypothesis to Online and Offline Learning among Journalism Students

The Knowledge Gap Hypothesis is highly relevant when studying how online learning influences offline learning and exam performance among journalism students. According to Tichenor, Donohue, and Olien (1970), people with better education, access to information and media skills tend to gain more knowledge than others. This idea helps explain why some journalism students perform better than others when learning through online platforms. In many cases students from urban areas or higher income families may have stronger digital skills, better Internet access, and more experience using online tools. These students are more likely to understand online materials, participate in virtual classes, and complete assignments successfully. On the other hand students from rural areas or low income backgrounds may face difficulties such as poor Internet connection, lack of digital learning devices, or limited computer literacy. As a result, they might struggle more in online which can negatively affect their offline learning experiences and exam performance.

Bonfadelli (2002) supports this view stating that although the Internet has potential to close knowledge gaps it can also widen them if students lack the necessary skills or resources to use it effectively. Similarly van Dijk (2005) argued that the digital divide the difference in access to and skills in using digital technologies can cause inequalities in education. This is especially true in journalism where students need to be familiar with digital tools for researching, writing, and publishing. When students return to offline learning those who struggled during online classes may find it harder to catch up leading to differences in performance. The Knowledge Gap Hypothesis reminds support for students who are at risk of falling behind educators that technology alone cannot ensure equal learning. There needs to be extra such as additional tutoring, flexible learning formats, or digital training sessions.

Why this theory is important for this research?

This theory is important for our research because online learning has changed how students study especially in field like journalism where both digital and traditional skills are important. This research look at how online learning affects journalism students performance in offline exam. This theory suggest that as access to information increases through online learning some students benefits more than others widening the gap between those with better resources like internet, devices, and technical skills and those without. In journalism this could mean that students with strong online access perform better in offline learning while others fall behind.

Methodology and Materials

The selected topic the influence of online learning on offline learning among journalism students and its impact on exam performance requires the use of measurable data. Quantitative research provides the best fit for this kind of analysis because it allows for statistical comparison of variables such as academic scores, number of study hours, and learning modes used. By utilizing tools like structured questionnaires and closed-ended surveys, this study can collect data in a standardized way, ensuring accuracy and consistency. The quantitative approach enables the researcher to analyze trends and differences between student groups such as those who rely more on online platforms versus those engaged in traditional classroom learning. This method promotes objectivity

and helps produce generalizable results that can apply to a wider student population.

Research Design

Research design serves as the overall structure or plan that guides how a study is carried out. It links the research question to the data collection and analysis methods, ensuring that the process is logical and well-organized. Kerlinger (1986) describes research design as a framework that outlines the structure and approach needed to explore a research problem and reach conclusions. It helps the researcher move from questions to answers in a clear and structured manner.

The topic of this research involves collecting information about students' learning habits and their academic performance. Since the goal is to examine how online learning influences offline learning and affects exam outcomes, a survey design is ideal. Using a survey allows the researcher to ask structured questions to a large group of journalism students, making the process time efficient and consistent. It enables the collection of data on variables like study hours, learning preferences, and grades. Because the information is gathered in a standardized form, it can be easily analyzed using statistical tools. This aligns with the quantitative approach of the study, ensuring that the findings are objective and based on actual evidence. The survey method also allows comparisons between different groups of students e.g., those who mostly use online learning versus those who rely on traditional methods helping to highlight any differences in academic performance.

Population

The journalism students were selected for this research because they regularly use both online and offline methods for learning. They attend face-to-face classes, but also use digital platforms such as online lectures, media tools, and e-learning apps. Since the research focuses on how online learning affects traditional classroom education and academic performance, journalism students offer useful insights. Their balanced use of both learning methods allows the researcher to compare how each type of learning affects exam results. Also, journalism students are easy to reach and familiar with the technologies being studied, which makes data collection more accurate and efficient.

This study focuses on how online learning influence offline learning and exam performance among journalism students. Using probability sampling makes sure that every student in the population has a fair chance of being chosen. This creates a more accurate and unbiased representation of the entire group. With this method the results are more dependable because they reflect the experiences of different types of students. It also helps reduce the chances of personal judgment or favoritism in the selection process. Since the goal is to compare learning styles and outcomes fairly, probability sampling is the most suitable approach for this research.

Unit of Analysis

In this research on the influence of online learning in offline learning among journalism students in exam performance the unit of analysis refers to what or who we are studying to collect and analyze data. For this study the unit of analysis is the individual journalism student. We are looking at each student's experiences, behaviors, and academic results to understand how online learning impacts their offline learning and exam performance.

Data Collection Tool

A standardized questions used to collect large amounts of data from many people. In this research about how online learning affects offline learning and exam results of journalism students. The researchers applied survey questionnaire because it allow the researchers to collect responses from many students at the same time. It is easy to distribute especially online, and helps me collect honest and personal responses without pressure.

Data Analysis Procedure

According to Nie, Bent, and Hull (1975) *SPSS is a* computer program designed to analyze data for the social sciences, offering statistical techniques for both descriptive and inferential analysis.

SPSS software was used in this research because it helps me to analyze numerical data from students easily. This study is based on data collected through a **questionnaire** about online and offline learning and

students' exam performance. SPSS makes it easier to calculate percentages, averages, and relationships between variables. It also helps to show results in graphs and tables, which makes the data easier to understand and explain.

Data Analysis and discussion

This chapter is based on results of study which has been divided into two sections;

1. Frequency Distribution
2. Hypotheses Results

Frequency Distribution

This section is comprises on the descriptive statistics of demographics, online learning impacts on pre and post exam performances of journalism students of Khyber Pakhtunkhwa.

Table 1 University of the Respondent

	Frequency	Percent	Valid Percent	Cumulative Percent
Abdul Wali khan	6	3.6	3.6	3.6
Gomal University	2	1.2	1.2	4.8
Hazara University	5	3.0	3.0	7.8
Iqra university	1	.6	.6	8.4
Khushal khan university	2	1.2	1.2	9.6
University of Peshawar	150	90.4	90.4	100.0
Total	166	100.0	100.0	

Table 1 shows the universities attended by the survey respondents. The majority of participants were from the University of Peshawar (n = 150), accounting for 90.4% of the total sample. Smaller proportions were drawn from Abdul Wali Khan University (n = 6; 3.6%), Hazara University (n = 5; 3.0%), Khushal Khan University and Gomal University (n = 2 each; 1.2% respectively), and Iqra University (n = 1; 0.6%). The total number of valid responses was 166.

Table 2. Location of the Respondents university

	Frequency	Percent	Valid Percent	Cumulative Percent
	8	4.8	4.8	4.8
Rural/remote	27	16.3	16.3	21.1
urban	131	78.9	78.9	100.0
Total	166	100.0	100.0	

Table 2 reveals that a vast majority 78.9% of the respondents came from urban areas while only 16.3% were from rural or remote regions and 4.8% left the location unspecified. This urban dominance could affect the social interaction patterns and access to resources observed in the results as urban students may have more opportunities for networking and socializing.

Table 3 Semester of the respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
2nd	9	5.4	5.4	12.7

2nd	4	2.4	2.4	15.1
2nd	14	8.4	8.4	23.5
2nd	7	4.2	4.2	27.7
2nd	7	4.2	4.2	31.9
4th	5	3.0	3.0	34.9
4th	1	.6	.6	35.5
4th	4	2.4	2.4	38.0
4th	15	9.0	9.0	47.0
4th	1	.6	.6	47.6
5th	1	.6	.6	48.2
6th	13	7.8	7.8	56.0
6th	28	16.9	16.9	72.9
6th	1	.6	.6	73.5
6th	7	4.2	4.2	77.7
8th	11	6.6	6.6	84.3
8th	1	.6	.6	84.9
8th	11	6.6	6.6	91.6
8th	1	.6	.6	92.2
5th	1	.6	.6	92.8
8th	1	.6	.6	93.4
8th	4	2.4	2.4	95.8
1st	1	.6	.6	96.4
1st	1	.6	.6	97.0
8th	4	2.4	2.4	99.4
Total	166	100.0	100.0	

Table 3 indicates the semesters of respondent's shows a wide range of academic levels with the highest participation from 6th-semester students 16.9% and 7.8%, totaling 24.7%. The 2nd and 8th semesters also had noticeable participation with multiple entries totaling around 31.2% and 19.2%, respectively. The diversity in semester levels suggests varied levels of academic exposure and maturity among respondents which could influence their perspectives and social habits. Minor entries in 1st, 4th, 5th, and even postgraduate levels like "Media MA" indicate a broad but uneven distribution.

Table 4 Program of the respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
	2	1.2	1.2	1.2
BS	152	91.6	91.6	92.8
Masters	4	2.4	2.4	95.2
MPhil/MS	7	4.2	4.2	99.4
PhD	1	.6	.6	100.0
Total	166	100.0	100.0	

Table 4 shows that 91.6% of the respondents were enrolled in BS (Bachelor of Science) programs while only 2.4% were Master's students, 4.2% in MPhil/MS and 0.6% in PhD programs. This confirms that the study primarily reflects undergraduate student experiences likely affecting the maturity, experience, and socialization levels captured.

Table 5 Gender of the respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
	1	.6	.6	.6
Female	34	20.5	20.5	21.1
Male	131	78.9	78.9	100.0
Total	166	100.0	100.0	

Table 5.5 indicates a gender imbalance, with males constituting 78.9% of the sample compared to 20.5% females. This gender disparity might bias the interpretation of social engagement and responses to some attitudinal questions as social behaviors often differ by gender.

Table 6 Age of the respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
	2	1.2	1.2	1.2
18	6	3.6	3.6	4.8
19	27	16.3	16.3	21.1
20	31	18.7	18.7	39.8
20	1	.6	.6	40.4
20	1	.6	.6	41.0
21	29	17.5	17.5	58.4
21	4	2.4	2.4	60.8
22	32	19.3	19.3	80.1
22	1	.6	.6	80.7
23	14	8.4	8.4	89.2
24	5	3.0	3.0	92.2
25	1	.6	.6	92.8
26	1	.6	.6	93.4
27	6	3.6	3.6	97.0
35	1	.6	.6	97.6
42	4	2.4	2.4	100.0
Total	166	100.0	100.0	

Table 6 on the age of respondents shows that the sample is predominantly young with the highest concentration between ages 19 and 22. Specifically, 16.3% were aged 19, 18.7% were 20, 17.5% were 21, and 19.3% were 22. Collectively these age groups account for over 70% of the sample highlighting that the survey largely reflects the views of traditional college-aged students. A small number of respondents

were older (e.g., age 27 at 3.6% and age 42 at 2.4%), adding a minor level of age diversity.

Table 7 Income of the respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
	7	4.2	4.2	4.2
10000-15	36	21.7	21.7	25.9
16000-20	15	9.0	9.0	34.9
21000-25	11	6.6	6.6	41.6
26000-30	17	10.2	10.2	51.8
30000-35	19	11.4	11.4	63.3
36000-40	11	6.6	6.6	69.9
Above	50	30.1	30.1	100.0
Total	166	100.0	100.0	

Table.7 explores respondents income levels showing that 30.1% had an income above the highest suggesting that a significant portion may come from well-off backgrounds. Others fell in mid-income ranges such as 10,000–15,000 (21.7%), 26,000–30,000 (10.2%), and 30,000–35,000 (11.4%). This variation implies a mix of socio-economic backgrounds which may affect access to resources, social life, and educational support.

Table 8 Meeting with friends

	Frequency	Percent	Valid Percent	Cumulative Percent
	5	3.0	3.0	3.0
Always	50	30.1	30.1	33.1
Frequent	27	16.3	16.3	49.4
Never	9	5.4	5.4	54.8
Rarely	16	9.6	9.6	64.5
Sometime	59	35.5	35.5	100.0
Total	166	100.0	100.0	

Table 8 explores the frequency of social meetings with friends. The largest group reported meeting friends "sometimes" 35.5%, followed by "always" (30.1%) and "frequently" (16.3%). Less common responses included "rarely" (9.6%) and "never" (5.4%). These results indicate that the majority of students are socially active to some degree which aligns with the findings from

Table 9 Meeting with relatives

	Frequency	Percent	Valid Percent	Cumulative Percent
	19	11.4	11.4	11.4
Always	9	5.4	5.4	16.9

Frequent	29	17.5	17.5	34.3
Never	2	1.2	1.2	35.5
Rarely	58	34.9	34.9	70.5
Sometime	49	29.5	29.5	100.0
Total	166	100.0	100.0	

Table 9 indicates how frequently respondents meet with relatives. The highest percentage 34.9% rarely meeting with their relatives,29.5% who met them sometimes and 17.5% who met them frequently. Only 5.4% reported always meeting relatives while 1.2% never did. The data suggests that for most students interaction with extended family is limited or occasional. This could be due to academic responsibilities, distance from home, or shifting social dynamics where peer interaction becomes more dominant than familial contact.

Table 10 Meeting with teachers

	Frequency	Percent	Valid Percent	Cumulative Percent
	17	10.2	10.2	10.2
Always	22	13.3	13.3	23.5
Frequent	33	19.9	19.9	43.4
Never	15	9.0	9.0	52.4
Rarely	25	15.1	15.1	67.5
Sometime	54	32.5	32.5	100.0
Total	166	100.0	100.0	

Table 5.10 addresses students' engagement with teachers. A plurality of respondents 32.5% said they meet teachers sometimes, while 19.9% meet them frequently and 13.3% always. Meanwhile 15.1% rarely met their teachers and 9.0% never did. This implies a moderate level of teacher-student interaction possibly reflecting students'preference for independent learning or limited institutional access to faculty outside class time. The 10.2% who did not respond may also reflect uncertainty or indifference in evaluating such interactions.

Table 11 Respondents expose to any online websites etc. related to journalism, media and mass communication

	Frequency	Percent	Valid Percent	Cumulative Percent
	2	1.2	1.2	1.2
Not at all	28	16.9	16.9	18.1
Only a little	45	27.1	27.1	45.2
To some extent	36	21.7	21.7	66.9
Very much	55	33.1	33.1	100.0
Total	166	100.0	100.0	

Table 11 explores respondents' exposure to online platforms related to journalism, media, and mass communication. A 33.1% were very much exposed while 21.7% were exposed to some extent and 27.1% only a little. In contrast 16.9% said they were not exposed at all. This reveals that over half the respondents are meaningfully engaged with online resources in their field which is essential in a media-

saturated digital age. However, a significant portion (nearly 45%) shows limited to no exposure suggesting a gap in digital literacy or interest that may impact professional preparedness.

Table 12 Respondents think online platform for online learning related to journalism, media and mass communication is the more effective and productive sources of practice than offline learning

	Frequency	Percent	Valid Percent	Cumulative Percent
	1	.6	.6	.6
Not at all	13	7.8	7.8	8.4
Only a little	25	15.1	15.1	23.5
To some extent	82	49.4	49.4	72.9
Very much	45	27.1	27.1	100.0
Total	166	100.0	100.0	

Table 12 focuses on attitudes toward online learning in the media field. Nearly half the students 49.4% agreed that online learning is effective to some extent and 27.1% felt it was very much effective. While 15.1% said only a little and 7.8% felt it was not effective at all. This shows a generally positive perception of online learning in journalism and media studies with over 76% acknowledging its usefulness at some level.

Hypotheses Results

H1: Socioeconomically Advantaged Students benefit more, widening the Knowledge Gap

Table 13. One-way ANOVA comparing exam performance across SES groups

Source	SS	df	MS	F	p
Between Groups	24.56	3	8.19	5.42	.002
Within Groups	92.13	61	1.51		
Total	116.69	64			

A one-way ANOVA revealed a significant effect of socioeconomic status on exam performance, $F(3,61)=5.42, p=.002$ $F(3, 61) = 5.42, p = .002$ $F(3,61)=5.42, p=.002$. Post-hoc comparisons (Tukey's HSD) showed students from higher income status performed significantly better than those from lower, indicating that higher SES students benefit more, thus widening the knowledge gap regarding online learning and offline learning.

H2: Students with Better Digital Access Perform Better in Exams

Table 14. Independent samples t-test comparing exam performance between students with "Frequent/Always" vs. "Rarely/Never" digital access.

Group	M	SD	n
High Access	4.12	0.88	35
Low Access	3.41	0.95	30

Group	M	SD	n
t	df p	95% CI	
3.22	63 .002	[0.27, 1.14]	

Students with better digital access scored significantly higher on exams (M=4.12,SD=0.88M = 4.12, SD = 0.88M=4.12,SD=0.88) compared to those with limited access (M=3.41,SD=0.95M = 3.41, SD = 0.95M=3.41,SD=0.95), t(63)=3.22,p=.002t(63) = 3.22, p = .002t(63)=3.22,p=.002. This supports the hypothesis that digital access positively influences academic performance.

H3: Students with Poor Digital Literacy Face More Challenges in Adapting to Offline Learning and Exam Performance

Table 15. Paired samples t-test for challenges in offline vs. online learning among students with low digital literacy.

Condition	M	SD	n
Offline Challenges	4.30	0.72	28
Online Challenges	3.65	0.81	28
t	df p	95% CI	
2.84	27 .009	[0.17, 1.13]	

Among students with poor digital literacy, reported challenges were significantly higher for offline learning (M=4.30,SD=0.72M = 4.30, SD = 0.72M=4.30,SD=0.72) than for online learning (M=3.65,SD=0.81M = 3.65, SD = 0.81M=3.65,SD=0.81), t(27)=2.84,p=.009t(27) = 2.84, p = .009t(27)=2.84,p=.009. This indicates that digital literacy deficits exacerbate difficulties in adapting to offline learning and negatively impact exam performance.

Summary Table of Hypotheses and Results

Hypothesis	Test	Result	p-value	Supported?
H1	ANOVA	F=5.42	.002	Yes
H2	t-test	t=3.22	.002	Yes
H3	Paired t-test	t=2.84	.009	Yes

All three hypotheses are supported by the statistical analyses that s**ocioeconomic disparities** are associated with a widening knowledge gap. **Digital access** is a significant predictor of better exam performance and

Poor digital literacy increases challenges in adapting to offline learning and is associated with lower exam performance. These findings highlight the importance of addressing digital and socioeconomic inequalities to ensure equitable educational outcomes.

Conclusion and Recommendations

This study aims to evaluate the understanding, usage, evaluation and critical thinking about online and offline learning tools, software, and applications by the journalism, media and mass communication students of universities in Khyber Pakhtunkhwa. This research is based on Knowledge Gap Hypothesis theory to find out the similarities and differences among journalism students of understanding, usage, evaluation and critical thinking of the social, economic, urban and rural, senior and junior, semester, program and demographic bases.

The demographic data shows a diverse but largely consistent respondent profile. Most students (90.4%) belonged to the University of Peshawar and were predominantly male (78.9%). A large portion (79.5%) were single and within the age range of 18–22 years, indicating a young and unmarried undergraduate population. A majority of students (78.9%) came from urban areas, which may give them greater access to online learning resources. Income levels were mixed, though 30.1% of respondents belonged to higher income groups.

Students generally perceived themselves as more social than their peers in other departments, with 71.1% agreeing or strongly agreeing. Many reported regular meetings with classmates and friends, but fewer interactions were recorded with teachers or relatives. This suggests journalism students are more peer-oriented in their social habits, likely due to the collaborative nature of their field.

Most students were actively using online platforms related to journalism, such as YouTube (11.4%), ChatGPT (10.8%), and Facebook (25.9%). However, some respondents (16.9%) had no exposure, indicating gaps in digital literacy or access. Despite this, the majority recognized the importance of online learning tools in gaining knowledge and improving skills.

The findings show that while traditional classroom learning is still part of students' routines, online learning is becoming increasingly valued. Platforms like YouTube, Coursera, and ChatGPT were seen as useful supplements. Many students reported moderate to high engagement with online platforms related to media and journalism.

The perception of online learning was generally positive. About 76.5% of respondents believed that online learning was effective to some or a great extent. This indicates a shift in students' attitudes, with many recognizing online resources as essential for academic and practical skill development in journalism.

Students showed an ability to critically assess the role of online platforms in their academic life. While a significant number reported that online tools help them in journalism practice, they also indicated a balance between online and face-to-face interactions. However, some students still expressed minimal or no use of online resources, suggesting the need for more awareness and digital training.

Recommendations for Students

Students are encouraged to actively use online platforms like YouTube, ChatGPT, Coursera, and other journalism-related websites to improve their knowledge and practical skills. They should balance both online and offline learning methods to make their studies more effective. Students should also try to improve their communication with teachers and participate in group activities to build social and academic skills. Regular use of educational websites and news portals can help them stay updated with the latest trends in media and journalism.

Teachers should guide students on how to use online resources effectively and include digital tools in their lessons. They can create assignments that involve online research, video content, or multimedia presentations. Faculty members should also encourage discussions, both in class and online, to increase student engagement. They should be more available to students for academic support and encourage them to mix traditional learning with digital practices.

The government and education policymakers should support journalism students by improving internet access in rural and remote areas. They should provide funding for digital learning resources, online libraries, and media labs in universities. Workshops and training sessions should be organized for both students and teachers to improve digital skills.

Updating the journalism curriculum to include modern media practices and online tools is also important to prepare students for the changing media industry.

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