

## USAGE PATTERNS OF MOBILE APPLICATIONS AMONG YOUTH: A GENDER PERSPECTIVE

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### Abstract

The high rate of mobile apps growth has inherently changed the way that the youth socialize, communicate, and access information across the world. Mobile applications have been integrated into the everyday life of the people of developing nations such as Pakistan especially in colleges. This paper will consider the gender usage of mobile applications among the youthful population with respect to frequency of usage, type of preferred application used, purpose of application usage, and the perceived impact on every day and academic life. The research design adopted was a quantitative survey where students of the university (250 in total) were used to collect data through a structured questionnaire. Gender-based differences in the use of mobile applications are significant and can be analyzed descriptively and in comparison. While male respondents exhibited greater preferences for entertainment, gaming, and utility-based applications, female respondents showed greater engagement with communication, social networking, and educational applications. The results advance our knowledge of Pakistani youths' online behavior and offer useful advice to educators, legislators, and app developers who want to create inclusive and useful online communities.

### 1. Introduction

Since smartphones are so widely used, mobile applications have become an essential part of modern life. Mobile technology has revolutionized social and academic interactions, communication, and information access. The most frequent users of mobile applications are young people, who use several platforms all day long for information seeking, entertainment, education, and social interaction.

Young people in Pakistan are using mobile applications more frequently as a result of the quick development of internet connectivity and

reasonably priced smartphones. For academic collaboration, peer communication, entertainment, and social media engagement, university students are depending more and more on mobile applications. According to empirical data, Pakistani youth's regular use of social media and mobile phones has a big impact on their social behavior. (Anwar, Rustam, & Iqbal, 2023).

Mobile applications have transformed communication between people by making instant messaging, video calling and sharing of multimedia to be possible. Digital media platforms have changed the traditional producer-consumer

dynamic where people can participate in the creation and distribution of content (Gillmor, 2006). Likewise, Zarrella (2010) goes further to state that the most critical media usage among the youths is through the social networking applications, which have real-time, personalized and interactive communication capabilities.

The topic of gender differences in the acquisition and utilization of technology has been a subject of research in the field of media and communication. More recent studies have indicated that, even though the access disparities have been dissolved, there have remained differences in usage motivations and preferences as well as perceived effects, even though the initial research had suggested that there existed a digital divide, which favored the male user (Siapera & Veglis, 2012). Anwar et al. (2024) state that the use patterns of mobile phones in the Pakistani population by the demographic groups differ significantly and influence social communication and lifestyle.

The existing unequal usage of mobile applications between men and women in Pakistan has not been empirically studied before due to the increased importance of mobile applications in youth culture. This study attempts to fill this gap by examining the usage of mobile applications by male and female university students, and including gender-disaggregated information in the list of the already existing literature.

## 2. Review of Literature

### 2.1 Youth Culture and Mobile Applications

Wireless applications became the hallmark of young culture in the digital era. Such applications offer communication platforms, education platforms, entertainment platforms and self-expression platforms. According to Foust (2008), mobile technologies erase the distinction between traditional and digital media because users are able to act both as the content creators and as the consumers. This has changed the consumption behavior of media and increased user interaction. Mobile applications are used by the youth not only as a leisure activity. Academic activities, including group project collaboration, participating in an online discussion, and access to instructional materials are being increasingly done by use of

applications. Research indicates that adolescents in Pakistan spend many hours daily on their phones, and the percentage of the time spent on social media applications is a significant proportion (Anwar et al., 2023).

### 2.2 Gender and Digital Media Usage

The communication studies have thoroughly examined gender differences in the use of digital media. According to Allan (2006), female users usually show interest in those platforms that focus on communication, whereas male users are interested in gaming, entertainment, and task-oriented technologies. In spite of the recent tendencies that state that the overall use is becoming more converged, gendered preferences still determine how digital platforms are used.

These findings are supported by research in Pakistan. According to Anwar, Alam, and Moazzam (2024), although men and women use their phones extensively, females tend to communicate and study using the apps. Nevertheless, the recreational or entertainment-oriented apps are more probable to be used by men.

### 2.3 Mobile Apps, Social Media, and Behavioral Effects

Young people have a large impact on the behavior due to mobile applications especially the social media platforms. According to Anwar et al. (2023), this overdependence on social media by Pakistani youth influences their communication patterns, relationships with each other, and even their emotional state. The routines and social styles of interactions are changing due to the availability and inseparable nature of mobile applications.

Although mobile applications can be used as a source of education and socialization, some fears have also been expressed that mobile apps could be used too often, cause distraction, and lead to loss of face-to-face communication. These conflicting results underscore the significance of being reasonable and limited in using mobile applications.

## 2.4 Mobile Applications and Education

Applications for mobile devices have become important resources for learning and teaching. Digital platforms, according to Handley and Chapman (2011), enable content sharing, collaborative learning, and ongoing access to educational materials. Mobile learning provides flexible and affordable higher education options in developing nations like Pakistan.

However, studies also show that the use of educational apps varies by gender. While male students may use educational applications less frequently or in conjunction with entertainment content, female students frequently exhibit more structured and goal-oriented use of these applications (Anwar et al., 2024).

## 2.5 Research Gap

Even though the current literature has been informative on the usage of mobile phones and social media within Pakistan, very little empirical research has been conducted on gender-based mobile applications usage among the youth. The current study fills this gap by providing quantitative data on gender variations regarding frequency, preferences, and the purpose of mobile application use by university students.

## 3. Theoretical Framework

The research will be based on the known communication and media theories that describe how people use the media, why and what is the social significance of the digital technologies. The study is mainly based on Uses and Gratifications Theory, Technology Acceptance Model (TAM) and Media Convergence Theory to examine gender-based variations on the use of mobile applications among the youth. Combined, these frameworks offer a holistic understanding of the reasons why the youth are using mobile applications, how they are adopting digital technologies and how converged media environments influence communication practices.

### 3.1 Uses and Gratifications Theory

The Uses and Gratifications Theory (UGT) is one of the most popular theories of the media and communication that tries to comprehend the

consumption patterns and motives among the audience. The theory was initially developed by Katz, Blumler, and Gurevitch (1974) and rests on the idea that consumers of the media are active individuals and they consciously choose platforms that enable them to achieve certain psychological and social needs.

The uses of media as per this theory are:

- Information seeking
- Interpersonal communication and interaction.
- Leisure and sightseeing.
- Education and personal development.

Applied to the mobile application, UGT is a proposal that young people actively decide and select the various types of applications depending on their needs and preferences. This model offers a good explanation of the gender variations observed in this research like the higher usage of education and communication applications by the female respondents and higher usage of gaming and entertainment applications by male respondents.

The relevance of UGT in digital and mobile media has been verified in previous works. According to Zarrella (2010), the social networking applications are especially popular due to their ability to satisfy the consumer needs in terms of interactivity, self-expression and connectivity. On the same note, Gillmor (2006) points out that the digital platforms allow users to be active instead of passive consumers of information.

The relevance of UGT in predating the behavior of youth media is also supported by Pakistani research. Anwar, Rustam, and Iqbal (2023) established that communicative, informational, and entertainment-related gratifications, motivate Pakistan youths to use social media. Thus, Uses and Gratifications Theory offers a good theoretical basis of studying why the mobile applications usage patterns are different among male and female youth.

## 4. Research Methodology

### 4.1 Research Design

The research design adopted was a quantitative survey researches to investigate the usage pattern

of mobile application among youth in a gender perspective.

**4.2 Population and Sample**

The sample population consisted of students in the institutions of higher learning. A sample of 250 students both male and female respondents were sampled using convenience sampling thus collected data.

**4.3 Data Collection Instrument**

Data collection was done through the use of a structured questionnaire. The questionnaire was divided into sub-questions about demographic data, frequency of using the mobile application, types of applications used, the use purpose and perceived impacts of using mobile applications on everyday life.

**4.4 Data Analysis**

The data gathered were examined through descriptive statistics and comparative analysis to find out the difference between the usage patterns of mobile applications by women and men.

**5. Results and Data Analysis**

The review found out that the use of mobile applications is very widespread among both female and male respondents. Most students indicated that they used applications via mobile applications on a daily basis although female respondents indicated higher rates of daily usage compared to male respondents.

Application categories were gender based with differences in desired applications. The female respondents were more involved in communication, social networking and education applications. The men respondents were more inclined towards entertainment, gaming and utility-based applications.

As concerns the usage purpose, the respondents indicated communication as the most noticeable purpose among the female respondents, and entertainment was the most predominant purpose among the males. The use of education and information was found to be used by both genders, albeit with the female students being more at higher grades.

**Table 1**  
**Gender-wise Distribution of Respondents**

Gender	Frequency	Percentage
Male	120	48%
Female	130	52%
<b>Total</b>	<b>250</b>	<b>100%</b>

Table 1 shows that female respondents constituted a slightly higher proportion of the sample (52%) compared to male respondents (48%).

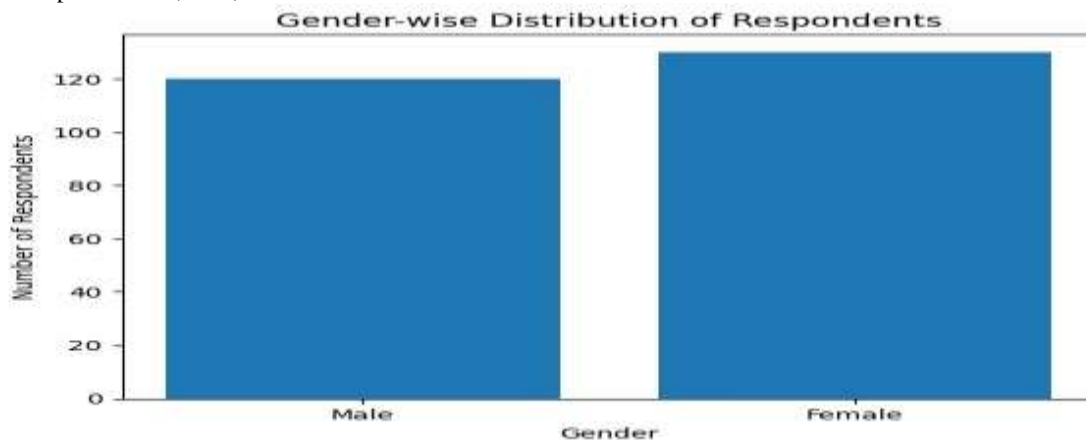


Figure 1

**Gender-wise Distribution of Respondents**

**Description:**

The gender-based distribution of the respondents in the study is shown in Figure 1. The sample size comprised 250 students of a university and the

number of female respondents (52%) was slightly higher than that of male respondents (48%). This equal representation guarantees both genders equal representation to make comparative analysis.

**Table 2**

**Frequency of Mobile Application Usage by Gender**

Usage Frequency	Male (%)	Female (%)
Daily	78	85
Weekly	15	10
Occasionally	7	5
Total	100	100

Table 2 demonstrates that most respondents used mobile applications on a daily basis, and female students reported using mobile applications more than male students daily..

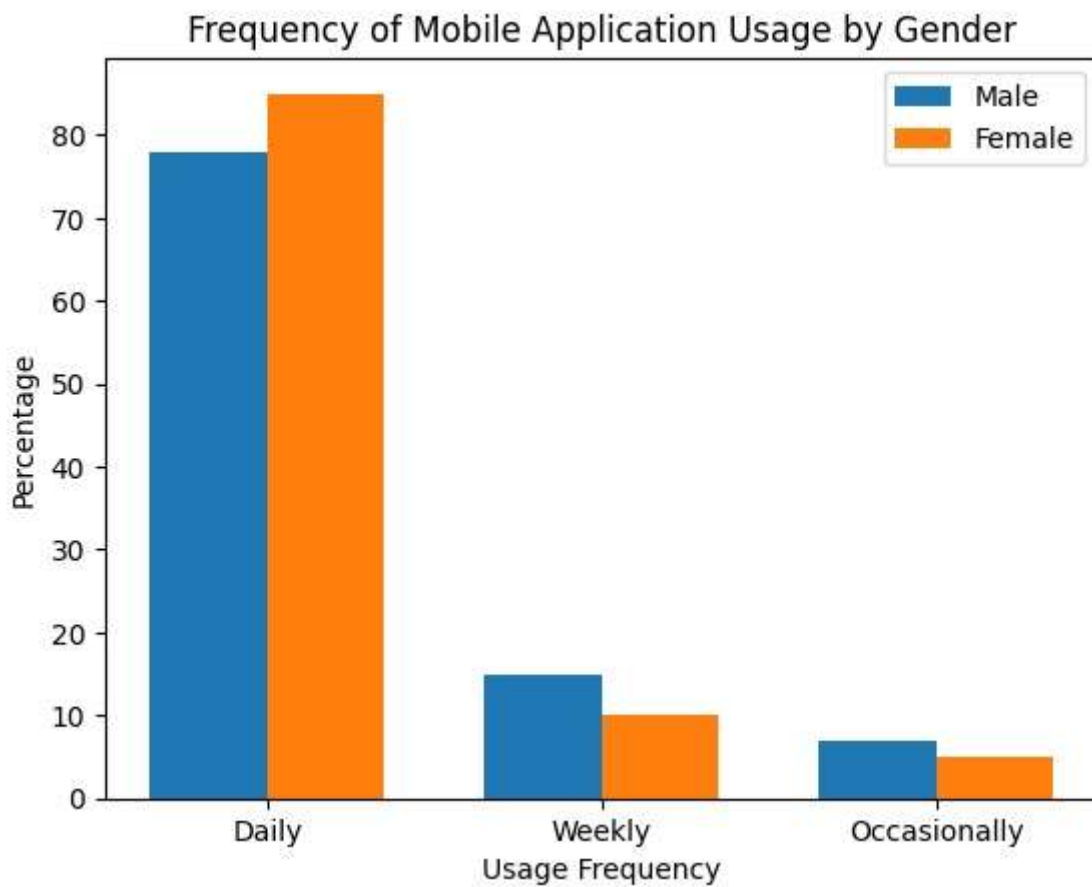


Figure 2

**Frequency of Mobile Application Usage by Gender**

**Description:**

Figure 2 presents the frequency of the use of a mobile application by male and female respondents. The findings indicate that most of the respondents used it daily with female students

(85 percent) using it more frequently daily than male students (78 percent). The comparison of mobile application usages was relatively low (weekly and occasional) by both genders, which shows the widespread usage of such applications in everyday activities.

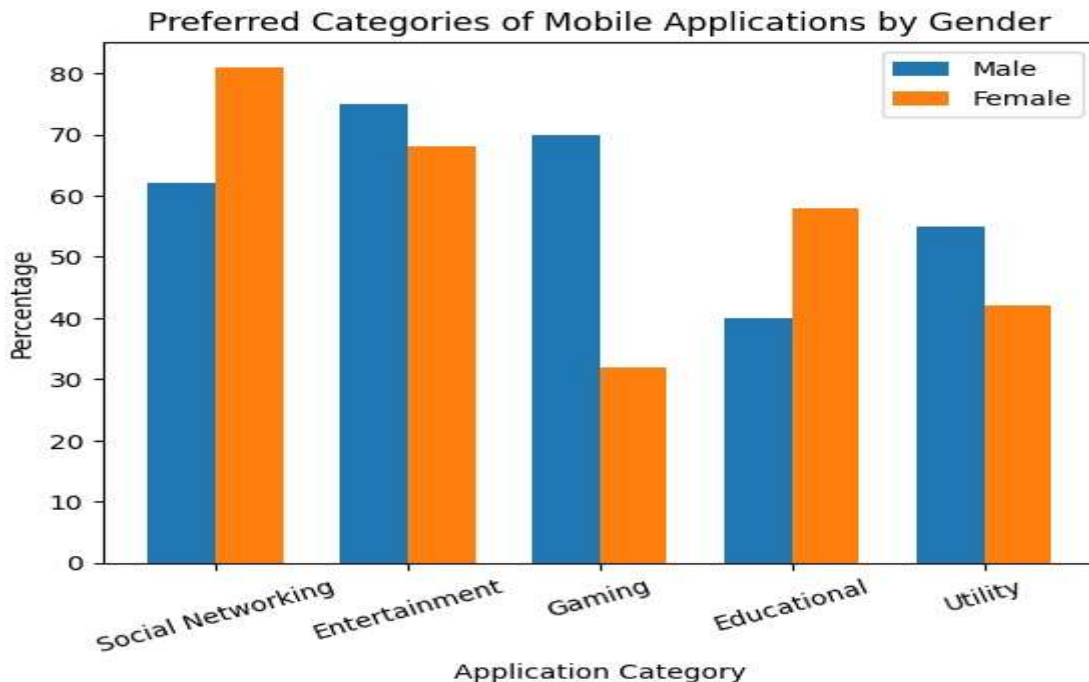
**Table 3**  
**Preferred Categories of Mobile Applications by Gender**

Application Category	Male (%)	Female (%)
Social Networking	62	81
Entertainment (Videos/Music)	75	68
Gaming	70	32
Educational Applications	40	58
Utility Applications	55	42

Table 3 demonstrates the definite gender differences in preferences to application. Women respondents were more active with regards to

social networking and educational applications as compared to male respondents who favored gaming and entertainment applications.

**Figure 3**



**Preferred Categories of Mobile Applications by Gender**

**Description:**

The results of gender-based distinctions in the

choice of favorite types of mobile apps are illustrated in Figure 3. The social networking

(81%) and educational applications (58%) were found to be much more active among female respondents. Contrary to this, the male respondents had more preferences towards

entertainment (75 percent) and gaming applications (70 percent). These results indicate clear gender-based difference on the usage patterns of mobile application preferences.

**Table 4**  
Purpose of Mobile Application Usage by Gender

Purpose	Male (%)	Female (%)
Communication	65	82
Entertainment	75	68
Education	40	58
Information Seeking	55	60

Table 4 indicates that communication was the primary purpose of mobile application usage among female respondents, while entertainment was the dominant purpose among male respondents.

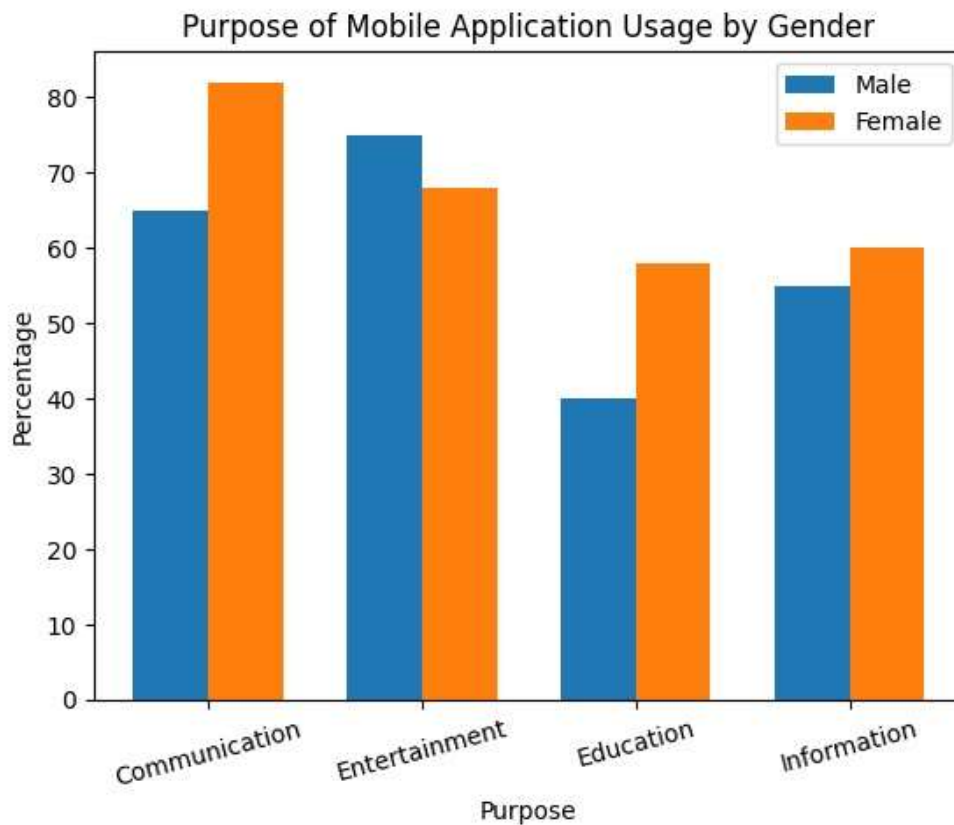


Figure 4

**Purpose of Mobile Application Usage by Gender Description:**

Figure 4 represents the main reasons of mobile application usage among the respondents. The most significant purpose of female students (82)

and male students (75) was communication and entertainment, respectively. Both genders claimed to use it educationally and informational, but female respondents were more successful.

**Table 5**  
**Perceived Impact of Mobile Applications on Daily Life**

Perceived Impact	Male (%)	Female (%)
Improves Communication	68	84
Enhances Academic Activities	42	60
Saves Time and Effort	57	63
Causes Distraction	61	55
Reduces Face-to-Face Interaction	58	52

The results of Table 5 show that the interviewees have admitted positive and negative effects of mobile application, although the female participants have noted greater academic benefits.

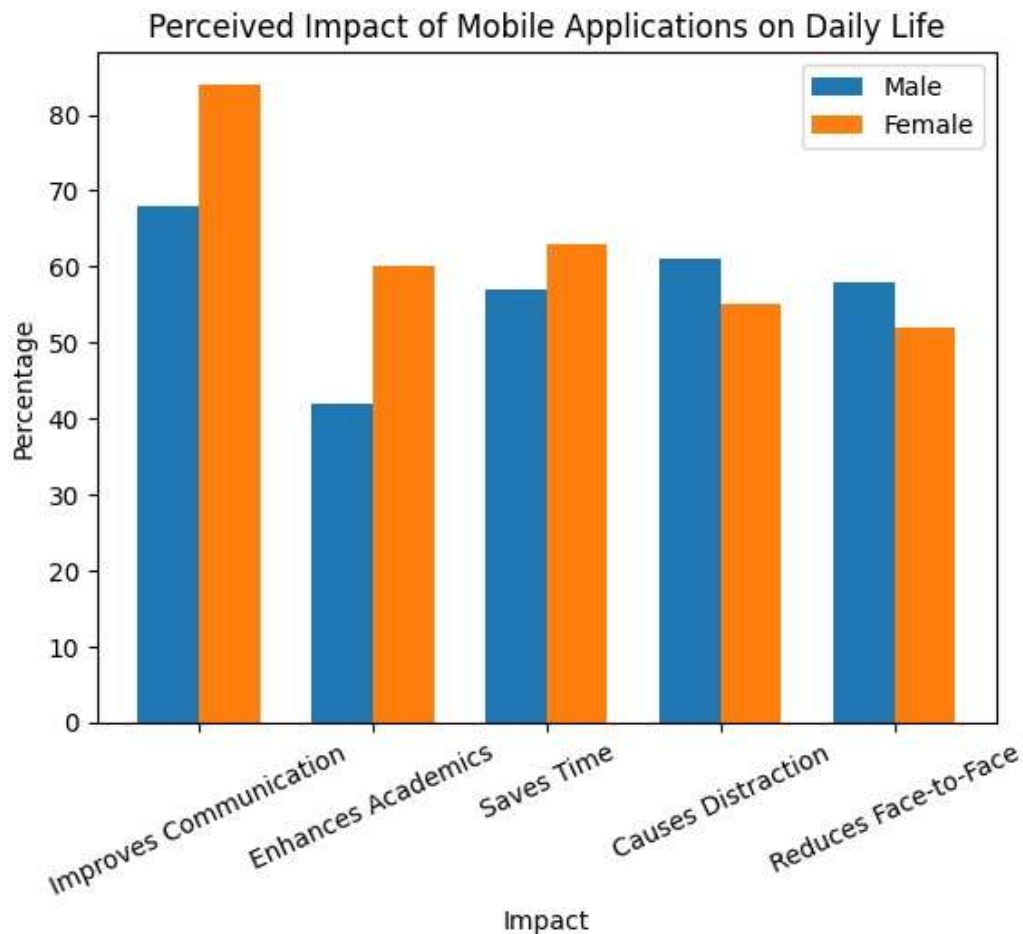


Figure 5

**Perceived Impact of Mobile Applications on Daily Life**

**Description:**

Figure 5 presents the perceptions of the respondents on the effects that mobile applications have on life. The positive effects that both genders admitted about were enhanced

communication and efficiency in time. Women also stated that they had more academic gains (60% as opposed to 42% by male respondents). Nonetheless, issues with distraction and loss of face to face interaction were also apparent in both groups.

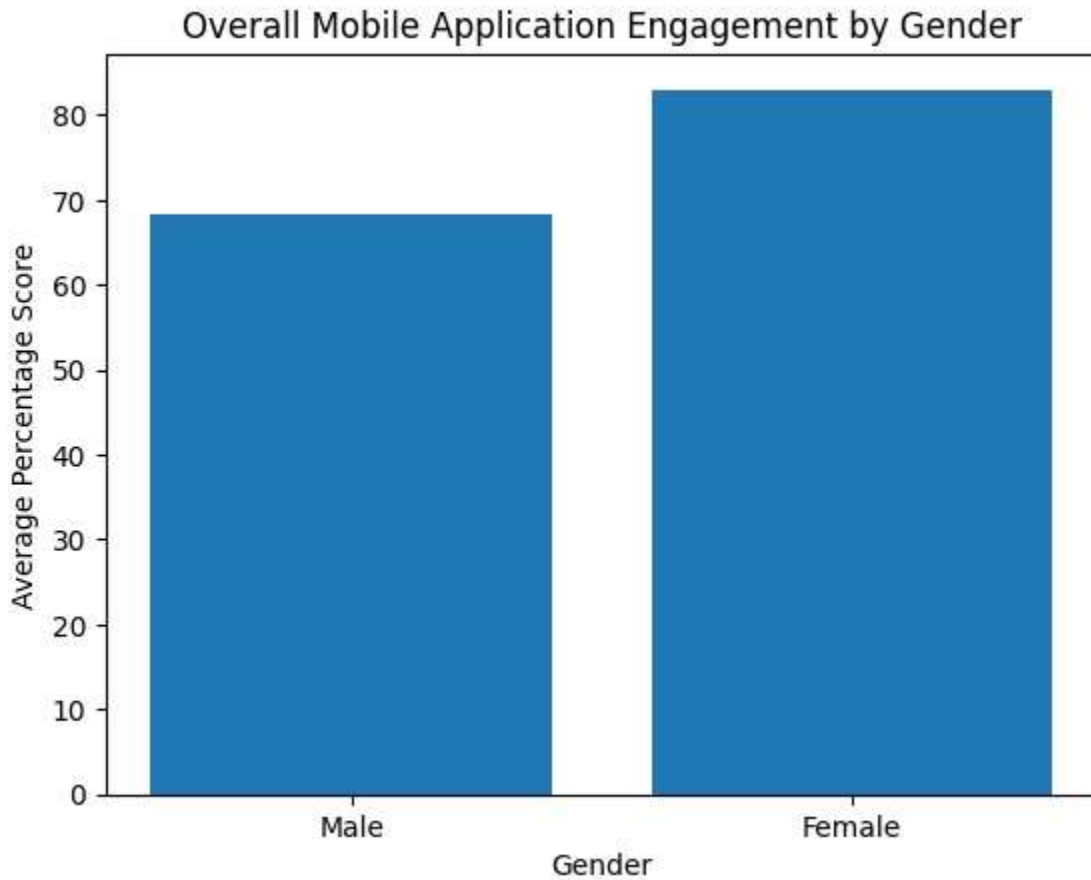


Figure 6

**Overall Mobile Application Engagement by Gender**

**Description:**

Figure 6 gives a general break down of mobile engagement on the use of applications by both male and female respondents by averaging the main indicators of usage. The chart shows that overall participation of female students is more than that of male students, which supports the conclusion that the frequency and diversification of the use of mobile applications are more characteristic of female youth.

**6. Discussion**

The results affirm that mobile applications have deeply penetrated the lives of Pakistani youth in their day-to-day lives. In line with the previous studies, the female students were found to be more engaged in communication-oriented and educational applications (Anwar et al., 2023). These trends could indicate gender communication choices and higher levels of scholarly orientation among the female learners. The male students were more inclined towards entertainment and gaming applications, which

confirms previous research of the gendered media consumption. But the general high usage between the two genders suggests that the traditional digital divide is lessening, with the differences that now correlate more on the functional preferences rather than the access.

The results also coincide with those of Anwar et al. (2024), who underline that the use of mobile phones in Pakistan affects the social behavior and lifestyle greatly. The rising importance of mobile apps in academic life brings out the possibility of mobile apps becoming effective educational aids when acted responsibly.

### 7. Conclusion

It is research that gives empirical support on gender variations in mobile application use among the youth in Pakistan. Although the engagement of both men and women in the university with mobile applications is high, the differences can be observed in the types of categories that are preferred, the reasons to use, and the perceived effects. These remarks underscore the importance of incorporating a gender sensitive policy in designing digital platform, pedagogic practices and media policy making

### 8. Recommendations

1. Educational institutions should integrate mobile applications into teaching and learning strategies to enhance student engagement.
2. Application developers should design gender-inclusive and culturally sensitive mobile platforms.
3. The use of mobile applications among young people should also be encouraged in a responsible and ethical manner by the policymakers.
4. Longitudinal and qualitative studies should be used in future studies to understand changes in the usage patterns even further.

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