

# Gender, Power and Digital Spaces: Change or a Different Shade

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## ABSTRACT

**Aim of the Study:** The study aims to determine the existence of gender power relations in digital spaces and the possibility of change.

**Methodology:** The information from the families was collected using a survey research method. A 1200 sample using the probability sampling technique from one Union Council of Rawalpindi was selected. Every UC has a 25000-30000 adult population, and based on that criterion; 300 families were chosen through a systematic random technique.

**Findings:** The results showed that 81% of people have access to smartphones and 66% of people own them, establishing the first level of the emergence of digital spaces. The second level involves time spent on smartphones and their use to meet needs, which include basic, social, recreational, and financial needs. Gender differences in financial needs were found to be very significant. Significant gender differences were found in the recreational apps, and 63% of males as compared to 57% of females use these apps. However, there was no gender difference in the use of social media; 38% of men and 39% of women used these apps, respectively. At the third level, the presence of power in digital spaces was investigated through feelings of insecurity and abuse.

**Conclusion:** The study concluded that digital technologies have broken the binary context of public and domestic spaces. The division of labor between men and women in digital spaces is gendered and linked to the capitalist economy. The study proved that these digital spaces have new shades of patriarchy, despite no change in gender power relations.

**Keywords:** Digital spaces, Gender, Insecurity, Online abuse, Power, Smartphone apps.

## Introduction

Technology has developed into a powerful force that is guiding society in a particular direction (Gurung, 2018). As a result of technological development, the world has become more connected and digitalized due to the widespread use of the internet, and it has also altered our way of thinking. Technology not only changes the way we think but also makes it simpler for us to explore new avenues, learn cutting-edge skills, and perform daily tasks (Furszyfer et al., 2021). The world has become significantly more digital as

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a result of smartphones. According to Hew et al. (2015), mobile devices are among the most commonly used technologies and have developed into common household items for the majority of people.

Smartphone applications (apps) are pieces of software that are used with various tools to carry out specific tasks (Hew et al., 2015). Anyone can access on-demand services that can be delivered to the places of their choice with the aid of these smartphone applications, which range from getting groceries delivered to their homes to receive medical care (Furszyfer et al., 2021). Smartphones offer users a lot of flexibility in how they can use their devices. In her research, Mozumder (2019), who primarily focuses on the younger generation, looks at how smartphone use affects social capital, social isolation, and the digital divide.

The term "digital divide" has received a lot of attention, but the majority of this attention has been on how accessible technology is and how widespread it is geographically. There is no doubt that the world is becoming smaller every day as a result of numerous technological advancements that are widening the gap between those who have access to these technologies and those who do not. Gurung (2018) asserts that the digital divide mainly separates those who are living in the digital age from those who are not.

In their recent study, Furszyfer et al. (2021) looked at the gender gap in the era of digitization and the problems with gender bias in the digital economy. They argued that the gender gap and wider skills gap between men and women in the technology sector have widened the gender imbalance in the smart home industry. Men own smart home devices at a rate of 11.89% compared to women's 9.63% ownership, even in developed nations like the USA. In addition, the study found that men (19.88%) are more familiar with smart home technology than women (11.89%). The study also showed that men tend to view technology more favorably than women. This is related to the notion that women aren't suited for technical careers as well as the socially constructed association between technological ability and masculinity (Furszyfer et al., 2021).

According to a study, although 4.1 billion people have access to the Internet, connectivity is not distributed equally. In general, 52% of women and 42% of men in the world's population are offline. These problems are present in the least developed nations, where one-third of women are less likely than men to have access to the Internet (OECD, 2022).

Therefore, smart technology isn't just a means of maintaining control; it's also a means by which gender norms and various paradigms can uphold, create, and challenge the ideals of masculinity and femininity (Furszyfer et al., 2021). The central issue isn't just who has access to digital networks, but also who is given power and who is subtly left out by the use of new tools. Because women typically entered the digital era later than men, new technology in the 1990s was exclusively portrayed as a male domain.

As researchers reexamine the ways in which digital technologies are embedded in socio-technical networks to produce different types of impacts, the idea of "digital differentiation" is subject to intense scrutiny from a theoretical perspective, and race, class, gender, and other offline domains of inequality continue to interact with these inequalities (Robinson, 2015).

Weedon (1987) argued that these inequalities are the result of "patriarchal power," which arises from biological differences. She clarified that it is not due to structures, because if it were, then the individual intentions, whether good or bad, would not be explained. Hence, there needs to be a theory that would describe the reason behind people oppressing each other and that could possibly account for both individual and social relationships.

## **Theoretical Underpinnings**

The authors use the concepts of gender, power, and digital spaces that have been used by various theorists in their works. Gender has been defined in a number of ways; however, we are looking at gender in the context of power relations in digital spaces.

Wajcman (2010) used the concept of "digital space" to emphasize how technology has altered life in different ways, erasing the distinction between men's and women's private and public lives, generating new spaces for social interaction, and simplifying routine tasks and economic activity.

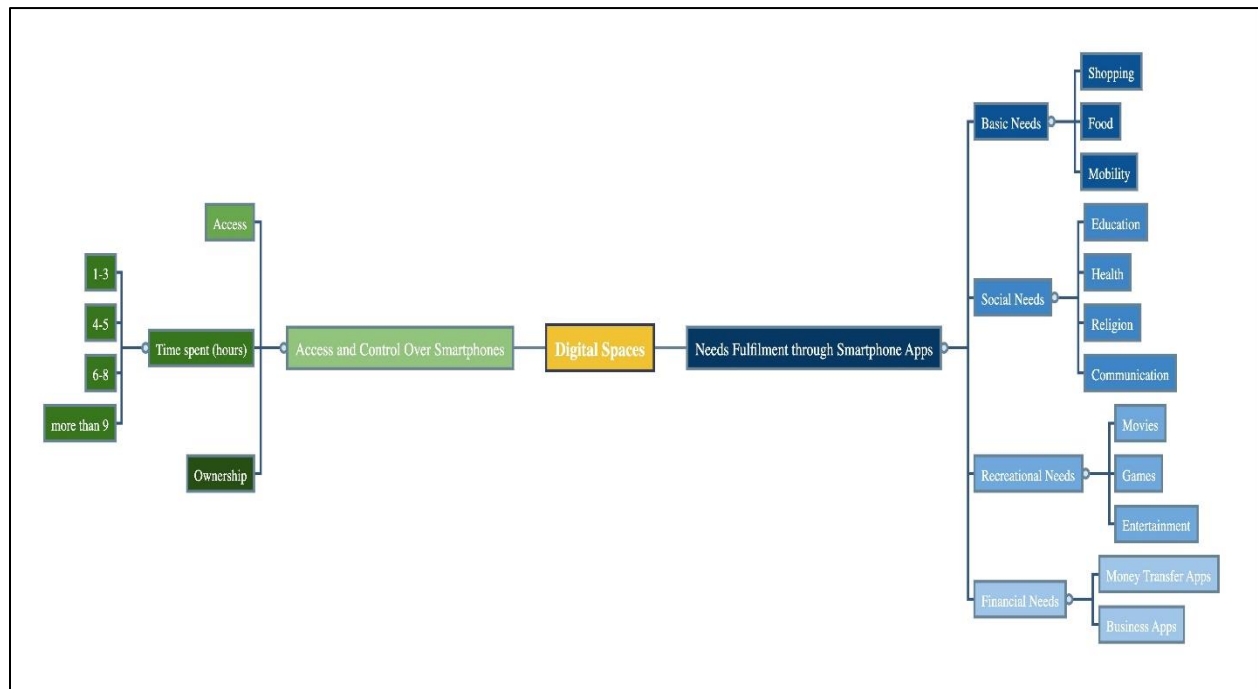
In general, men and women are responsible for performing certain tasks in Pakistani society according to the traditionally assigned gender division of work. Women perform a number of economic tasks, but traditionally, they are dependent on men for financial gains. Besides doing domestic tasks, women who work in the public sphere face different kinds of discrimination as well as their economic dependency on men and fewer women use technology, which in turn contributes to other inequalities (Hilbert, 2011). According to Agenjo-Calderon and Galvez-Munoz (2019), women also faced difficulties as a result of recent technological advancements in the workplace and in the labor market.

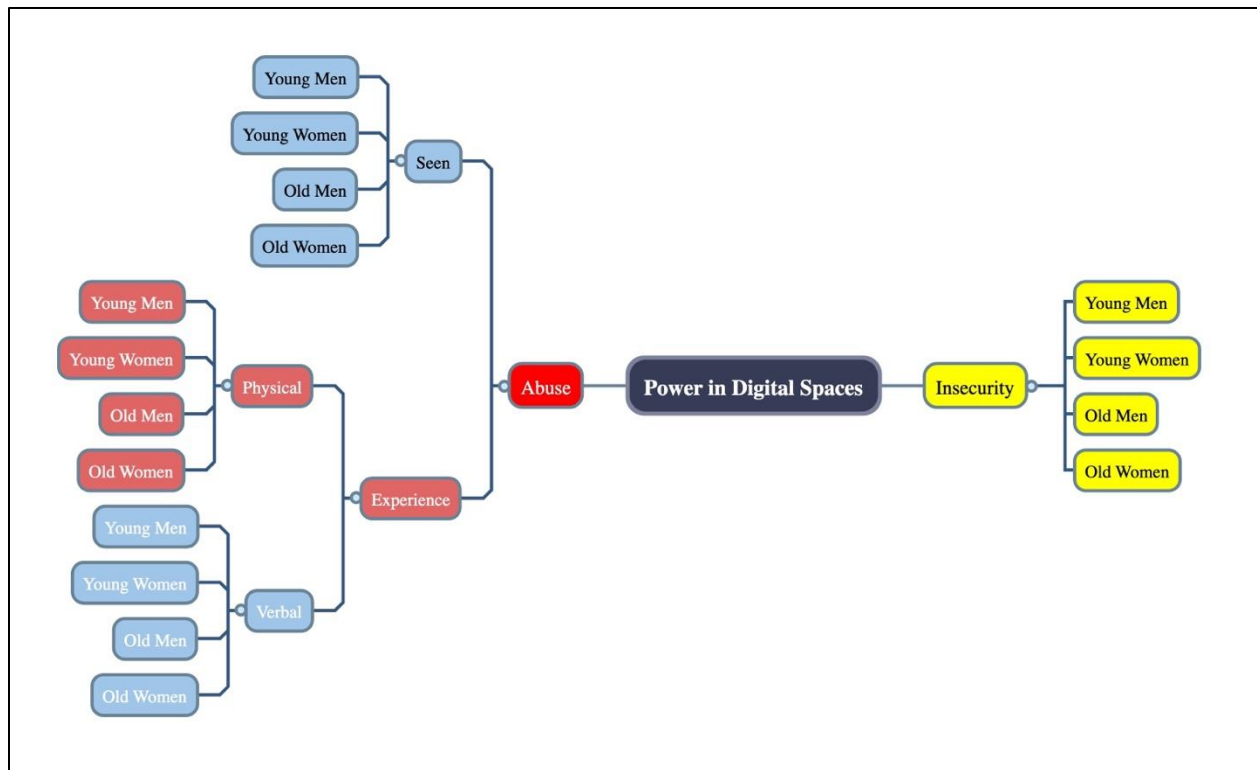
Although the feminist political framework highlighted the gender division of labor and power that exists in gender relations in domestic and public spheres, it ignored technological issues, as pointed out by Agenjo-Calderon and Galvez-Munoz (2019). Technologies are gendered, which Faulkner (2001) demonstrated by making a connection between gender and technologies and finding many ways in which technologies are gendered. One step further, Young (2010) emphasized the link between neoliberal ownership and the governance structures of the industrialized economy and viewed technology as a new business model. The digital economy was also highlighted by Webster and Zhang (2020), who argued that it is not an ideologically neutral process but rather the outcome of technological trends. However, they do not comprehend how the idea of economic activity, technological design, and other factors lead to gender relations that have power dynamics.

In digital spaces, the idea of power was raised by Furszyfer et al. (2021) about how digital networks uphold control through gender norms and other paradigms that create and challenge the ideals of masculinity and femininity. The concepts of gender, power, and digital spaces from the writings of various theorists are discussed in order to analyze the findings of our research.

## Conceptual Frameworks

Figure 1 & 2





### ***Statement of the Problem***

The way that family, friends, coworkers, and other groups interact has changed over time and now depends on how easy or difficult life is for each group. This online use of the digital world has an impact on family members in both positive and negative ways. This study is a step toward understanding how many family members use smartphones, the types of applications they use, and the implications for them in the urban context of Rawalpindi, which is a large city in Pakistan with a mix of cultures and communities.

### ***Research Questions***

1. To what extent does the adult population within households have access to and control over smartphones, for what purpose are the users using them, and how much time is spent on these devices?
2. To what extent do gender power relations exist in digital spaces?

### ***Objectives of the Study***

1. To understand the prevalence of smartphones, usage of smartphone applications, time spent on these applications and reasons of using applications across age, and gender among families of urban Rawalpindi.
2. To explore power dynamics and gender norms in the daily usage of smartphone applications within families.

### ***Methodology***

The survey research design was used to collect information from the area. Rawalpindi is a municipal corporation city and consists of 46 Union Councils (UC). The average population of one UC is approximately 25,000 adults. UC 38, which is named Ganj Mandi, was selected because of its unique location in the city, as Ganj Mandi is both a residential and business center for the whole city. It consisted

of a large number of mohallas like Bagh Sardar, Kashmir Colony, Warkshapi Mollaha, Akal Garh Mollaha, Choungi Number 3, Raja Bazar, Nawalti Cinema, etc. People from all ethnic backgrounds and from all over Pakistan have settled in this area.

### ***Sampling Frame***

A probability systematic random sampling technique was used to divide UC 38 Ganj Mandi into various streets. It was decided to use the household as the analytical unit and to include every tenth house in the street in the survey. If the participants from the tenth household declined or were not available, permission was obtained from the participants on both sides of the house. Four members from each of the three hundred (300) families that participated in the survey made up a total of twelve hundred (1200) adults, or 5% of the population. This is a moderate sample size that allows us to generalize the study's findings to other contexts with similar conditions.

### ***Tool Development***

A review of the literature and interviews with experienced smartphone users among women university graduates were used to generate the questionnaire. The questionnaire was divided into different sections. The first section consists of demographic information about the participants. The second section comprises questions related to access to and control over smartphones. The section also includes questions about the functions of apps and the justifications for using them in daily activities. The last section covers questions related to the various digital spaces in terms of security and abuse.

### ***Research Process***

A written call for applications was published for the hiring of young females to conduct field data collection. After being chosen as field researchers, they received a day of pre-training to familiarize them with the tool created for this study and how to complete the survey form. A session was held to discuss feminist approaches to field research information gathering. Field researchers learn about the reflective technique, the power it holds in their lives, and how it manifests itself in the field during the process of information gathering. After spending five days in the community, a second two-hour session was held in the middle of the field to discuss issues and difficulties encountered and to solicit feedback on reflexivity from those present. Another one-day workshop was held after the data collection was complete to solicit reflection and feedback. Everyone brought up the power of freedom to make a positive difference in their own lives and the lives of those around them during the feedback session on the last day. This gives us the ability to find a position of overall collective empowerment.

### ***Google Drive and WhatsApp Group Formation***

A Google Drive was made in order to share up-to-date details regarding each family member's daily progress during fieldwork, as well as observational notes and photos for quick review and clarification in the event of a misunderstanding. To view the participants' real-time locations and the team members' safety, a WhatsApp group was also set up. In the event of any issues, one can be located, and the person closest to them will be able to assist the woman.

### ***Consent Information***

Consent from the participants was also taken at the time of interviews as to whether they wanted to participate in the study, and they can refuse at any time if they feel uncomfortable. A written consent form was prepared for their willing signatures (an Urdu and English version of the consent form is attached), and verbal consent is also acceptable if they are unable to sign their voluntary participation on paper.

### ***Data Analysis Techniques***

The data was collected through a survey form, and the quantitative data gathered through the questionnaire was entered into the software SPSS to run statistical analysis. The cross-tabulation and the chi-square test were used to determine the difference between gender and age.

### ***Feminist Ethics***

Feminist values may be understood in a variety of ways, but creating space and opportunities to reveal lived realities of power and structural inequalities and the difference is one way of looking at the forefront of feminist values. The current study is looking for gender and power in digital spaces as a change or a different shade of the same patriarchal pattern. The key feminist value underpinning this study is to challenge and reduce inequalities that put women on the margins of patriarchal power while at the same time aiming to exercise their agency.

Feminist ethics were upheld during the whole research process. Getting informed consent was the central ethical practice that involved both formal and informal consent. It was up to the participants whether they wanted written or verbal consent, and before going into formal interviews, they were informed about the study objectives and gave consent, and those who were willing to participate were included in the study.

### **Results**

The survey data was analyzed statistically, and presented in graphs, cross-tabulation, and tested through chi-square. Following is the presentation of the results:-

Table 1: *Demographic information of the participants*

<b>Sr. #</b>	<b>Variables</b>	<b>Categories</b>	<b>F</b>	<b>%</b>
<b>1</b>	Gender	Male	600	50
		Female	600	50
<b>2</b>	Age (range) 18-29	Young Male	300	25
		Young Female	300	25
		Above 30	300	25
		Old Male	300	25
		Old Female	300	25
<b>3</b>	Marital Status	Single	353	29
		Married	847	71
<b>4</b>	Working Status	Home Makers	398	33
		Self- employed	311	26
		Employed	234	20
		Students	184	15
		Unemployed	073	06
<b>5</b>	Ethnic Group	Punjabi	794	66
		Kashmiri	143	12
		Pashtun	119	10
		Urdu speaking	114	09
		Hazra	020	2
		Sindhi	010	1

Table 1 shows the demographic results of the participants. The results indicate the gender, age, marital status, working status, and ethnic groups of the participants. The gender and age of the participants

consist of 50% young and old male and female participants, respectively. The findings also show that 71% of married participants are married, and the rest are single participants. The working status of participants included homemakers (33%), self-employed (26%), employed (20%), students (15%), and unemployed (6%). In the study area, people belong to different ethnic groups, and the highest living ethnic group is Punjabis (66%), followed by Kashmiris (12%, Pashtuns (9%), and Urdu speakers (9%).

Table 2: Access to and control over smart phones

Smartphones	Yes		No	
	F	%	F	%
Access to	970	81	230	19
Ownership	793	66	407	34

Table 2 shows the results of the access to and ownership of smartphones by the participants. 81% of the participants have access, while 66% of the participants own smartphones in the study area.

Table 3: Access to smartphones across age and gender

Gender category	Age difference on access to smart phone			$\chi^2$
	Young	Old	Total	
Male	289(48%)	211(35%)	500 (83%)	.000
Female	277 (46%)	193 (32%)	470 (78%)	.000

Table 3 specifies the results of access to smartphones in terms of age. The chi-square value reveals a highly significant difference between the younger and older generations in terms of access to smartphones. These results are similar to the study of Mozumder (2019), who reported that the younger generation uses more smartphones than the old generation, and the younger generation negotiates their freedom and autonomy within and outside of the family. However, the results in access to smartphones found a non-significant gender difference, meaning both men and women have access to smartphones. The results were consistent with the previous research that highlighted that due to technological advancement, the world has become more connected and digitalized (Furszyfer et al., 2021; Rodriguez et al., 2015) in the urban centers of the world, and smartphones have played a key role in digitalizing the world. Smartphones have evolved into essential household items for the majority of people across the globe (Hew et al., 2015).

Table 4: Smartphones ownership across age and gender

Gender category	Age difference on smart phone ownership			$\chi^2$
	Young	Old	Total	
Male	260(43%)	178(29%)	438(73%)	.000
Female	214(35%)	141(23%)	355(59%)	.000

Table 4 shows the results of smartphone ownership in terms of age and gender. With regard to control over smartphones, it was found that 66% of the participants in the study area own smartphones. The chi-square value in the table reveals a highly significant difference between younger and older generations in terms of ownership of smartphones. The younger generation owns more smartphones as compared to the older generation. In a similar manner, more men as compared to women hold more control over smartphones in the area. These results vary with global research, as Statista's report for 2022 indicated that nearly 84% of people globally own a smartphone. Moreover, Furszyfer et al. (2021) reported that men own 12% of smart home devices as compared to women, who own 10% of smart home devices within households in the context of the USA.

Table 5: *Time spent daily on smart phones*

Sr. #	Time spent on smart phone	F	%
1	1-3 hours	504	42
2	4-6 hours	224	19
3	7-9 hours	125	10
4	More than 9 hours	128	11
5	Not applicable	219	18
	<b>Total</b>	<b>1200</b>	<b>100</b>

Table 5 shows the frequencies and percentages of time spent on smartphones. 42 percent of participants use smartphones for one to three hours per day, 19 percent use them for four to six hours per day, and 10 percent and 11 percent use them for seven to nine hours or more than nine hours per day, respectively. These results are similar to the previous study by Massey (1994), who argued that people connect through these digital spaces, which are public, and that these public spaces are those settings where people are valued according to their interpersonal connections. These digital spaces have not only altered public spaces but also established digital spaces as public spaces.

Table 6: *Time spent daily on smart phones across age and gender*

Age category	Time spent on smart phone	Gender differences		$\chi^2$
		Male	Female	
<b>Young</b>	1-3 hours	92 (15%)	154 (25%)	.000
	4-6 hours	79 (13%)	68 (11%)	
	7-9 hours	55 (9%)	35 (6%)	
	More than 9 hours	65 (10%)	22 (4%)	
<b>Old</b>	1-3 hours	110 (18%)	144 (24%)	.000
	4-6 hours	044 (7%)	033 (6%)	
	7-9 hours	026 (4%)	009 (1%)	
	More than 9 hours	030 (5%)	011 (1%)	

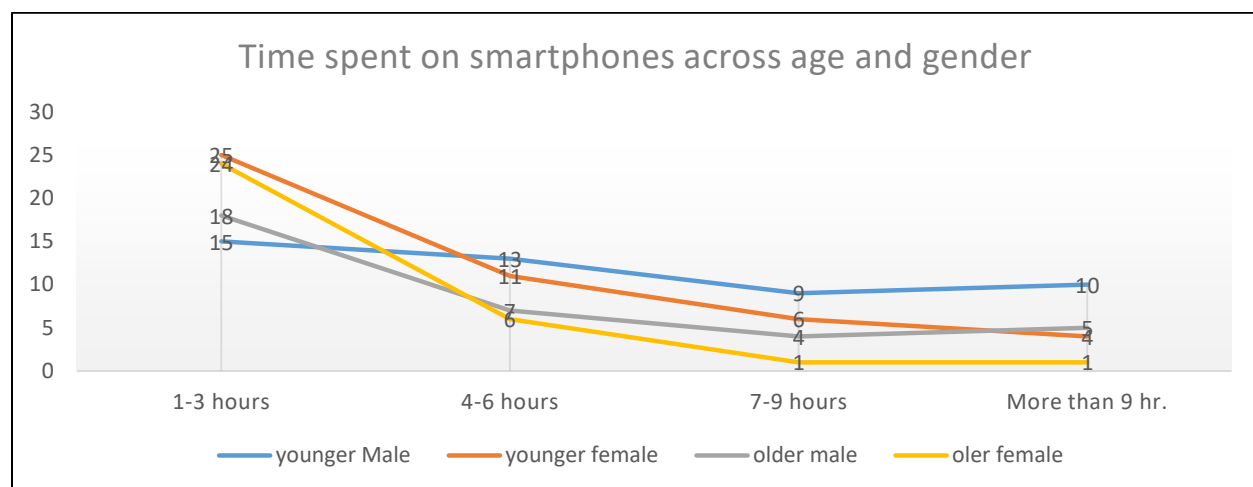


Table 6 indicates the results of daily time spent on smartphones across ages and genders. The chi-square value shows a highly significant gender difference in daily time spent on smartphones. Women of all ages spend less time on their smartphones on a daily basis than men of all ages.



Table 7: *Number of downloaded apps on phones*

Sr. #	Number of downloaded apps	F	%
1	0-10	796	66
2	11-20	164	14
3	21-30	019	01
4	More than 30	009	01
5	Not applicable	218	18
	Total	1200	100

Table 7 displays the results of the number of downloaded apps in addition to the built-in apps on smartphones. According to the findings, 66% of participants had up to ten downloaded apps, and 14% had up to 20 downloaded apps on their smartphones. Besides inbuilt smartphone applications, participants were asked about the number of downloaded apps; 66% reported having up to ten downloaded apps, and 14% reported having up to twenty downloaded apps on their smartphones. This is supported by the study conducted by Rodriguez et al. (2015), who emphasized that smartphone applications not only support their users in attaining specific goals but also assist in their daily activities.

Table 8: *Frequency and percentage of apps usage*

Sr. #	Using these apps	F	%
1	Yes	972	81
	No	010	01
	Not applicable	218	18
		1200	100

Table 8 shows the results of the frequencies and percentages of app usage. 81 percent of participants use these for various purposes. Interacting and communicating through these smartphone apps for different purposes on a daily basis established it as a digital space, which Foka and Arvidsson (2014) mentioned as those spaces where all the activities happen to meet the basic, social, recreational, and financial needs of people. The results showed that these downloaded apps satisfied various needs among people of various ages and genders.

### ***Using Digital Space for Basic Needs***

Table 9: *Fulfilling basic need for using these downloaded apps across age and gender*

Sr. #	Reasons	Age	Gender		Total
			Male	Female	
1	Food	Young	231(38%)	178 (29%)	409 (68%)
		Old	106 (17%)	085 (14%)	191(32%)
2	Shopping	Young	96 (16%)	72 (12%)	168 (28%)
		Old	32 (5%)	34 (6%)	066 (11%)
3	Mobility	Young	115 (19%)	72 (12%)	187 (31%)
		Old	46 (8%)	32 (5%)	078 (13%)

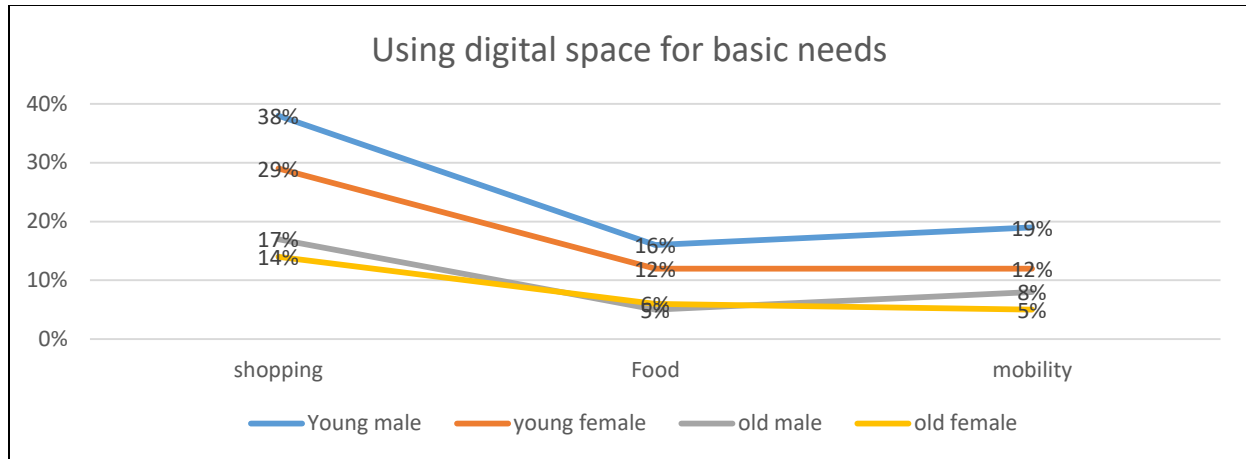


Table 9 reveals that these downloaded apps fulfill different basic needs across different ages and genders. Young boys use these apps more than young girls for things like food and travel, whereas old men use them more than old women to fulfill their basic needs. These spaces follow the pattern of how traditionally women have relied on men to meet their needs for food and travel. These results are in line with the idea from the report of Furszyfer et al. (2021) that smartphone technology is not just an instrument of control but also a tool through which gender norms can create and maintain masculinity and femininity.

### *Using Digital Space for Social Needs*

Table 10: *Communication, education, health and religious (social needs) apps usage across age and gender*

Sr. #	Reasons	Age	Gender		Total
			Male	Female	
1	Communication	Young	279 (47%)	270 (45%)	549 (91%)
		Old	202 (33%)	192 (30%)	394 (65%)
2	Education	Young	080 (13%)	097 (16%)	177 (30%)
		Old	033 (6%)	023 (4%)	056 10%)
3	Health	Young	060 (10%)	080 (13%)	140 (23%)
		Old	052 (8%)	057 (10%)	109 (18%)
4	Religious	Young	104 (18%)	130 (21%)	234 (39%)
		Old	097 (16%)	093 (16%)	190 (32%)

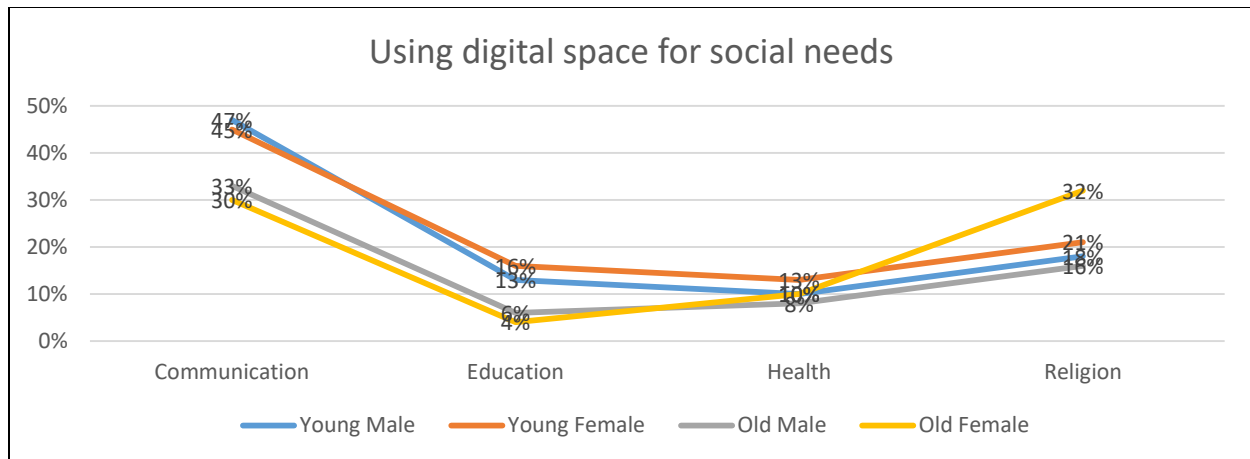


Table 10 shows the results of the usage of downloaded apps for fulfilling social needs across ages and genders. The results indicate no gender differences between the younger and older generations in using communication apps, while a slight gender difference is found in using educational, health, and religious apps between younger and older women as compared to younger and older men. These results are consistent with the findings of Hilbert (2011), who highlighted that women around the world are discriminated against in fields like employment, income, and education, which leads to existing inequalities about women using less technology. In the same manner, Faulkner (2001) reported that technologies are gendered in a number of ways, and Wajcman (2010) highlighted a link between technology and gender. The research found no gender or age differences in WhatsApp communication, but there were small gender differences in Facebook usage. Facebook is more popular among young and older men as compared to younger and older women. However, the findings also showed that young girls and women were more likely to use Instagram than boys and men.

### ***Using Digital Space for Recreation***

Table 2: *Using apps for recreation purposes across age and gender*

Sr. #	Reasons	Age	Gender		Total
			Male	Female	
1	Entertainment	Young	278 (46%)	264 (44%)	542 (90%)
		Old	182 (30%)	161 (26%)	343 (57%)
2	Gaming	Young	200 (33%)	153 (25%)	353 (58%)
		Old	056 (9%)	060 (10%)	116 (19%)
3	Watching movies	Young	266 (44%)	253 (42%)	519 (86%)
		Old	171 (28%)	159 (26%)	330 (55%)

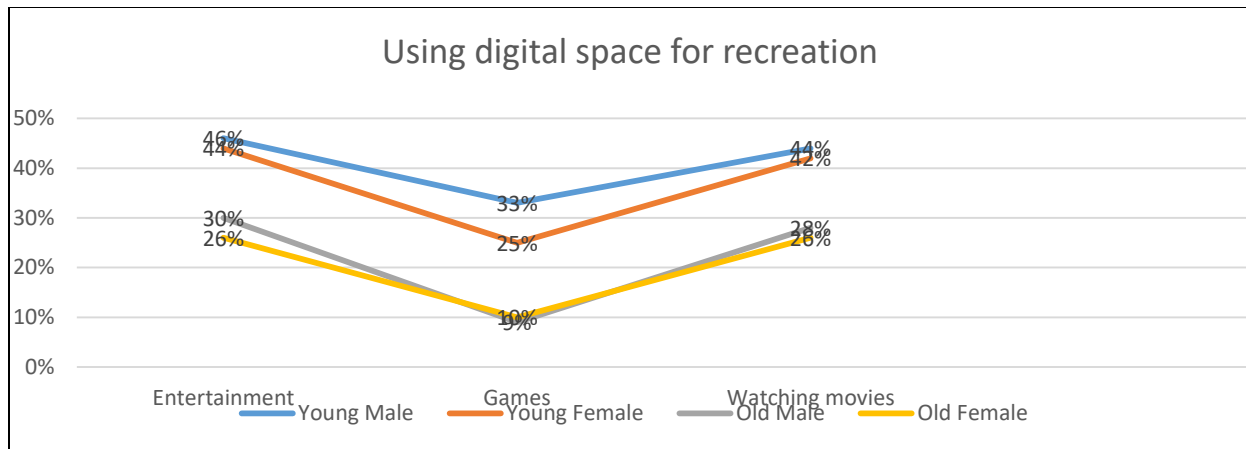


Table 11 indicates the results of the usage of downloaded apps for fulfilling recreation purposes across ages and genders. The results show a slight gender difference in the use of entertainment apps, with 46% of younger boys as compared to 44% of younger women, and between younger and older men and women, 36% and 26%, respectively. With regard to results about gaming habits through the use of downloaded apps, there are gender differences among the younger generation, which is 33% young boys as compared to 25% young girls, but no gender differences are found among the older generations. However, there are generational differences in gaming, with 29% of the younger generation playing compared to 10% of the older generation. The findings also highlight significant generational differences in watching movies, with 44% of the younger generation watching movies as compared to 28% of the older generation, but no gender differences are found.

### Using Digital Space for Financial Needs

Table 12: Apps usage for financial purposes across age and gender

Sr. #	Reasons	Age	Gender		Total
			Male	Female	
1	Money Transfer	Young	160 (26%)	69 (12%)	229 (38%)
		Old	091 (15%)	42 (7%)	133 (22%)
2	Business	Young	58 (10%)	19 (3%)	77 (13%)
		Old	31 (5%)	07 (2%)	38 (6%)

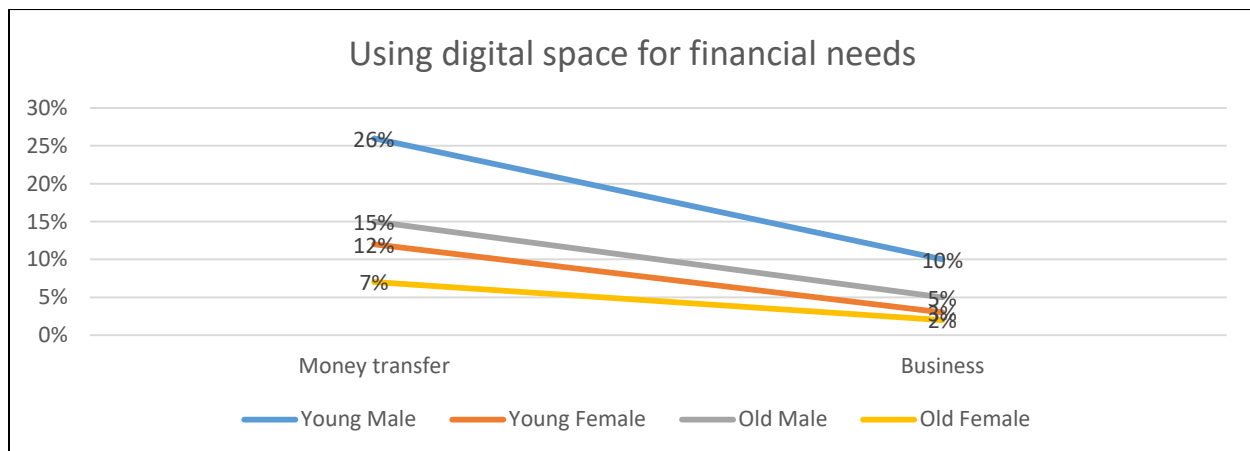


Table 12 shows how these downloaded apps for financial-related matters help people of all ages and genders. Money transfer apps are used by 26% of young males compared to 12% of young females, and 15% of old males use them compared to 7% of old females. With regard to business-related apps, 10% of young males as compared to 3% of young females use business apps, while 5% of older males as compared to 2% of older females use business apps. Traditionally, women are dependent on men for financial needs and money-related matters, which is consistent with the same patriarchal pattern found in using these apps. Economic dependency on men is the old age status of women, which is questioned in public spaces but not in digital spaces, and Huws (2019) argued that women's participation in digital spaces has increased, but no one questions the status quo of a system that maintains an exclusionary system.

### ***Power in Digital Spaces***

Table 13: *Self-reflection on using apps across age and gender*

Sr. #		Age	Gender	
			Male	Female
1	Feel happy while interacting with others	Young	238 (40%)	220 (36%)
		Old	168 (28%)	157 (26%)
2	Apps played a positive role	Young	172 (28%)	186 (31%)
		Old	131 (21%)	122 (20%)
3	Using other phone apps while having own phone	Young	59 (9%)	118 (19%)
		Old	58 (9%)	086 (14%)
4	Feeling insecure	Young	211 (35%)	164 (27%)
		Old	152 (25%)	130 (21%)
5	Have ever seen online abuse	Young	107 (18%)	101 (17%)
		Old	067 (11%)	056 (9%)
6	Experience online abuse	Young	070 (12%)	074 (12%)
		Old	054 (9%)	051 (9%)
7	Online interaction and effects on relations	Young	142 (23%)	139 (23%)
		Old	092 (15%)	086 (14%)
8	Get effected verbally	Young	95 (16%)	81 (13%)
		Old	78 (13%)	63 (10%)
9	Scolded from parents	Young	143 (24%)	121 (20%)
		Old	010 (1%)	010 (1%)
10	Hit physically	Young	23 (3%)	11 (1%)
		Old	04 (.5%)	00 (0%)
11	Isolation from the family	Young	17 (2%)	18 (2%)
		Old	9 (1%)	12 (1%)

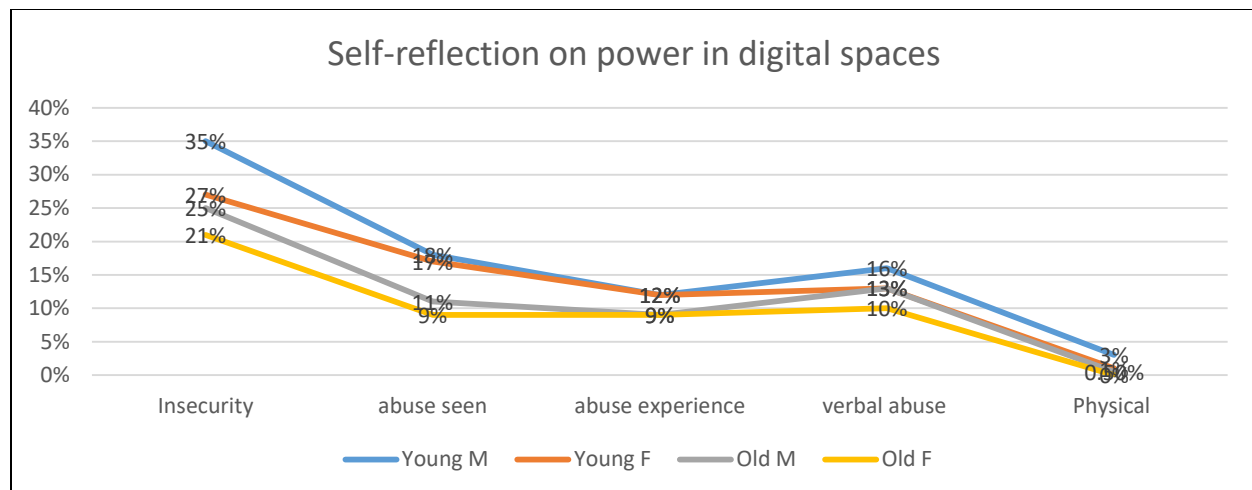


Table 13 displays the results of self-reflections on app usage by age and gender. The results of self-reflection from using these downloaded apps showed that the top 40% of young males, compared to 36% of young females, felt happiness, while 28% of old men and 26% of old women also reported feeling happiness. The positive role of these apps in their lives was mentioned by 28% of young males and 31% of young females, while 21% of old males and 20% of old females mentioned the positive role of these apps in their lives. There are 19% more young females than young males (9%) using apps from other phones for a variety of reasons, and similarly, there are 14% more old females than old males (9%) using apps from other phones. This is because women have a habit of keeping their phone numbers private from unfamiliar men. However, 35% of young males and 27% of young females reported feeling insecure online, and this gender disparity persists in older men and women (25% and 21%, respectively).

When asking about observing online abuse, gender differences are not present; however, age differences are, with the younger generation outnumbering the older generation. The results are in line with what people who have observed online abuse have reported experiencing; there are no gender differences, but there are age differences, with 17% of the younger generation reporting abuse compared to 10% of the older generation. However, when it comes to online verbal abuse and its effects on participants, more young males (16%) reported it than young females (13%), and this was consistently reported by more old men (13%) than old women (10%) who faced online verbal abuse. Similarly, when asked who had been scolded by their parents for using smartphones, 23% of young males reported being scolded by their parents due to increased online interaction, compared to 20% of young females.

## Discussion

The purpose of the study is to better understand digital spaces and determine whether or not gender norms and power are present in digital spaces. In traditional Pakistani society, the division of work between men and women in the domestic and public spheres is clearly defined. According to Wajcman (2010), technology has changed life in a very different way, erasing the distinction between men's and women's private and public lives, creating a new space for social interaction, and facilitating both daily tasks and economic activity.

This study established digital space as a reality of our lives and empirically located it through the access and control of smartphone applications between men and women, as well as through the time spent using these apps. The findings revealed that young men and women possess and use smartphones at a higher rate than older men and women. The ownership of smartphones still showed inequality, with more men than women owning one. The findings of daily smartphone usage across ages and genders are shown in Table 6 in a similar manner. The chi-square value showed a very significant gender difference in the amount of time each day spent using smartphones. Women of all ages use smartphones less frequently than men do, on average, across all age groups.

Furthermore, Faulkner (2001) claimed that there are numerous ways in which technologies are gendered, and Wajcman (2010) emphasized a link between gender and technologies. There is evidence that the traditional pattern of women depending on men to meet their basic needs exhibits a slight gender difference and does not follow the same path. According to Table 9, young boys are more likely than young girls to use these apps to satisfy basic needs like food and travel, whereas older men are more likely than older women to do so. Table 10 revealed that there are no gender differences in the use of communication apps between younger and older generations, but there is a marginal gender difference in the use of educational, health, and religious apps between younger and older women as compared to younger and older men. In a similar vein, Table 11 showed a marginal gender difference in the use of entertainment apps among younger men and women, while this difference is greater among older men and women. There are no differences between young men and women in the younger generation's use of gaming apps or movie watching, but there is a greater gender gap in the older generation.

Discrimination against women in the workplace and income inequality contribute to the fact that fewer women use technology overall, which in turn contributes to other inequalities (Hilbert, 2011). Agenjo-Calderon & Galvez-Munoz (2019) mentioned that women face challenges as a result of recent technological advancements that are related to work and employment. Traditionally, the economic dependence on men is due to the old age status of women, and Table 12 shows similar findings regarding financial-related issues and notable gender differences discovered in the use of money transfer apps and business apps by men and women of all ages.

The second objective of the study was to find out the presence of power in digital spaces. Although power and the gendered division of labor are heavily emphasized in the feminist political-economic framework, it ignores technological issues (Agenjo-Calderon & Galvez-Munoz, 2019). Young (2010) sees technology as a new business model and emphasizes the connection between neoliberal ownership and the industrialized economy's governance structures. Webster and Zhang (2020) argued that the digital economy is not a historically or ideologically neutral process but rather a result of technological trends. They are unable to understand how the concepts of economic activity, technological design, and other factors result in gender relations. The findings revealed that more young people than older people expressed happiness while using these apps, and younger people than older people emphasized the positive impact these apps had on their lives.

In contrast, Table 13 highlighted the results of the presence of power in these spaces and the gender differences found regarding insecurity, with more young men than young women in digital spaces, while a slight difference was found between older men and women. This new power dynamic between men and women makes more men feel uneasy in online communities where information is shared. In digital spaces, the idea of power raised by Furszyfer et al. (2021) about how digital networks uphold control through gender norms and other paradigms that create and challenge the ideals of masculinity and femininity is very much in evidence. Table 13 demonstrates that there are no gender differences when people are asked if they have witnessed online abuse. However, there are age differences, with the younger generation outnumbering the older generation. When it came to the effects of online verbal abuse on participants, however, more young men than young women reported experiencing it, and older men than older women consistently reported it. Similar to the previous finding, more young men than young women said that their parents had chastised them for using smartphones because of the rise in online interaction.

## **Conclusion**

In conclusion, digital technologies have established a new space and broken the binary context of public and domestic spaces. As the majority of the people in this study sample have access to smartphones, and more than half of the sample population owns a smartphone, as well as having downloaded more than ten applications of their interest for interaction and communication, digital spaces are a reality of our lives. In terms of the division of labor between men and women in digital spaces, it is gendered and linked to the

capitalist economy. Technologies are taken as a business model, not as a space to interact and communicate. These technologies were once thought to be gender-neutral, but over time, it became clear that they were actually biased against women. The study proved that these digital spaces are mostly masculine and have new shades of patriarchy where predominantly financial and money transfer apps are used by men. While reflecting on the presence of online power, it was found that there are slightly different shades of power in terms of online insecurity and facing verbal abuse, while young men reported more insecurity than young women. Overall, there is no change in gender or power, but there is some blurring of patriarchal shades.

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## Conflict of Interest


Authors have no conflict of interest.


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