

## **Smartphone Applications in Skill Development and Women Entrepreneurship: Analyzing Perceptions of Young Females' Smartphone Applications in Skill Development and Women Entrepreneurship**

### **Abstract**

*The use of smartphone applications have brought a massive change and empowered the personal and professional lives of women by providing a platform to enhance their talent. Main purpose of this study was to examine the usage of smartphone applications in skill development and digital entrepreneurs among females. Further the research study explored how smart phones provide platforms for early startups and how the young women are implementing the skills to their practical life. Qualitative research approach was used by focus group discussions. The study concluded that there are lots of beneficial uses of smartphone applications. Smartphone application works as a platform which gives lots of opportunities to women to enhance their abilities, skills and entrepreneurship. It is in-expensive and user-friendly medium of learning and earning and aiding in the empowerment of young women*

**Keywords:** *smartphone applications, women entrepreneurship, skill development*

### **INTRODUCTION**

Smartphone applications dramatically increased as a valuable learning tool for practical skills and as a business platform for females. They are playing very beneficial role for women to learn skills and also opened the gates for women digital entrepreneurship. This study is an attempt to examine the usefulness and the role of smartphone applications in both perspectives, and how they are helping females to shape their capabilities. Smartphone applications represent a new paradigm in this relationship between technology and female empowerment. Technological development in the field of electronics and telecommunication has brought about a revolution in the life of people. The technical products so developed have brought about a noticeable change for the better in the personal and professional lives of people by enhancing their

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capabilities and empowering them to enrich their life and life experiences. The diffusion of innovation theory by Rogers elaborates how innovative ideas and technology gains momentum and is accepted among consumers. It explains the process of acceptance and implications of new ideas and technology. The recognition of technology to enhance individual skills is continually increasing. The implementation of new technology and ideas are producing more opportunities for entrepreneurs (Zanello, Mohnen & Ventresca, 2016). The acceptance of smart phones has empowered women whether working or non-working. Smartphones have a lot of applications that are totally about skill learning and business startups opportunities for women. Women can set up an online business sitting at home. These current facts and future projections indicate that mobile technology has already become one of the most ubiquitous technology devices in human development, and this is the most widely used device for accessing market information in a business domain.

In order to promote skills and employability of women there are lots of apps for women to enhance their skills for example for artists and others who are looking for new ways to embrace creativity. These apps will also help in increasing exposure or discover the work of others, from peers to art historical masters (Shashank & Prateek, 2019). The ratio of women entrepreneurs is very low as compared to men in developing countries like Pakistan. There are multiple reasons for the low percentage of women entrepreneurs including business problems, social problems and technical issues (Tulus, 2009; Aslam, Latif & Aslam, 2013; Roomi, & Parrott, 2008; Afshan, Shahid & Tunio, 2021). However women are struggling to fight these problems and create their space to work and become financially independent as women entrepreneurs in the rural areas are empowering themselves through self-employment in the agricultural and non-agricultural businesses (Ahammad & Moudud-ul-Huq, 2013). Mobile applications have also transformed the use of social media applications as it is no longer just a means of communication with others but also a platform for business and learning. Mobile apps are considered to be the cheapest and perhaps the most effective marketing tools for business and easiest tool of learning skills. Skill development in case of women is not only to prepare them for jobs but also to improve their skills as well as Health Management, Decision Making, Self-confidence or Conflict Management (Ahmad, Sinha & Shastiri, 2016).

Mobile phone technology as a tool can facilitate women's active participation in business, access to market information, promote economic growth, and alleviate poverty (Huyer & Sikoska, 2003). Mobile technologies enable women entrepreneurs to access market information about their products without physical travel since trading exchanges take place in virtual market space created by mobile phones and a layer of the application software. Smartphone applications have allowed women to recognize, create and nourish their skills and entrepreneurial opportunity through online selling

and realize that their free time can be used to earn profit. This research attempts to identify the important role of smartphone applications and how women are utilizing these tools to start their small business. Developed and developing nations have come to understand that women's entrepreneurial activities contribute to socioeconomic growth and utilizing the full potential of all human resources is essential for sustainable development (Jobber, 2010). Mobile marketing apps have been progressively employed as business gadget innovations in developing economies. One identified opportunity is the application of technology to enable women entrepreneurs' access to market information with ease (Kapinga Montero & Mbise, 2019). Mobile phone technology as a tool can facilitate women's active participation in business, access to market information, promote economic growth, and alleviate poverty (Huyer & Sikoska, 2003).

Presently, the use of smartphone apps can be seen in areas such as communication skills, photography, editing, blogging, education, cooking and baking, clothing, knitting, handicrafts, gardening, beauty, art and crafts, jewelry, home and event decor, graphics and many more. Mobile applications satisfy users on different levels of the pyramid of needs owing to their sense of belonging. Now there are other lots and lots of applications available on our phones for learning skills and earning with your skills. It seems that there are apps for almost every task and have changed traditional businesses (Laudon, et al, 2016). Mobile Applications provide a platform to begin new learning such as new languages. There are several applications for skills development like Pinterest, Reddit, tumblr, She Trades etc. and also there are several apps which give the platform to present oneself like Instagram, YouTube , blogs, etc. Tools for personal branding are various and include blogging, Facebook, Twitter, Pinterest, YouTube, Instagram, Quora, Slideshare, podcasts, wikis, and videocasts (Clark, 2011; Chen, 2013; Elmore, 2010; Harris & Rae, 2011; Kleppinger & Cain, 2015; Pace, 2008; Poepelman& Blacksmith, 2014; Vitberg, 2009).

This study is carried out with the expectation that it contributes academically and practically to the better understanding of what opportunities prevail for female entrepreneurs if they choose to learn any skill or start or operate their skills in business by using mobile phone applications. smartphone applications have allowed women to recognize, create and nourish skills and entrepreneurial opportunity through selling online and realize that their time can be used productively. There is low investment and operating costs involved in startups through social networking mobile apps like Instagram that eventually motivate women entrepreneurs. Since, many women can run their businesses from home and at their own convenience; this has helped them to have a better work-life balance, where they can effectively manage both their professional and personal lives simultaneously. These days both men and women are connected

with smartphones and women are also starting their startups through social media platforms or applications and learning beneficial life skills. Thus the reason for selecting this topic is to find out how women are earning money through these apps and what are the basic tips for others.

The significance of the study is that mobile apps are a very beneficial gadget for women to learn skills according to their interests and needs. Through this research people came to know about the very important role of mobile apps and how women are utilizing these tools to start small businesses. People come to know what type of knowledge and skills are required in today's digital world to develop professionally and succeed as an entrepreneur. Through this study women can find that there are lots of applications which can act as a turning point in women's life; the only thing that they need to know about are the benefits of mobile apps. The specific focus on girls is because the narrative of empowerment is most frequently applied to them.

### **Research Objectives**

1. Analyzing the trend of smartphone applications in skill development among females
2. Identifying the anticipation of smartphone apps in women entrepreneurship and empowerment.
3. Find out how smartphone is providing platforms and giving ideas to women for early startups.
4. To examine the implementation of the skills in practical life.

### **Research Questions**

**R Q:** How do mobile applications play a contributory role in women's lives?

## **LITERATURE REVIEW**

Chattu et al, (2013) mentioned that Information Technology plays an important role in the field of women empowerment. Women must be encouraged to bring their vision and leadership, knowledge and skills, views and aspirations into the development agenda from the grassroots level in order to make it accessible to all women. Wally & Koshy (2014) argued towards the internet penetration rate of mobile phone and social media and argued that over 80% utilized social media for social and commercial purposes. Srinivasan (2015) has cited mobile applications as a game changer for rural women entrepreneurs. However, the advantages it has given to the urban woman have not been seen by her rural sister on the other side of the digital divide. While traditional IT requires women to adapt to technology, mobile applications can be adapted to effectively address the unique socio-cultural, political and economic needs and sensitivities of this segment, making it a potential game changer for rural women as a whole, and rural women entrepreneurs in particular. In addition Komunte, (2015) investigated the use of mobile Technology among women entrepreneurs and the findings of the study revealed that the majority of rural and urban women were micro entrepreneurs. On the other hand Schiemer, (2017) investigates how young Egyptian

women are accessing and utilizing mobile technology to contribute to their socio-economic empowerment. The findings indicate that mobile phones are normalized within their life. Kapinga et al, (2018) illustrate the role of mobile marketing application for entrepreneurship development in Iringa, Tanzania. This paper reports the co-creation process of a mobile application contextualized to Tanzanian women entrepreneurs to facilitate access to market information for improving their business performance and livelihood. In the same way, Nikita and Tauffiqu (2015) found that skills and knowledge are the driving forces of economic growth and social development of any country. The economy becomes more productive, innovative and competitive through the existence of more skilled potential women. Moreover, YouNie, (2016) examined the detailed impact of mobile fashion applications among females and explored how fashion systems have been reshaped by mobile applications through the role that fashion apps play in the current fashion system in both western countries and China. Mobile internet applications generally nourish the discourse of fashion bloggers and communities of interest.

Ganito explained that our lives are increasingly performed within a mobile context. There is unanimity over the profound impact mobile communications are having on the way we live, interact with others and perceive the world. The mobile phone also acquires symbolic aspects in different cultures and groups and is closely related to aesthetics and fashion, rendering it a cultural object. Grounding this research in previous findings and feminist theory, this paper presents a view of the mobile phone as new media and a “technology of gender”, a place of gender construction and transformation. Now women are polishing their skills and contributing to the economic development of the country due to mobile phones. On the other hand, Johnson (2017) mentioned the importance of developing, maintaining and promoting one’s personal brand with specific mobile apps. Personal branding is the process by which an individual actively tries to manage others’ impressions of their skills, abilities and experiences. Self-awareness and understanding one’s strengths and weaknesses in order to effectively present the self is essential to building a personal brand. Many tools are available on social media to convey one’s personal brand. Ching-I Cheng & Damon Shing-Min Liu (2008) proposed an intelligent system, called “Mobile Fashion Advisor” aimed to create a virtual fashion assistant to give suggestions on the use of clothing and help users avoid buying clothes that are never worn.

The APEC project (2018) presents case studies of successful women entrepreneurs engaged in ICT business or actively integrating ICTs into their business. Ying Lau, (2018) examined the development of a healthy lifestyle mobile app for overweight pregnant women. Mobile apps are becoming an increasingly ubiquitous platform for delivery of health behavior interventions among overweight and obese prenatal women. Apps are a favorite technology platform for healthy diet advice, appropriate

physical exercise, and weight management because they are user-friendly and advantageous. Mobile apps create new opportunities to set behavioral goals, provide healthy lifestyle counseling, and facilitate self-monitoring of prenatal women who use applications to look for pregnancy well-being related data, talk about issues with companions, and look for exhortation from experts to manage their pregnancy dynamics. Hossain & Rahman (2018) analyzed social media with regard to the creation of entrepreneurial opportunities for women and reported significant contribution to the economy of the country as women comprise half the entire population. Iftikhar et al (2020) explained the impact of YouTube Tutorials in Skill Development and their results conclude that there is an overall positive impact for skill development on the youth with YouTube tutorials helping in understanding and building aptitude among youth.

## RESEARCH METHODOLOGY

The study introduced qualitative methodology through Focus Group to gain an in-depth understanding of the role of smartphone applications among females. The population consisted of young female smartphone application users and digital female entrepreneurs of Lahore. The participants were nominated through 'quota sampling technique' with key selection aspects that they should be using smartphone applications for learning skills or as a business platform. 48 respondents were sampled, 24 of whom were using smartphone apps as an earning platform and the rest of the respondents used smartphone apps to learn or polish their skills. Eight focus groups consisting of 6 respondents each were formed. All discussions and sessions were bilingual and were recorded, both in Urdu and English.

### General Information about Respondents

Focus groups	Entrepreneurs	Applications
Group 1	Members included: 2 Saree designers, 2 handmade craft brands, a bag designer and a leather artist.	Pinterest, Instagram, Facebook, Udemy, Fuzia, Domestika, Uber
Group 2	Members included: 2 graphic designers, 2 self-taught resin artists, an etching artist and a scented candle maker.	Canva, Pinterest, Instagram, Youtube, KineMaster, Behance, Careem
Group 3	Members included: 2 handmade custom embroidery pages. a child accessories brand, 2 ventures of hand painted khussas and a jewelry designer	Artform, Youtube, Instagram, Picsart, Pinterest, We heart it, Bykeya

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Group 4	Members included: 3 food and baking brands, a crochet artist, a handmade bag designer and a nail and string artist	Youtube, Instagram, Facebook, Pinterest, Grocer, Dribbble, Uber
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### Learner And Users

Group 5	Members included: 2 art bloggers, 2 makeup artists, a lifestyle influencer and a home decorator	YouTube, Remind me, Five-minute crafts, Skillshare, Redecore, Daily life, Instagram
Group 6	Members included: 3 food bloggers, 2 housewives, a ceramic artist and a medical blogger	YouTube, Pinterest, Instagram Facebook, Food fusion, we heart it
Group 7	Members included: 2 travel bloggers, 3 fine art students, 2 students of media and a calligrapher	YouTube, Fitness guru, Tasty, DIYs and Crafts, Trip advisor Instagram
Group 8	Members included: 2 food and nutrition students, a food table designer, 2 mommy bloggers and a student of fashion designing.	YouTube, Instagram, Domestika, Pinterest, Udemy, Fuzia

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### Interpretation and Data Analysis

The responses were composed under five primary themes, which facilitated in finding out the important role of mobile applications in both skill development and entrepreneurship among females.

#### **Theme 1: Makes women more skilled and organized:**

The majority of participants acknowledged that mobile apps are helping women in every aspect of life and providing new opportunities and platforms. They can manage their daily routine tasks easily and also learn new skills or make themselves more productive with smartphone applications. These apps are making them more skilled day by day and helping them in organizing their routines and budgets etc. Majority of the respondents stated that they use smartphone applications to learn new skills. The apps keep women updated, groomed, skilled, organized, productive and creative. Smartphone apps are the best way to learn skills and techniques easily, and they connect everyone. Smartphones and their applications have been added to our culture to make women aware, to educate them and to change their attitude and opinions towards a particular task successfully. One of the participants from group 5 stated that these apps are helping women a lot to become entrepreneurs, learn skills, and run businesses. "Being a mother and having a dual career as a pharmacist and an entrepreneur of jewelry designer, these apps help me a lot in organizing or managing my routine". Another participant from group 4 states, "it has become a productive tool

for keeping me organized because I have short term memory loss so different reminder apps have become my second brain” and as an art student I am addicted to Pinterest for exploring new and creative ideas”.

### **Theme 2: Minimize the traditional, financial and personal barriers for learning and business:**

Most participants strongly agreed that women are tackling different problems in underdeveloped and patriarchal countries like Pakistan where smartphone apps are playing the role of hope and wheel of empowerment for females. Most females are not allowed to go out, start business and sell their products or learn anything apart from formal education. These applications are playing a beneficial role in molding women into entrepreneurs by creating a business all from their phone. Smartphone apps give the opportunity to start a business without any big financial support. Females can easily work from home within their comfort zone because these apps enable women to combine work with family commitments by reducing time pressures. Smartphone apps are particularly useful in countries where there are restrictions on women’s mobility. Most importantly it gives an opportunity to learn from any international institute through online courses and minimizes geographical barriers. A participant from group 7 stated: “Not every artist has the resources to display their work in exhibitions and to set up their own art gallery, for showcasing their art, applications have made it so much easier for the artists to take their work to the international level while sitting at home”. Participants also acknowledged that apps encourage and minimize the barriers for elderly and aged females to start their own startups without any age and education limit. Participants from group 2 stated: “smartphone apps are really taking female development and home business to great heights”. These apps have become a necessity for small businesses to survive and are the backbone of women’s home-based business. She quoted: “Smartphone apps are playing the role of ladder for females”.

### **Theme 3: Encourage females to increase their exposure and utilize their talents**

Majority of the respondents trusted that these applications encourage females to work or learn innovative skills and make them more creative and talented by telling women that they have life outside of their house other than as a wife, a mother or a sister and help them to nourish their hidden qualities. They provided several platforms where females can polish their skills and then showcase them to the wider audience. Females are encouraged by other females through these apps to enhance their capabilities and empower them to enrich their life experiences. There are places where women help and motivate each other through virtual communities. This encourages and empowers the females to learn skills and start their own startup and become financially independent. Females can explore all kinds of ideas especially through Pinterest and learn a lot of things through YouTube. Moreover, in terms of business they can learn marketing and advertising also through different smartphone apps. Smartphone applications help females in boosting confidence and self-grooming because when females see other

females they get encouragement and inspiration, and also improve or empower them with the help of these apps. This gives ideas for shaping old techniques with the latest trends as a participant from group 3 quoted: “I am very good at embroidery from the beginning but I was not able to use this skill in the latest creative way. When I started using mobile applications, I explored some new ways of using embroidery and started using it on hoops and wall hangings and started my own business. It enhances my exposure and as well as polished my skill”. Majority of the participants appreciated that Instagram has always proved to be a very effective tool for home based business by making working patterns easier and accessible.

#### **Theme 4: Helping to create balanced and flexible professional and domestic workload**

Most Participants acknowledged that smartphone applications help them in managing their personal and professional life side by side. Work through these apps doesn't require 24/7 presence and is easy to understand and manage. Females can set their own rules and guidelines for working since they are not doing a 9 to 5 job. It helps females in managing their studies or universities along with their work or businesses. Married females look after their children and home along with their work. Applications help women in balancing their domestic and professional work load, and make the women self-sufficient so that females can do their work or learn from home according to their own personal schedules and make them efficient in saving time and energy from household chores like grocery and shopping etc. One of the respondents stated: “smartphone applications encourage women to think about if you may have certain values as a working woman, you have the autonomy and the authority to create a work environment that works best with your needs and the needs of your family. Being a digital entrepreneur, it gives us the opportunity to live our life more authentically, while at the same time allowing us to create a corporate culture that's more in line with your values”. However, a few of the participants argued that domestic workloads pretty much remain the same and sometimes it creates more disturbance in your life, and it may increase your workload both domestic and professional. But the majority of the participants highly appreciated the role of applications that give the opportunity to live life more authentically.

#### **Theme 5: Financial support and contributing in economy**

In response to financial support and contributing to the economy the participants trusted smartphone applications and favored that definitely females through smartphone applications are contributing to the economy. Smartphone apps are helping women especially in patriarchal entrepreneurship but there are more applications like, mouqa online, ghar par, uber, food pansociety with a lot of social, personal and domestic pressure makes them able to run their own businesses. Smartphone applications are supported in numerous ways not only for providing employment and

earning sources for women but because these women can then become independent and self-sufficient. It is contributing to the economy since women are now aware of their rights, they are being mindful and know how to use their skills to earn money. Females' online businesses are creating jobs for other local workers and artists and contributing to the economy just like their male counterparts. Women empowerment and economic development are closely related and the majority of the respondents believe that nowadays due to smartphone applications females are creating a lot of work for other vendors and local talented people. These apps promote cultural crafts also and give chances to our local craftsmen. From this perspective it contributes a lot to our economy. The major thing is that it has digitized our local businesses and women's entrepreneurial activities. Contributing to socioeconomic growth and utilizing the full potential of all human resources is essential for sustainable development. One of the participants highlighted the very important aspect that smartphone applications also play a very important role for the artisans of Pakistan. These apps also provide skills of marketing and leadership attributes. One of the participants from group 1 stated: "Local businesses are the backbone of the country. We are promoting local business. I provide employment to more females so it's like women working together will improve our economy."

## **RESULTS & DISCUSSION**

Smartphone apps have brought about a revolution in the life of women, and have helped them to make themselves more productive, creative and skilled. They help them in managing their task in any casual emergency and difficulty of routine, they can easily find tutorials online from easy kitchen hacks to consulting experts. The results show that the majority of participants strongly approved this declaration. They acknowledged that in patriarchal societies, women have to face a lot of cultural, gender, financial and family barriers both in earning and learning but this picture is changing with the advancement of technology like mobile apps. The working is very accessible so women can earn and learn sitting at home. Smartphone apps are a beneficial tool for women empowerment. The best part of working through smartphone apps is that we don't need an army of twenty people and a huge investment for business. Social media apps also empower many females from different international groups, which can encourage other females to do everything. Because of patriarchal traditions and social stereotypes, women entrepreneurs in Pakistan face many challenges in starting their own businesses. However, through smartphone apps they are able to work within their boundaries. The results show that almost 90 percent were in favor of these apps lessening the barriers in women's progress. One of the participants said: "business is now a one-man show and you are just a tap away". Smartphone apps always encourage users, particularly women, to make themselves more valuable and productive, enhance their confidence, make them feel more autonomous and connected, able to access new opportunities and give a platform for earning. These apps actually encourage women to have a life outside of their house rather than just a homemaker. They are earning and

this helps them to become more confident, gain self-esteem and increase their status within their house; because of increased income they can provide a better quality of life to their family and thereby share the responsibilities of their partner. These apps encourage our youth and future generations to consider entrepreneurship as a valuable career. Most respondents strongly acknowledged that working through mobile apps is like a circle that never ends because everyone is motivating and inspiring others. The perception of the majority was in favor since apps help females in many ways. Women who could not go out, can take care of their children along with other household chores. It doesn't matter which lifestyle you may want to adopt in raising a family, or what values you abide by as a working woman, you have the authority to create a work environment that works best with personal needs and the needs of your family. But few females have the perception that women have to continue the struggle for balance in work and life because women are not considered the breadwinner of the family by default. However, a lot of apps have come up to manage their routine and help them in making their lifestyle even more productive. They definitely minimize the hurdles with an increasing number of opportunities and responsibilities. The majority of females acknowledged that smartphone applications promote female development by making them independent in contributing to the economy. Applications like Instagram and Facebook, help females to promote their home based businesses, empower and strengthen our economy and decrease the rate of unemployment for men, proving that women entrepreneurs can create jobs, innovation and new trends.

## **CONCLUSION**

This study has attempted to explore the role of smartphone applications in women's skill development and entrepreneurship. It has been shown that there are lots of beneficial uses of smartphone applications. Smartphone application is the platform which gives a lot of opportunities to women to enhance their abilities and experiences. It is an inexpensive and user-friendly medium of learning and earning. The researcher investigated women's perceptions, opinions and personal experiences towards the use of mobile applications and revealed that smartphone apps allow women to polish their talents and learn skills, thereby making them more productive and organized and allow them to start their own business, make themselves independent and promote female entrepreneurship. Mobile apps are a game changer for females in patriarchal societies, and developing countries like Pakistan, not only breaking gender stereotypes for females but also contributing to our economy. The study proved that if women are provided opportunities, they can excel themselves. The study concluded that mobile phone application is a skill development tool and business platform that liberates women and allows them to motivate others by progressively employing others and contributing to the improvement of the economy.

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