

Journal of Law & Social Studies (JLSS)

Volume 4, Issue 1, pp 57-85

www.advancelrf.org

Exploring the Factors Affecting the Growth of Women Owned SMEs in Pakistan

Dr. Naveed Iqbal Chaudhry

Department of Business Administration,
Director General, University of the Punjab Gujranwala Campus,
Gujranwala, Pakistan
Email: naveediqbal81@yahoo.com

Mahnoor Tariq

Institute of Business and Management IB&M,
University Engineering and Technology, Lahore, Pakistan
Email: mahnoortariq82@gmail.com

Abstract

This study aims to identify the growth factors and their impacts on the SMEs owned by women in Pakistan, for this purpose, the interpretive structural modeling (ISM) technique of research was used. It was extensively studied how the identified factors impact the entrepreneurial abilities of women in Pakistan. Synthesis of previous literature was done to find out the factors that highly impact the growth of SMEs owned by women in Pakistan, later, the ISM model was obtained and applied to these factors, to find out the extent and nature of impacts. Not only the considered issue is of great importance, but also the implemented methodology bears great importance in the field of research, as it is being considered by researchers extensively. ISM technique has helped in identifying ranks and importance of the factors that significantly impact the growth of SMEs, studying these rank-wise results, women in Pakistan can minimize the level of issues and obstacles that come along on the way of the business ventures. Moreover, women in Pakistan can benefit from the positive factors to trigger the growth of the SMEs. Many factors were discovered that significantly impact the growth of SMEs owned by women in Pakistan, finding these factors have not only enhanced the literary importance of this study but the practical importance of the study has been enhanced as well. As, the inhibiting factors can be significantly minimized by enhancing the promoting factors.

Keywords: Factors, Growth, Women, Small and Medium Enterprises, Pakistan

Introduction

Even in the era of the developed and modernized world of today, initiatives taken by women in under-development countries are challenged and severely threatened by the market competition and successful market players. In such conditions, both the positive and negative factors are of great importance, such as the factors that promote the growth of such initiatives and the factors that inhibit the growth of such initiatives. Back Women entrepreneurship is termed as “women having control over a firm which they own alone or with someone else as a partner” Frédéric Meunier (2017). Women entrepreneurs play a vital part in the progress of a country through expanding levels of employment, business innovations, and the welfare of individuals in the countries (Charbel Salloum, 2016). Women entrepreneurship is having considerable attention from many scholars for both scientific and practical research. For the improvement of women’s participation in the workplace as a basic element, this attention can be traced back also for the entry of new products in services from women owned businesses (H. Hattab, 2011).

Entrepreneurship in developed countries is considered to be as a sign of development and growth, it accelerates the economy and adds into the innovation of the country, but in country like Pakistan, entrepreneurship is not only a challenge, but it is a big milestone for the women to achieve specifically. Women entrepreneurs are challenged even today, after all this development all around the world, women are considered to be a recessive gender, so there is much work yet to be done for the purpose of development of the initiatives taken by women in Pakistan. Although the benefits of women entrepreneurship are being accepted globally as an entrepreneurial practice and writing, while the extent of women entrepreneurs in underdeveloped countries is still needed to be researched more.

Entrepreneurship is a very wide term, which has had its meaning changed around based on the conditions and different aspects of the characteristics of the entrepreneur. This term has different aspects and outcomes based on the nature and characteristics of the individual executing it. Examining entrepreneurship from the view point of an entrepreneur’s perspective is important for understand performance of a firm, as these motivational factors can give them more encouragement for overcoming all the barriers of businesses (Carsrud & Brännback, 2011).

Women in Pakistan are facing issues related to their economic status, their social status, their recessive characteristics and the challenges that they encounter on a regular basis because of the dominant gender of the society. In this case the transitioning process of housewife or homemaker to business owners is not an easy task. However, in India, this scenario is changing. Women are more interested in being independent and owning small enterprises. But still, the role of female entrepreneurs is less participative s compared to developed countries. Small and medium enterprises owned by women are very important for the economic growth of a nation.

The barriers and challenges in entrepreneurship and career making are not the only challenges that are faced by the women in Pakistan, but there are several other factors as well that the women of Pakistan have to face throughout their lifetime. Educational opportunities to the women are not equal and societal approval for Pakistani women is based on traditional norms. Also, status of Pakistani women is not homogenous; there is diversity in classes, region and division of urban/rural. Especially in rural areas, where women are unaware and are not provided

with proper education, and not allowed to work, their role is limited to producers of social aspects.

In Pakistan, women are considered very low by standard and deprivation of women's status starts by birth, as a "baby girl" is not a wanted girl, society as a whole works as oppressor. Women entrepreneurship is an important factor for economic development of a nation. Developed countries like UK, US, UAE have studied this factor and its aspects as (Roomi et al., 2009) and (Gupta & Mirchandani, 2018) have shed light on female entrepreneurship and how it has positive impact on these developed nations. Similarly, in Pakistan a developing country with maximum female population of 50% there is need of time to highlight the factors that affect the growth of SMEs.

This study has addressed a very important issue because as the level of education and awareness is increasing in Pakistan, it is becoming more and more important to provide the Pakistani women with equal opportunities and equal access to resources, so that the knowledge and awareness can be applied significantly to the available resources and opportunities. Women entrepreneurship in Pakistan is highly challenged and threatened by men and norms of Pakistan. There are several aspects to which this study is contributing significantly, the topics like discrimination, inequality and difference in the social status have been gaining the attention of different researchers since so long and there are significant studies present on such topics, but the results and outcomes of such things have not been studied extensively. Such kind of societal behaviours lead to least opportunities of education for women, low level of career status for women and difference between men and women with respect to social status and economic status as well. So, this study is inclined towards the outcomes of such kind of ruthless and deviant behaviours.

Literature Review

Several studies have been analyzed for the purpose of digging out the factors that might inhibit or promote the growth of the small and medium enterprises owned by women in Pakistan. According to a consensus, growth is not linear process, and it does not depend on limited factors, so it is a complex process (Ram, 1996). Churchill and Lewis (1983) have stated that small firms go through life cycle process of growth stages. These approaches are like product life cycle approach, which has an early stage of growth, birth, then comes maturity, and decline or death. An application of this cycle also claims that growth in small organizations should be connected to organization's age. But other authors on small firms have criticized the life cycle approach considering them to be very simplistic and claim that growth process is not cyclic but can be interspersed to relative period of stability (O'Farrell, 1988).

However, Storey (1994) has done much research related to characteristics of growth he found no absolute evidence that allows the development of profile or model of growth in small sector, but the studies recognize that there is presence of some factors which are financial, human and social, potential of developing staff, management skills to cope with changing environmental needs, creativity and opportunity recognition for growth in small enterprises. Related literature divides factors influencing small businesses into two categories. The first category consists of entrepreneur's characteristics such as behavior, attitude and personality (Storey, 1994), their capabilities which include education or training which creates higher expectation in many

industrial sectors, and the social capital they are having can influence access to the resources (Brush, 2004).

Entrepreneurship and Entrepreneurial Characteristics

Entrepreneurship is defined by different researchers in different ways based on the characteristics of the entrepreneur and the conditions provided for the initiative taken by the entrepreneur. However, mainly, it is as taking an initiative based on an innovative idea irrespective of the availability of resources and finance. Entrepreneurship is all about capturing ideas and converting them into products or services, then introducing them into the market (Markman et al., 2016). Entrepreneurship was introduced by Richard Cantillon in 1775, and further modified by Ricardo, Adam Smith and Mill. It plays an important role in uplifting the economy in developing countries (VASUDEVAN & PARALKAR, 2016). Women entrepreneur is a person who uses her abilities to take all risks for fulfilling her need and becomes independent. Women entrepreneur can also be defined as “the person who develop new venture and work for development of their business which could be a formal business or an informal one which is registered” (Osman et al., 2011). Women entrepreneurship helps women by raising standard of living and providing opportunities, its paves way for these needy women. Pakistan is a developing country which has 50% of women in population, but participation of these women in economic development is low as compared to men due to gender inequality in country.

The ability of taking risk and need of achievement are factors that help women entrepreneurs in achieving their goal. The ability to take risk is an ability of taking bold steps by doing investment in market with resources, that can have uncertain results (Yunus et al., 2018). It is a factor that differentiates an entrepreneur from manager or employed worker. These risks can be financial, business or personal in any identical situation. While the other trait that help women in coping with challenges is need of achievement. The need of achievement plays role of psychological force that shape the behavior of women (McClelland, 1965). Individuals are motivated by these forces to overcome these challenges. This force can be extrinsic (exerted by other expectations) or intrinsic (inner force that motivates a women). In 23 studies, 20 showed the association of entrepreneurship and need of achievement (Eagly & Johnson, 1990). Moreover, entrepreneurship is also triggered by the societal forces of support, acknowledgement and protection, however, the Pakistani society majorly lack these forces when it comes to the entrepreneurial initiatives that women in Pakistan take.

Importance of SMEs

Mostly in developed and developing countries, the most important part of an industrial sector are SMEs. The economic involvement by small and medium enterprises in employment is more in developing countries (Javalgi & Todd, 2011). As the contribution of SMEs in GDP of any country is immense, it gives many employment opportunities. The literature which focuses on SMEs is increasing day by day. In developing nations, one third of the labor is finding jobs in SMEs (Mead & Liedholm, 1998) due to which both developing and developed countries are encouraging their growth and survival. The failure in small and medium ventures not only cause unemployment but also societal pressure (Saini & Budhwar, 2008). SMEs have less personnel, resources and time for looking beyond their short term requirements that are immediate (Major & Cordey-Hayes, 2000). SMEs also have benefits of behavioral nature which could be their

internal flexibility, the entrepreneurial dynamics or responsiveness to various circumstances, while large ventures have benefits of excess technology and finances. Limited resources hinder these SMEs to carry out developmental activities or inner research (Verhees & Meulenberg, 2004). These meager skills make the firms in out of control sense (Ahmad, 2015). As compare to large firms, SMEs are expected to manufacture and deliver inadequate products range in limited market and would prefer using product development strategy or market penetration as replacement of market development strategy (Kraus et al., 2012). SMEs act as most vital driving force in economic development of country with their risk taking behavior, flexibility or labor intensive behavior than large firms (Khalique, Isa, & Nassir Shaari, 2011).

Table 1 Problems and Opportunities

Problems:	Opportunities:
Lack of resources, means or time	High customer approach
Lack of know-how	More market knowledge
Focusing on only one product/market	Strong influence of entrepreneur
Potential overload on management	High motivation in employees
	Possibility of quick implementation

Role of SMEs In Industry of Pakistan

SMEs play an important role in the economic success, technological advancement, promotion of economic renewal, sourcing of large industry and social development in Pakistan. SMEs are also important for reducing poverty and expanding economy. It can act as a foundation for employment and social upraise. Pakistani economy is direct reflection of its economic industry (Khalique, Isa, Nassir Shaari, et al., 2011).

There is an estimate that SMEs comprises of 90% of 3.2 million private enterprises in industrial, trade and services sector of Pakistan and around 70% of non-agricultural labor is employed. This contribution of these enterprises is more than 30% in GDP and 25% in the export earnings of country. Also, there share in value adding services is estimated to be 35%. With respect to critical need and importance of small industries in creating low-cost jobs and reduction in poverty, government have tried their best for its development, but this sector remained to be uncompetitive in market of world due to structural weaknesses, lack of latest technology, unsuitable business and regulatory environment, lack of management and marketing skills and

many other factors both at provincial and federal levels. Venture capital is an effective option for business start-ups. But for this some important and significant steps are needed to be done for encouragement of domestic and foreign investors. This will lead to establishment of Fund Management Company (FMC).

Small and medium enterprises (SMEs) have a great potential for expanding capacity of production and opportunities of employment in the country. Enhancement in the role of financial sectors for development of SME sub-sector can reduce the severe problem of unemployment and low export level. Academia and corporate sector should also play their role by introducing challenge funds for financing of SMEs for promoting entrepreneurship. Challenge Funds (CF) have been introduced by some countries for eliciting innovative responses to several chronic challenges such as increasing responsiveness of local government for improvement in services or arresting deficiencies in agricultural value chains etc. (economist, January 19, 2018)

In developing countries, these entrepreneurial SMEs which are formally registered are contributing up to 60% of total population which is employed and 40% of the GDP; the percentage can grow more if informal SMEs are also taken into account. The access of firms to international markets is improved due to globalization, which results in rapid development and growth. While the main barrier in growth and development is lack of financial sources (Karadag, 2015). Studies show that financial institutes are giving more favors and facilities to large enterprises as compared to small industry, which results in a financial deficit in the small sector. 70% of applicants are denied within a year. It is important to study the factors that are influencing the performance of entrepreneurial SMEs. Instead of these massive examinations on SMEs growth, there is no agreement about features which boost the growth of SMEs (Muhammad Asif Khan et al., 2020)

Factors influencing growth of SME's owned by women in Pakistan

There are several factors that can influence the growth of the businesses owned by women. To the world's economy, small and medium enterprises owned by women play a vital role by contributing to the country's economic conditions. According to the study of (Ali et al., 2019), in Asian countries like Pakistan, only twenty percent of the small and medium enterprises can get growth. Within the first few months of the starting venture, most of the businesses got failed. Past studies have put great stress on the personal factors of the businesswomen like age, gender, and previous work experience. They suggested that these factors can be used for enhancing the growth of the business or can be proved significant in lower growth of the business ventures. In previous studies, the same kind of factors was examined thoroughly. Due to the significant relationship with the growth of the businesses owned by women, the researchers have covered such topics as well.

Furthermore, talking about the education about the business more deeply, it has been concluded by several studies in the past that university education is the key player who can turn your business upwards or downwards at the same time. Researchers elaborated that university education can provide the businesswomen with the key concepts and processes of conducting the business properly, and the knowledge can also bring the abilities of modern ways of doing business and creativity, which can be proved useful in the business world because the learning outcomes of the education enables the women to work under challenging circumstances by

taking essential steps in order to flourish their businesses. Moreover, academic researchers have also argued that knowledge-seeking behaviour may also disrupt the dealings of the business. The businesswomen may find themselves attracted by the opportunities lying in the market, and thus those opportunities may prove non-beneficial for them. In such a way, the educational behaviour can also harm business growth. It is evident from the past researches as well (Vasan, 2020).

Talking about other factors which can influence the growth of the businesses which are owned by the women in Pakistan, this factor can be the family life of the women. The children of most of the working women are not able to get the attraction of their mothers, this cause disruptions in the working operations of the business, and according to the study of (Bilal et al., 2016), the women then did not pay attention towards the work or business. This caused dual responsibility for the working ladies. In Pakistan, this issue is prevalent, and this can lead to the impaired functioning of the business activities due to the lack of supervision of the women owner to the business. This may also turn the business into declined growth.

Moreover, the entrepreneurial character of the working women is of great importance and can influence business growth at significant level. The entrepreneurial working women would be able to solve the severe problems regarding their business, and they can also bring feasible opportunities for the business. According to the study held in China, the entrepreneurial characteristics can be proved beneficial in order to attract the growth for businesses because such women can achieve effective output with minimal input in no time. Moreover, the entrepreneurial characteristics can cause the development of further businesses as well. Several researchers have explained that role models are required in society, which can guide properly for conducting the business smoothly and for the development of the business. Moreover, they have also argued that the closer the matching of the role models with the existing problem, the more would be the results in the form of significant benefits.

Furthermore, women tend to have greater experience in the business because they know that better experience can give growth to their existing business as well. For the sake of having Individual skills and knowledge, the work experience is considered to be the most important asset for the women business owners in Pakistan. For the sure success of the business, the experience would be a feasible asset. As per the study of (Charles et al., 2015), the bast experience about the business can cause the special success of the business as well. Compared to employees with different pathways, the experienced businesswomen can be able to manage business more efficiently and can be capable of finding ways to study new businesses. A study has explained that the experience of the business has been proved significant in the form of business growth up to an encouraging level. For ensuring the rapid growth of the business, the women must have the proper experience and relevant experience as well. Most of the women in Pakistan failed while conducting the businesses just because they lack the experience about the business. Work experience is used to expanding the capabilities of the person who is doing business.

Growth factors impacting the SME's owned by women in Pakistan.

In Pakistan, significant numbers of small and medium level enterprises can be seen, which are basically owned by females. Existing literature would highlight the growth factors which can be proved significant and can play a role in the success of the women-owned businesses in Pakistan.

These growth factors can be the key players in the growth of the business, which are owned by women entrepreneurs. Factor like socio-cultural can be recognized as the informal element which can impact the growth of the SME's owned by women because it includes the culture of the living people in a society. Culture involves norms, code of conduct, and ethics of doing anything. According to the study of (Manzoor Ahmad Khan et al., 2020), noted that such as religions, family values, and marital status of the women, the business performance and growth scenarios of the businesses owned by women can be impacted through such factors as well. Due to family limitations, married women are constrained upon the homes, and they are not entitled to perform the business activities correctly and in full manners. On the other hand, while comparing married women with unmarried women, the women who are not married can significantly manage their business and can put the number of efforts which can lead their businesses towards significant growth.

Moreover, according to the past studies, it has been seen that the factors which are containing the financial elements can play a significant role in the growth of the medium and small level businesses owned by women in Pakistan. These elements can lower the growth and can enhance the growth of the businesses with no time. In-country like Pakistan, women are often having problems managing their financial resources. There are several constraints in the acquisition of financial resources in Pakistan. According to the family problems and social conditions of the businesswomen it is hard to manage the funds in order to start a venture or in order to support the existing business venture.

The researchers have also imposed that better environmental factors can bring significant growth to the business owner by women in Pakistan. The better infrastructure, training programs, and proper availability of the finance can be proved as an important aspect of growth for female ownership. However, strong political systems can also bring growth to businesses. Such as political and economic systems, the entrepreneurial traits of the businesswomen can also be affected (Shakeel et al., 2020). The decisions of the women holding several businesses of small and medium level can be influenced by the government policies and steps taken for the businesses. For the betterment of the economy, the government must take some steps, and they take those steps by keeping in mind the growth of the overall businesses in the country.

They introduced such policies which can be proved useful for the people conducting business world-wide and locally as well. Better infrastructure may include well-developed roads, buildings, and easy access to transportation so that the businesses would ensure the timely delivery of the products to their distributors or customers. These elements can flourish business growth in no time. The strong political system in Pakistan can also be a major achiever for the growth of businesses. The government policies such as taxes and removal of other barriers can be proved positive for the growth of the businesses owned by women.

The interest of authors in female entrepreneurship is increasing day by day in literary perspective, which shows the importance of these women in modern world economy. There are three elements that emerge from recent literature. First, the growth of female entrepreneurs has increased in last decade, even if the total percentage is still less than male entrepreneurs (Cloninger, 2017). Second, this process of growth reflects of being sustained economy rather than fleeting one (Shaw & Carter, 2007). Third, there is a clear difference of opportunities and challenges faced by women and in their motivations or expectations. The

gender related differences are analyzed globally. They vary from the industrial sector in which women want to work-retail trade or service sector-to salary gaps that differentiates women, their limited approach to financial resources and credits.

Gap Analysis

In developed and developing countries, female entrepreneurs are starting their business at faster rate than male community. They are playing a vital role in job generation and economic development. In developing countries, it is predicted that there are 8-10 million small and medium enterprises having at least 1 women owner(Bank, 2011). Women entrepreneurship is constrained by obstacles such as government policies, societal issues or financial unavailability. Addressing these factors is important but motivational should also be brought in latest literature (Grewe & Stein, 2011). There are a few factors that are contributing towards the growth of women owned businesses. The factors included socio-cultural factors, education, and expertise, environmental factors, personal and financial factors as well. These factors are of great importance as these are extracted from several pieces of literature that have been done in the past. Talking about the influential aspects which can influence the growth of SMEs in Pakistan are the age of the owner, education level, personal life, business experiences. Moreover, the government policies and business environment can also be the feasible measures that can enhance the growth of the business or lower the growth of the business, and this depends on the nature of the business.

The main driver for study and research on women entrepreneurial competencies is how they are associated with development and growth of economies. The growth of venture is supposed to be indicated as important for success of venture (Low & MacMillan, 1988). Although there are some evidences that developing of entrepreneurial skills will lead to growth and success(Mitchelmore & Rowley, 2013). Following gaps are found about factors that influence women owned SMEs in Pakistan:

- The literature has highlighted barriers and obstacles that hinder women and their competencies but factors that influence motivationally should also be brought in light for, as it can help women in overcoming challenges.
- This sort of study is conducted in developed countries, but in developing economies there no such literature that can highlight these influential factors that support women entrepreneurs. Most of the female's entrepreneurship developmental theories have originated from developed countries having specific values and social norms regarding participation of women in industrial activities(Mitchelmore & Rowley, 2013).
- Any comprehensive framework connecting these factors and showing their mutual relation cannot be found.

All above mentioned facts provide the urge to conduct study of factors that influence women owned SMEs of Pakistan. The research would be convenient in filling these gaps out about entrepreneurial SMEs. The qualitative and exploratory study has aim to identify these factors and show their mutual relationship.

Research Methodology

This research is based on the interpretivism philosophy, which is also known as interpretivist philosophy, this research involves interpreting of elements involved in the study, so that human interest can be integrated in the study as well. This philosophy is based on the belief that the only access to reality is through language, shared meanings, instruments, and consciousness. The philosophy is related with philosophical position of idealism, and this philosophy groups together diverse approaches, which involves social constructivism, hermeneutics, and phenomenology. Moreover, this is a qualitative research that involves collection and analysis of data that is non-numerical. Non-numerical data is utilized for understanding experiences, opinions and concepts. This research method is utilized to gather deep information regarding the problem and also to generate new ideas regarding the study. Qualitative research is applied over here so that, deep understanding of the issue can be gained by understanding experiences and opinions regarding the factors that impact the growth of women owned SMEs in Pakistan. The research technique applied is of ISM, ISM is used in management sciences' and systematic theory as an interactive learning methodology (Ravi & Shankar, 2005). For dealing this approach with the reference of groups or institutions, a detailed explanation is presented by (Moore, 1987). It is used to show the relationship of elements, barriers and variables. The most significant feature is that it does not require any prior knowledge for operating it (Malone, 1975). This method is suitable for those cases where interrelationship of variables is required. It explains how one variable can influence another variable.

The developed Flow-chart for ISM preparation

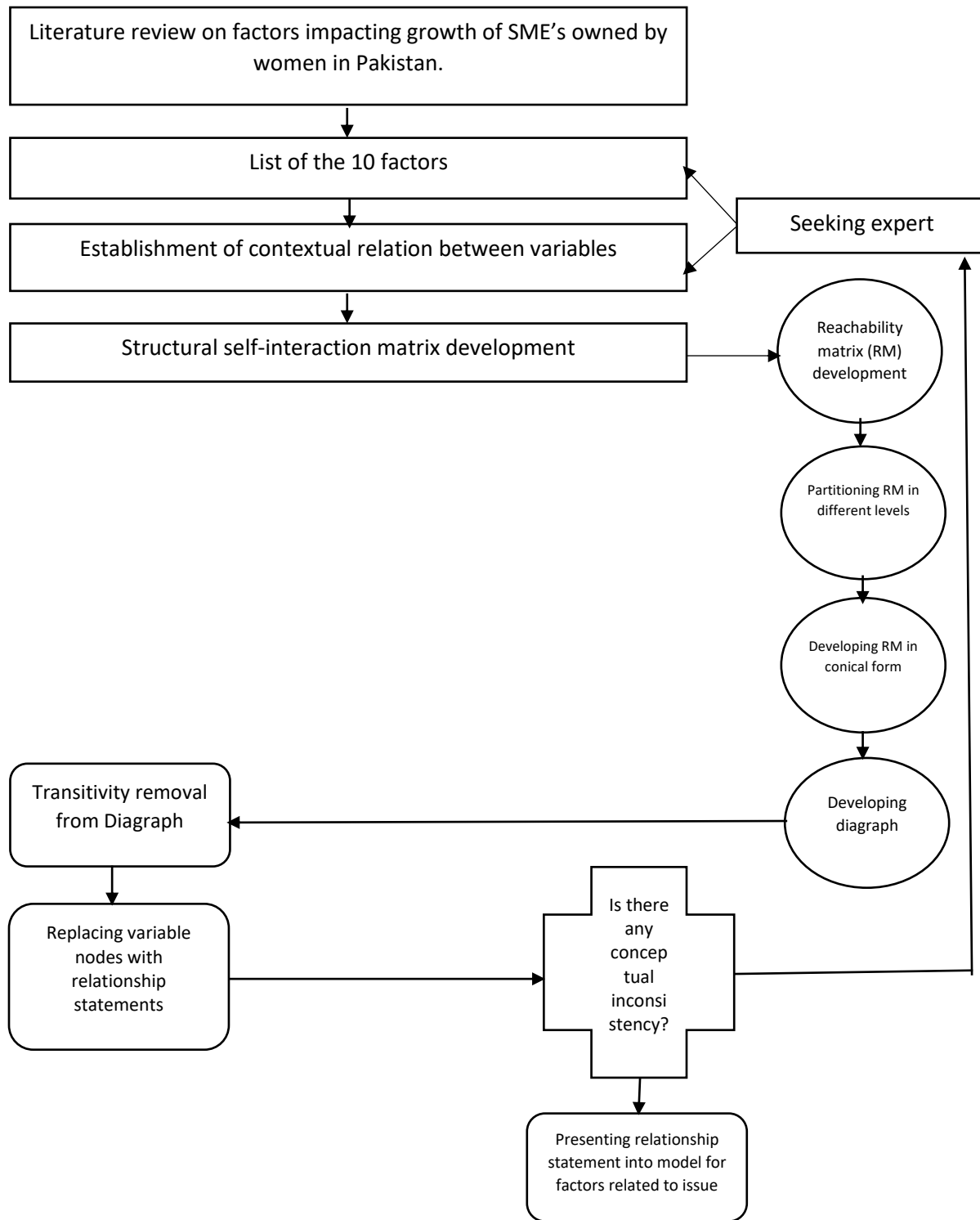


Figure 0.1: Flow chart for ISM model preparation

This model is showing different steps that are followed in this study, first of all, extensive literature review has been done for the purpose of finding out the factors that impact the growth

of the SME's owned by women in Pakistan. After this, the ten factors are listed down, then from the 10 factors identified, the contextual relationship is established between the variables, after seeking the expert opinion. After this step, structural self-interaction matrix is developed, from this, the reachability matrix is developed, followed by the partitioning of reachability matrix into different levels, after this, the conical form of reachability matrix is developed, and the diagraph is produced. After this step, the transitivity is removed from the diagraph, then the variable nodes are replaced by the relationship statements. In the end, if there is any kind of conceptual inconsistency present, expert opinion is taken again. But if there is no such issue, relationship statement into model for factors related to issue is presented.

Proposed Questionnaire for Experts

The given table is focused to note down the perceptions of owners of small and medium enterprises in Pakistani industry to develop pair wise contextual relationship between factors influencing growth of women entrepreneurs. Utilizing the questionnaire given below, opinion regarding the factors that can impact the growth of women on SMEs in Pakistan has been collected from 50 experts. Moreover, in the beginning, sample size is not selected in the qualitative studies and saturation point is used to select or decides the sample size. All the respondents up to the extent of saturation are consider as sample size. These selected sample have minimum experience of three years in the entrepreneurship. So, Data has been collected from these people, for the purpose to gain information about the Factors Affecting the Growth of Women Owned SMEs in Pakistan.

Profile of Experts

There were 50 experts interviewed for the purpose of data collection. 37 of them were female owners of small businesses like salons, boutiques, schools, academies and NGOs, while 13 of them were male educational experts. This combination of experts helped me in identification of factors through semi-structured interviews. A list of questions asked from experts is attached in the appendix.

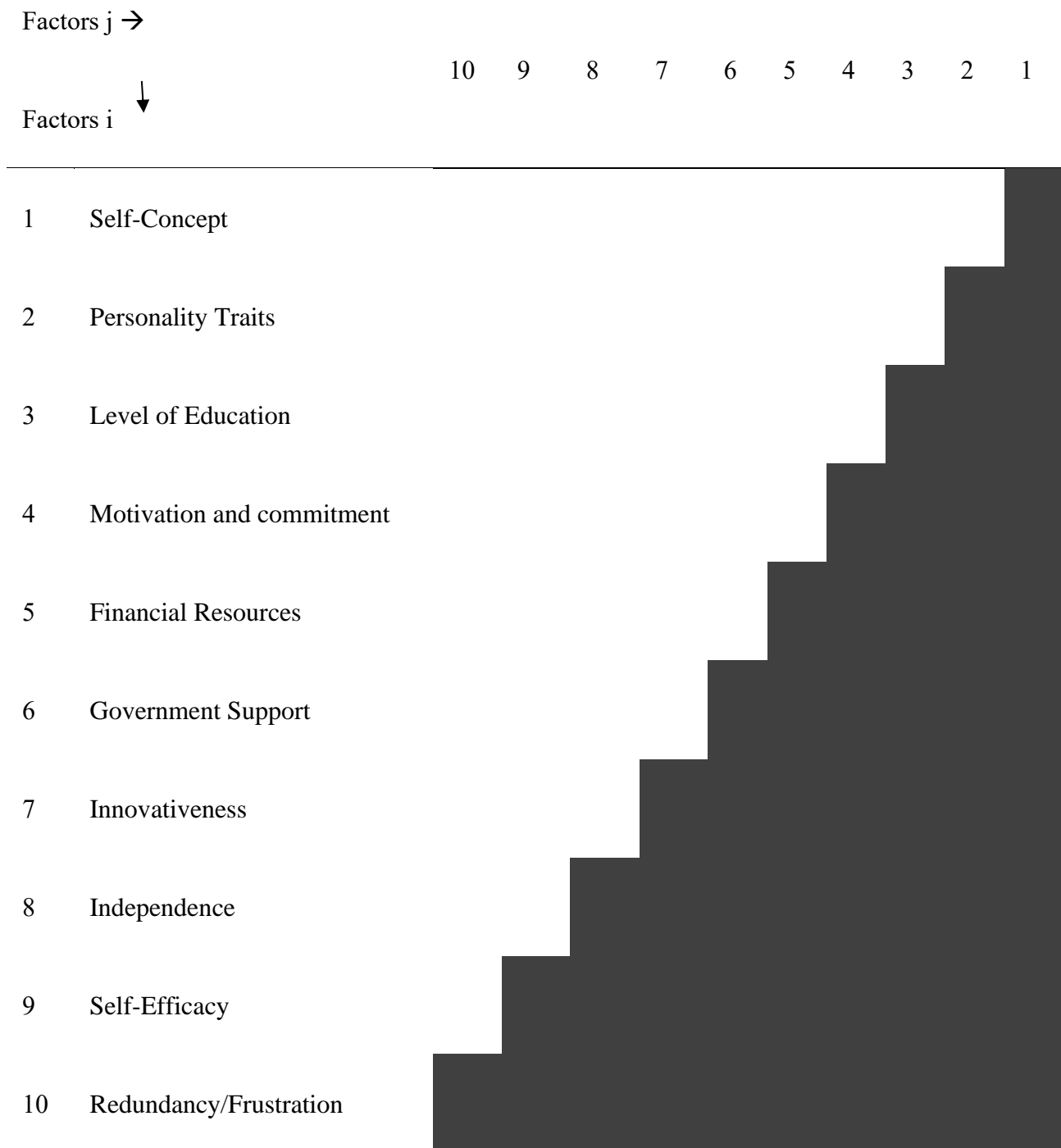
Please fill in the box using any of following symbols:

V= variable *i* will help to achieve/alleviate variable *j*

A= variable *j* will help to achieve/alleviate variable *i*

X= variable *i* and *j* will help to achieve/alleviate each other

O= variable *i* and *j* are unrelated



*All above factors are proposed with reference to literature review

Data Analysis and Interpretation

Following the method of interpretive structural modelling, different steps are fulfilled in this section to find out the impacts of different factors, and to find out the importance of the impacts of those factors. First of all, the self-structural interaction matrix is formed, by stating the

impacts of the ten factors, then the reachability matrix is obtained with the help of replacing relationship directions with binary numbers, based on the nature of the relationships (Govindan et al., 2015). In the third step, partitioning is done for the purpose of removing transitivity, iterations have taken place in 6 steps, later, the summary of iterations have been given. Then the node diagram is drawn, replaced by the complete diagram including the full factor names. Lastly, MICMAC Analysis is done and presented in a graph (Dewangan et al., 2015).

Table 0.1: Self-structural interaction matrix

Factors j →										
Factors ↓	10	9	8	7	6	5	4	3	2	1
1 Self-Concept	A	V	V	X	O	O	V	A	V	
2 Personality Traits	A	V	V	A	A	A	V	V		
3 Level of Education	A	V	V	V	V	V	V			
4 Motivation & commitment	V	V	V	V	A	A				
5 Financial Resources	V	V	V	V	V					
6 Government Support	O	V	V	A						
7 Innovativeness	A	V	V							
8 Independence	V	V								
9 Self-Efficacy	A									
10 Redundancy/Frustration										

Following is the self-structural interaction matrix, in which the ten selected factors have been listed, it is showing that how each factor has an impact on the other or is helping to achieve the other factor. **V** is for showing that variable *i* will help to achieve/alleviate variable *j*, **A** is here to

show that, variable j will help to achieve/alleviate variable I , **X** is here to show that, variable i and j will help to achieve/alleviate each other, and **O** is placed here to show that variable i and j are unrelated.

Table 3 is explaining that Self-concept can achieve self-efficacy, independence, personality traits and motivation and commitment, which can be seen from the sign of V placed against the number of all of these four factors, in alignment with self-concept. Similarly, it is presented in the table that redundancy and level of education can impact self-concept shown with the sign A. There is an impact of innovativeness and self-concept on each other, shown by X, whereas O is showing that there is no relationship present between government support and self-concept and self-concept and financial resources. In case of personality traits, it alleviates level of education, motivation and commitment, independence and self-efficacy, and it is impacted by frustration, financial resources, government support and innovativeness.

Table 0.2: Reachability matrix

Factors j		10	9	8	7	6	5	4	3	2	1	Driving Power
Factors i												
1	Self-Concept	0	1	1	1	0	0	1	0	1	0	5
2	Personality Traits	0	1	1	0	0	0	0	1	1	0	4
3	Level of Education	0	1	1	1	1	1	1	1	1	0	8
4	Motivation & commitment	1	1	1	1	0	0	0	0	1	0	4
5	Financial Resources	1	1	1	1	1	1	0	1	1	0	7
6	Government Support	0	1	1	0	0	0	1	0	1	1	4
7	Innovativeness	0	1	1	1	0	1	1	1	1	0	7
8	Independence	1	1	1	0	0	1	1	1	1	0	6
9	Self-Efficacy	0	0	0	0	1	1	0	1	1	0	4

10 Redundancy/Frustration	0	0	1	0	1	0	1	0	0	0	3
Dependence	3	8	9	5	4	5	6	6	9	1	

Moreover, level of education alleviates, Motivation and commitment, Financial Resources, Government Support, Innovativeness, Independence and Self-Efficacy, and it is impacted by redundancy. There is an impact of Motivation and commitment, Innovativeness, Independence, Self-Efficacy, Redundancy/Frustration, and it is impacted by Financial Resources and Government Support. There is an alleviation impact of Financial resources on Government Support, Innovativeness, Independence, Self-Efficacy and redundancy. There is no relation between government support and redundancy, but government support impacts independence and self-efficacy. Moreover, there is an impact of innovativeness on independence and self-efficacy as well. There also is an impact of independence on self-efficacy and redundancy.

In the table 4 below, SSIM matrix is now converted to binary matrix, it is also known as the initial reachability matrix.

In the SSIM matrix, where (i, j) entry, is V, then (i, j) entry will become 1 and the (j, i) entry has been turned to 0. In SSIM, if (i, j) entry is A, then (i, j) entry has changed to 0 and (j, i) entry has changed to 1. In SSIM, if (i, j) entry is X, then both (i, j) entry and (j, i) entry have become 1. Whereas, if in SSIM, (i, j) entry is O, both (i, j) entry and (j, i) entry have become 0. Resulting in the initial reachability matrix, moreover, all entries corresponding to “1” have been summed horizontally against each factor to find out the driving power of each factor and also all entries of “1” have also been vertically summed up against each factor to know about the dependence or the risk of each factor.

Then in this third step, partitioning of factors has been done for removing transitivity, this has been done in table 5, 6, 7, 8, 9 and 10.

Table 0.3: Level 1 partitioning

Factors	Reachability Set	Antecedent Set	Intersection Set	Level
1	1, 2, 4, 8, 9	1	1	
2	2, 3, 4, 8, 9	2	2	
3	3, 4, 5, 6, 7, 8, 9	3, 1	3	
4	4, 7, 8, 9, 10	4	4	
5	5, 6, 7, 8, 9, 10	5, 2, 4	5	
6	6, 8, 9	6, 2, 4	6	
7	7, 8, 9	2, 6, 7	7	
8	8, 9	8	8	
9	9, 10	9	9	
10	10	1, 2, 3, 7, 9, 10	10	I

First of all, reachability has been found out by mentioning the element itself against the factor number and also by mentioning all other factors that it will achieve such as 1, 2, 4, 8 and 9. Whereas, antecedents are found out by mentioning the element itself and all of the elements which will help achieving that element, such that 1 will achieve 1. Then intersection set is formed by extracting one common element between reachability and antecedent set, which is 10. At last, common elements between intersection set and reachability set are taken into the level column which in this case is 10, so it is assigned level 1 as it is at level 1 of partitioning and is eliminated.

Table 0.4 : Level 2 partitioning

Factors	Reachability Set	Antecedent Set	Intersection Set	Level
1	1, 2, 4, 8, 9	1		
2	2, 3, 4, 8, 9	2		
3	3, 4, 5, 6, 7, 8, 9	3, 1		
4	4, 7, 8, 9	4		
5	5, 6, 7, 8, 9	5, 2, 4		
6	6, 8, 9	6, 2, 4		
7	7, 8, 9	2, 6, 7		
8	8, 9	8		
9	9	9	9	II

Then in table 6, level 2 partitioning is done, between reachability set and antecedent set, 9 is common so it is taken in intersection set and is eliminated from the matrix at level 2.

Table 0.5: Level 3 partitioning

Factors	Reachability Set	Antecedent Set	Intersection Set	Level
1	1, 2, 4, 8	1		

2	2, 3, 4, 8	2		
3	3, 4, 5, 6, 7, 8	3, 1		
4	4, 7, 8	4		
5	5, 6, 7, 8	5, 2, 4		
6	6, 8	6, 2, 4		
7	7, 8	2, 6, 7		
8	8	8	8	III

In table 7, Then level 3 partitioning is done, between reachability set and antecedent set, 8 is common so it is taken in intersection set and is eliminated from the matrix at level 3.

Table 0.6: Level 4 partitioning

Factors	Reachability Set	Antecedent Set	Intersection Set	Level
1	1, 2, 4	1		
2	2, 3, 4	2		
3	3, 4, 5, 6, 7	3, 1		
4	4, 7	4		
5	5, 6, 7	5, 2, 4		
6	6	6, 2, 4	6	IV

7	7	2, 6, 7	7	IV
---	---	---------	---	----

In table 8, Then level 4 partitioning is done, between reachability set and antecedent set, 6 and 7 are common so these are taken in intersection set and are eliminated from the matrix at level 4.

Table 0.7: Level 5 partitioning

Factors	Reachability Set	Antecedent Set	Intersection Set	Level
1	1, 2, 4	1		
2	2, 3, 4	2		
3	3, 4, 5	3, 1		
4	4, 7	4		
5	5	5, 2, 4	5	V

In table 9, Then level 5 partitioning is done, between reachability set and antecedent set, 5 is common so it is taken in intersection set and is eliminated from the matrix at level 5.

Table 0.8: Level 6 partitioning

Factors	Reachability Set	Antecedent Set	Intersection Set	Level
1	1, 2, 4	1	1	VI
2	2, 3, 4	2	2	VI
3	3, 4	3, 1	3	VI

4 4, 7 4 4 VI

In the sixth iteration, finally, the rest of the variables have been assigned to the level six. Then the summary of the iterations has been provided below in table 11.

Table 0.9: Summary of Iterations

Factors	Reachability Set	Antecedent Set	Intersection Set	Level
Self-Concept (1)	1, 2, 4, 8, 9	1	1	VI
Personality Traits (2)	2, 3, 4, 8, 9	2	2	VI
Level of Education (3)	3, 4, 5, 6, 7, 8, 9	3, 1	3	VI
Motivation & commitment (4)	4, 7, 8, 9, 10	4	4	VI
Financial Resources (5)	5, 6, 7, 8, 9, 10	5, 2, 4	5	V
Government Support (6)	6, 8, 9	6, 2, 4	6	IV
Innovativeness (7)	7, 8, 9	2, 6, 7	7	IV
Independence (8)	8, 9	8	8	III
Self-Efficacy (9)	9, 10	9	9	II
Redundancy/Frustration (10)	10	1, 2, 3, 7, 9, 10	10	I

In table 11 above, factor numbers have been replaced by the names of the factors, levels have been assigned to all the elements, which also show their importance over here. Level wise, the impacts of all these ten factors can be seen on the growth of SME's Owned by women in

Pakistan. Now the next step is to produce a node diagram out of the iterations done. Figure 1 is showing the node diagram below:

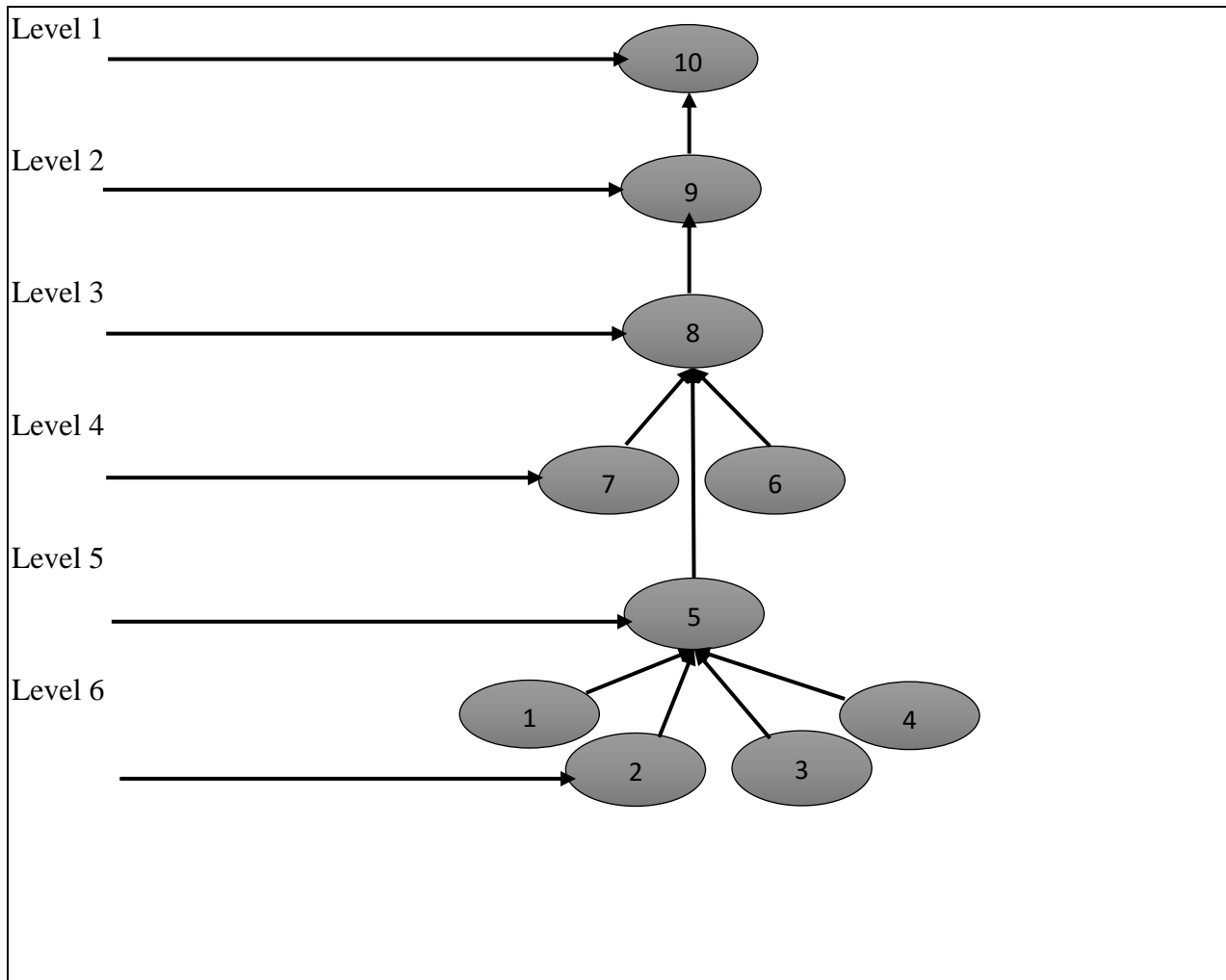


Figure 0.1: Node diagram

The figure shows factor 10 at the top, as it was eliminated at level 1, then 9 was eliminated at level 2, then factor 8 was eliminated at level 3, at level 4, factor 7, 5, 6 were eliminated, at level 5, factor 5 was eliminated. Whereas factors 1, 2, 3 and 4 were placed at level 6.

Figure 3 below is of the ISM Diagram, derived from node diagram:

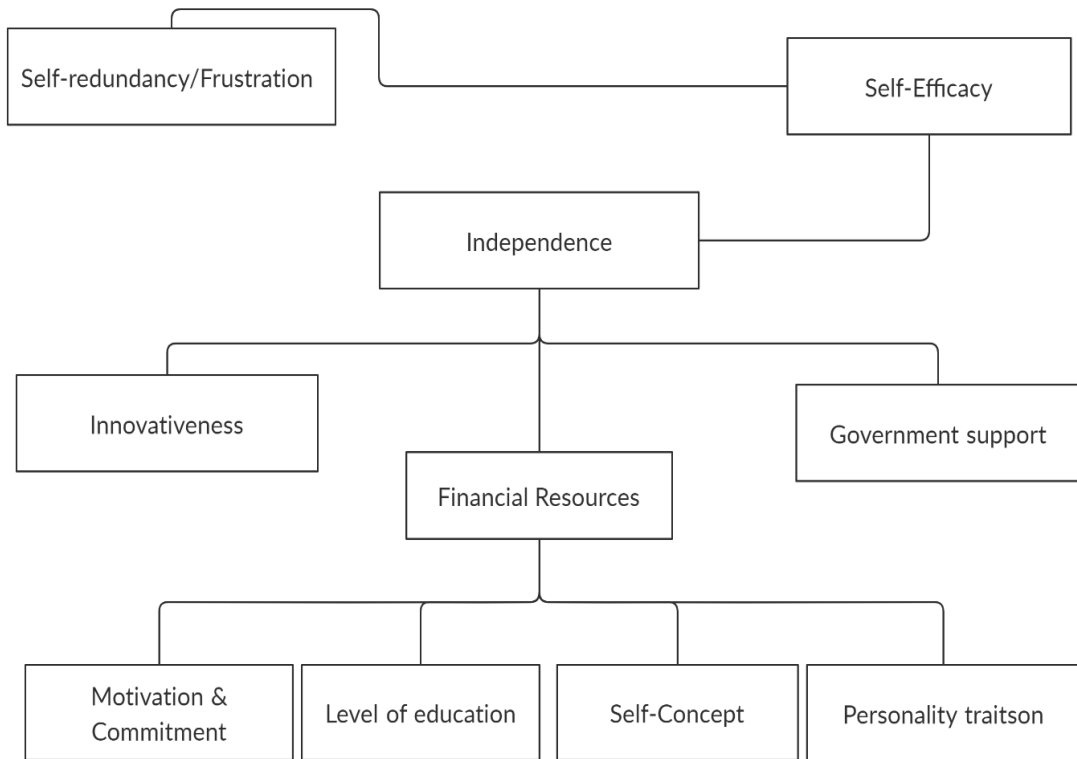


Figure 0.2: ISM Diagram

Figure 3 is showing all variables level and importance wise, impacting each other, it can be well predicted from this diagram that how these factors can impact or alleviate the growth of the SME’s owned by women in Pakistan. Moving forward, Figure 4 below is showing MICMAC analysis.

Driving Power

11											
10											
9			●						●		
8			II			8			III 3		
7				5		7					

6											
5			1								
4			I		4, 6			2	IV	9	
3	10										
2											
1											
	1	2	3	4	5	6	7	8	9	10	11

Figure 0.3: MICMAC Analysis

Dependence \longrightarrow

The figure 4 above shows MICMAC analysis, it is done to analyze the driving power and dependence of the variables, driving power is taken on y-axis and dependence is taken on x-axis. Factors 4, 6 and 10 are in quadrant I, which shows that these are linkage factors, having strong drive power and strong dependence power, so Motivation and commitment, Government Support and redundancy will impact other factors strongly and will get impacted strongly in return. In quadrant II, there lies factor 1 and 5, self-concept and financial resources are dependent factors, having weak drive power and strong dependence power. In quadrant III, 3, 7 and 8 are present, so level of education, innovativeness and independence are autonomous factors for growth, having weak drive and dependence power, these are elusively disconnected from the system. In quadrant 4, factors 2 and 9 are present, so it shows that personality traits and self-efficacy are independent factors of growth for SME's owned by women in Pakistan, having strong drive power, weak dependence power and are categorized as key factors.

Discussion and Conclusion

Discussion

The purpose of this research was to find out the factors that can impact or alleviate the growth of the small and medium enterprises in Pakistan that are owned by women. For this purpose, based on the extensive literature review, ten factors were found which can impact or alleviate the growth of the small and medium enterprises. These factors included, Self-Concept, Personality Traits, Level of Education, Motivation and commitment, Financial Resources, Government

Support, Innovativeness, Independence, Self-Efficacy and Redundancy/Frustration. Motivation and commitment, government support and frustration were found to be the linkage factors, having strong drive power and strong dependence power, so Motivation and commitment, Government Support and redundancy will impact other factors strongly and will get impacted strongly in return. Which means that there is a very significant impact of commitment on the growth of women owned SMEs in Pakistan, it is also elaborated in previous studies that commitment plays a very significant role in the growth of business initiatives by women. Moreover, the impact of government support and motivation has also been found out to be very significant on the growth of women owned small and medium enterprises in Pakistan, whereas, previous studies have not majorly highlighted government support as a major factor that impacts the growth of businesses owned by women in Pakistan (Yadav & Barve, 2015). Moreover, these factors can significantly impact growth of the SME's owned by women in Pakistan, based on the study results of several researches (Gan et al., 2018; Khan et al., 2015). It was also observed from the results that self-concept and financial resources are dependent factors, having weak drive power and strong dependence power, the study puts forward the idea that frustration can highly and negatively impact the growth of SME's owned by women in Pakistan, these results are also supported by the study of (Valmohammadi et al., 2016). Previous studies have not significantly highlighted that frustration can cast on the growth of the businesses that are owned by women in Pakistan, however they study significantly proves that there is a negative and significant impact of frustration on the growth of the small and medium enterprises owned by women in Pakistan (Manzoor Ahmad Khan et al., 2020). Factors of level of education, innovativeness and independence are autonomous factors for growth of SME's, having weak drive and dependence power (Yadav & Barve, 2015). The study suggested that personality traits and self-efficacy are independent factors of growth for SME's owned by women in Pakistan, having strong drive power, weak dependence power and are categorized as key factors for the growth of these SME's.

Conclusion

The findings of this study are unique in a novel way, telling the condition of female owned SMEs and what are the factors that are influencing them in challenging and stereotypic environment of Pakistan. The study has done by going through some barriers and hurdles that come in women's way and how women are tackling them. This research is very informative and influencing for the women who want or wish to work in developing or underdeveloped countries. Using Interpretive Structural modeling technique, the identified influential growth factors are ranked according to their impact and a proper model was made for clear understanding of variables that are scattered right now. These identified factors have helped to recognize which factors are more influential and how they contribute to playing an important role in entrepreneurship. The study has found out that the factor of self-concept can not only enhance the growth of SMEs owned by women in Pakistan, but it can also alleviate other factors that will promote growth of SMEs such as independence, self-efficacy and level of education. Similarly, factor of motivation and commitment have been seen to be enhancing the growth level, along with enhancing innovativeness, independence and self-efficacy in women entrepreneurs of Pakistan.

Implications of The Study

This study has vast implications and possesses novelty in many aspects, such as digging out the literature review in depth for the purpose of finding out the factors that can impact the growth of the SMEs owned by women in Pakistan, many factors were discovered that significantly impact the growth of these SMEs. Moreover, finding these factors have not only enhanced the literary importance of this study but the practical importance of the study has been enhanced as well. Moreover, the study is novel because of the usage of ISM technique for the purpose of finding out the factors that impact the growth of the SMEs owned by women in Pakistan, almost none of the study has been done in the past for this topic, using this technique in the context of Pakistan. This method has increased the clarity for impacts of the factors opted, moreover this study can help the policymakers in making entrepreneurial activities easy for the women in Pakistan, considering their contribution to the economy of the country.

Limitations of the study and future research recommendations

This study has several limitations as well, such as the study is being conducted in SMEs only, not in MNCs, whereas it can be seen today that women are playing a major role in running several MNCs and are also working on some major positions in the MNCs in Pakistan. So, it was also important to consider women related with different sectors, considering their contribution. Moreover, for the research, while doing the literature review, the target population was only taken from Punjab and no other provinces such as Baluchistan, KPK and Sindh, so it cannot be stated clearly that this study is generalizable and applicable to all the women in Pakistan. So, it is also recommended that future studies should focus on women in Pakistan overall. Another limitation is that this study is exploratory and qualitative in its nature, quantitative research can be performed on its identified factors in the future.

References

- Ahmad, Y. (2015). *Business strategies and resources for Small and Medium Enterprises (SMEs): a case of auto parts manufacturing industry* University of Engineering & Technology Taxila, Pakistan].
- Ali, H. Y., Khan, M. K., Asrar-ul-Haq, M. J. J. f. I. B., & Development, E. (2019). Factors affecting the performance of women entrepreneurs in SMEs: a case study of Punjab, Pakistan. *12*(1), 67-82.
- Bank, W. (2011). International Finance Corporation. *Healthy Partnerships: How Governments Can Engage the Private Sector to Improve Health in Africa, Washington DC*.
- Bilal, A. R., Khan, A. A., & Akoorie, M. E. M. J. C. M. S. (2016). Constraints to growth: a cross country analysis of Chinese, Indian and Pakistani SMEs.
- Bouri, A., Breij, M., Diop, M., Kempner, R., Klinger, B., & Stevenson, K. (2011). Report on support to SMEs in developing countries through financial intermediaries. *Dalberg, November*.
- Carsrud, A., & Brännback, M. (2011). Entrepreneurial motivations: what do we still need to know? *Journal of Small Business Management*, *49*(1), 9-26.

- Charbel Salloum, G. A., Catherine Mercier-Suissa, Stephanie Khalil (2016). The rise of women and their impact on firms' performance. *International Journal of Entrepreneurship and Small Business*
- Charles, N. A., Ojera, P. B., David, O. J. J. o. I., & Entrepreneurship. (2015). Factors influencing choice of strategic management modes of small enterprises. 4(1), 4.
- Cloninger, S. K. (2017). *Exploring the lives of women who lead* Antioch University].
- Dewangan, D. K., Agrawal, R., Sharma, V. J. P.-S., & Sciences, B. (2015). Enablers for competitiveness of Indian manufacturing sector: An ISM-fuzzy MICMAC analysis. 189, 416-432.
- Eagly, A. H., & Johnson, B. T. (1990). Gender and leadership style: A meta-analysis. *Psychological bulletin*, 108(2), 233.
- Frédéric Meunier, Y. K., Rita Ramalho. (2017). Women's Entrepreneurship: How to Measure the Gap between New Female and Male Entrepreneurs? *e library*
- Gan, X., Chang, R., Zuo, J., Wen, T., & Zillante, G. J. J. o. c. p. (2018). Barriers to the transition towards off-site construction in China: An Interpretive structural modeling approach. 197, 8-18.
- Govindan, K., Azevedo, S. G., Carvalho, H., Cruz-Machado, V. J. I. J. o. E. S., & Technology. (2015). Lean, green and resilient practices influence on supply chain performance: interpretive structural modeling approach. 12(1), 15-34.
- Grewe, C., & Stein, P. B. W. (2011). *Strengthening access to finance for women-owned SMEs in developing countries*.
- Gupta, N., & Mirchandani, A. (2018). Investigating entrepreneurial success factors of women-owned SMEs in UAE. *Management Decision*.
- H. Hattab, A. T. N. D., D. Wall1, G. Jnawali, J. Coraux, C. Busse, R. van Gastel. (2011). Growth temperature dependent graphene alignment on Ir(111).
- Javalgi, R. R. G., & Todd, P. R. (2011). Entrepreneurial orientation, management commitment, and human capital: The internationalization of SMEs in India. *Journal of Business Research*, 64(9), 1004-1010.
- Karadag, H. (2015). Financial management challenges in small and medium-sized enterprises: A strategic management approach. *EMAJ: Emerging Markets Journal*, 5(1), 26-40.
- Khalique, M., Isa, A. H. B. M., & Nassir Shaari, J. A. (2011). Challenges for Pakistani SMEs in a knowledge-based economy. *Indus Journal of Management & Social Sciences*, 5(2).

- Khalique, M., Isa, A. H. B. M., Nassir Shaari, J. A., & Ageel, A. (2011). Challenges faced by the small and medium enterprises (SMEs) in Malaysia: An intellectual capital perspective. *International Journal of current research*, 3(6), 398.
- Khan, I., Rahman, Z. J. J. o. R., & Services, C. (2015). Brand experience anatomy in retailing: An interpretive structural modeling approach. 24, 60-69.
- Khan, M. A., Kamal, S., & Khan, I. U. J. s. (2020). Analyzing the Inhibitors of MSMES' Access to Banks' Financing: Evidence from Khyber Pakhtunkhwa, Pakistan. 3(2), 160-167.
- Khan, M. A., Siddique, A., Sarwar, Z., & Nadeem, Q. (2020). Determinants of entrepreneurial small and medium enterprises performance with the interaction effect of commercial loans. *Asia Pacific Journal of Innovation and Entrepreneurship*.
- Kraus, S., Rigtering, J. C., Hughes, M., & Hosman, V. (2012). Entrepreneurial orientation and the business performance of SMEs: a quantitative study from the Netherlands. *Review of Managerial Science*, 6(2), 161-182.
- Low, M. B., & MacMillan, I. C. (1988). Entrepreneurship: Past research and future challenges. *Journal of management*, 14(2), 139-161.
- Major, E., & Cordey-Hayes, M. (2000). Engaging the business support network to give SMEs the benefit of foresight. *Technovation*, 20(11), 589-602.
- Malone, D. W. (1975). An introduction to the application of interpretive structural modeling. *Proceedings of the IEEE*, 63(3), 397-404.
- Markman, G., Devinney, T. M., Pedersen, T., & Tihanyi, L. (2016). Global entrepreneurship: Assessment and challenges. *Global entrepreneurship: Past, present & future (Advances in international management, Volume 29)*, 35-43.
- McClelland, D. C. (1965). N achievement and entrepreneurship: A longitudinal study. *Journal of personality and Social Psychology*, 1(4), 389.
- Mead, D. C., & Liedholm, C. (1998). The dynamics of micro and small enterprises in developing countries. *World development*, 26(1), 61-74.
- Mitchelmore, S., & Rowley, J. (2013). Growth and planning strategies within women-led SMEs. *Management Decision*.
- Moore, C. M. (1987). *Group techniques for idea building*. Sage Publications, Inc.
- Nasir, M., Iqbal, R., & Akhtar, C. J. P. A. R. (2019). Factors Affecting Growth of Women Entrepreneurs in Pakistan. 3(1), 35-50.
- Osman, M. H. M., Rashid, M. A., Ahmad, F. S., & Rajput, A. (2011). MARKET ORIENTATION-A MISSING LINK TO SUCCESSFUL WOMEN

ENTREPRENEURSHIP IN DEVELOPING COUNTRIES: A CONSPECTUS OF LITERATURE. *International Journal of Academic Research*, 3(4).

- Rashid, M. K., Niazi, A. A. K., & Khan, I. Investigating the Antecedents and Impact of Social Media Usage on the Performance of Women-owned SMEs in Pakistan.
- Ravi, V., & Shankar, R. (2005). Analysis of interactions among the barriers of reverse logistics. *Technological Forecasting and Social Change*, 72(8), 1011-1029.
- Roomi, M. A., Harrison, P., & Beaumont-Kerridge, J. (2009). Women-owned small and medium enterprises in England. *Journal of Small Business and Enterprise Development*.
- Saini, D. S., & Budhwar, P. S. (2008). Managing the human resource in Indian SMEs: The role of indigenous realities. *Journal of World Business*, 43(4), 417-434.
- Shakeel, M., Yaokuang, L., & Gohar, A. J. S. O. (2020). Identifying the Entrepreneurial Success Factors and the Performance of Women-Owned Businesses in Pakistan: The Moderating Role of National Culture. *10(2)*, 2158244020919520.
- Shaw, E., & Carter, S. (2007). Social entrepreneurship. *Journal of Small Business and Enterprise Development*.
- Valmohammadi, C., Dashti, S. J. I., & Management. (2016). Using interpretive structural modeling and fuzzy analytical process to identify and prioritize the interactive barriers of e-commerce implementation. *53(2)*, 157-168.
- Vasan, M. J. S. J. o. M. (2020). Moderating effect of demographic and business characteristics on performance of women owned small enterprises: Empirical evidence from India. *15(2)*, 319-333.
- VASUDEVAN, D. S., & PARALKAR, V. (2016). Venture Capital as A Catalyst for Entrepreneurial Development in India.
- Verhees, F. J., & Meulenbergh, M. T. (2004). Market orientation, innovativeness, product innovation, and performance in small firms. *Journal of Small Business Management*, 42(2), 134-154.
- Yadav, D. K., & Barve, A. J. I. j. o. d. r. r. (2015). Analysis of critical success factors of humanitarian supply chain: An application of Interpretive Structural Modeling. *12*, 213-225.
- Yunus, N., Abdul Razak, A. Z. A., Rahman, R. A., & Ghouri, A. M. (2018). The Influences of Marketing, Entrepreneurship and Learning Orientations Towards Firm Performance of Malay Entrepreneurs in Perak. *Management Research Journal*, 8(1), 21-31.