

A STUDY OF COMPETENCIES AND CHALLENGES OF INDIAN WOMEN ENTREPRENEURS³

Entrepreneurs are innovators, job providers and people who perform economic activities while fulfilling responsibility towards the society (Ahmad N & Seymour R, 2006). According to the 6th Economic Census released by the Ministry of Statistics and Programme Implementation, there are 58.5 million entrepreneurs in India, of which 14 % are women entrepreneurs. The aim of the research paper is to outline empirical research on the competencies required by women entrepreneurs to start a business and to sustain the same successfully. This paper also aims to discuss the problems and challenges encountered by women entrepreneurs in running their business. A survey of women entrepreneurs was conducted in Gujarat using a structured questionnaire and personal interview. The questionnaire was designed with a list of competencies, problems and challenges faced by the women entrepreneurs that were compiled from previous theoretical and empirical research. The entrepreneurs were asked to give their ratings based on their perception and experience on five-point Likert scales. A factor analysis was conducted in order to identify clusters of competencies that loaded onto each group. The most common problems and challenges faced by women entrepreneurs were identified statistically.

The factor analysis identified 9 clusters of competencies from the list of 36 competencies, which are necessary for entrepreneurs to start the business and sustain with it. The results show that the major problems faced by the women are lack of finance, difficulty in work-life balance and high socio-cultural barriers over the life of the business.

The outcome of this paper can be used by researchers, government agencies, non-government organisations and incubation centres to understand and develop policies that help more and more women to become entrepreneurs and run their business successfully.

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Introduction

India today is witnessing a multi-dimensional change in the area of women-led entrepreneurial endeavours. On one hand, technology, globalisation, digitalisation and ease of doing business has ensured start-up booms; on the other hand, other women are gradually but persistently entering the domain of entrepreneurship. In today's era, women entrepreneurs don't come from only established business houses or the higher-income strata of the society, but they belong to all walks of life and from all over the country. According to the 6th Economic Census released by the Ministry of Statistics and Programme Implementation, in India there are 14% women entrepreneurs.

In today's start-up boom, it is remarkable to see 35% of start-ups being led by women entrepreneurs. This goes on to show how women are not just contributing to the economic growth of the nation but are also creating employment opportunities for others. As per a survey, around 71% of women employ around 5 or less people in India. Moreover, 73% of women entrepreneurs earn an income of approximately Rs.10,00,000 in a financial year. (<https://www.startupindia.gov.in/>).

While India witnesses women entrepreneurs across age groups, it is noteworthy that 58% of women entrepreneurs commenced their business in the age group of 20 and 30 and around 25% of women initiated business even before turning 25. Early entry into the business space gives them higher risk-taking ability. Geographically while, Bangalore, Delhi-NCR, Chennai, Mumbai and Hyderabad stands out in the Women entrepreneurship index, other tier 1&2 cities are also picking up well. (<https://www.startupindia.gov.in/>).

Entrepreneurs and Women Entrepreneurs

There have been various definitions and interpretations of the term 'entrepreneur' presented by various researchers and scholars. Ahmad and Seymour (2006), stated that the key role of entrepreneurs is to be innovators, job providers and people who perform economic activities while fulfilling responsibility towards the society. Anwar and Amber (2012) believe that women entrepreneurs use their knowledge and resources to develop or create new business opportunities. According to Moore and Butter (1997), be it informal setups, non-registered businesses, or any formal registered setup. They further added that women entrepreneurs could be classified as those who have started their businesses and managing them steadily with an ownership of at least 50% of the entity and they are in operating for one year or more. As per the Government of India (2006), a business entity owned and controlled by a woman with a financial interest of a minimum of 51% of the capital and should also provide 51% of employment to women in the entity.

In India, out of a total of 58.5 million entrepreneurs, only 13.76%, i.e., 8.05 million are women. These establishments owned by females, provide employment to 13.45 million people. Table 1 explains the number of units registered in the states of India and the no. of women entrepreneurs in each of the states as a % of the total no. of units registered in that particular state (<https://www.startupindia.gov.in/>).

Table 1

Women Entrepreneurs Registered in India

Women Entrepreneurship States	No. of Units Registered	No. of Women Entrepreneurs	Percentage
Tamil Nadu	9,618	2,930	30.36
Uttar Pradesh	7980	3180	39.84
Kerala	5487	2135	38.91
Punjab	4791	1618	33.77
Maharashtra	4339	1394	32.12
Gujarat	3872	1538	39.72
Karnataka	3822	1026	26.84
Madhya Pradesh	2967	842	28.38
Other States & UT's	14,576	4185	28.71
Total	57,452	18,848	32.82

Source: Report of MSMEs, 12th Five-year plan 2012-2017.

The ranks are given to the top 8 states having more than 25% of the total no. of registered units in the respective state. Rank 1 is given to the Uttar Pradesh in terms of registered women entrepreneurs, followed by Tamil Nadu and Kerala. Gujarat is in rank 5.

According to Global Entrepreneurship Monitor (2010), in the global entrepreneurial activity, more than one-third are women.

Women Entrepreneurship in Gujarat

The business-driven aspect of Gujarat has been at the core of its growth ever since the beginning. The youth of Gujarat grows in an environment that is highly conducive for business orientation and development. British Council, (2016) have analysed that both the genders benefit from this socio-economic exposure and it is reflected in the entrepreneurial acumen of the youth. Along with the men who are the obvious receivers of this knowledge, the female counterparts also learn the art of doing business from a very early age in life. While the spirit of entrepreneurship exists in the environment, it is all the more fuelled by the various incentives provided to the women entrepreneurs by the Government of India and the Government of Gujarat. Gujarat's vast culture and the zeal towards entrepreneurship, along with its deep-rooted tradition of business, geographical benefits, government's initiatives to boost women entrepreneurship and the continuous development of the 'Vibrant' state, has attracted investors and business communities from across the globe.

The continuously growing literacy rate in the state as a whole and amongst women, in particular, is another very important contributor in grooming women entrepreneurs. Census, (2011), the literacy rate amongst women in Gujarat has increased to 70.73%, which was 5% better in comparison to the average national women's literacy rate.

Review of Literature

Women lead 13.72% of enterprises in the MSME sector in India (4th All India Census of MSME, 2007). Lerner et al. (1997), explained that businesses, that are owned by women are privately owned and dependent on the owner of the business and her skills or competencies. Colombo and Grilli, (2005) have identified that entrepreneurial competencies are those cluster of competencies which is applicable to successful entrepreneurship and is related to the growth and survival of new and small businesses.

Competencies amongst women entrepreneurs

The Oxford dictionary defines competency as “the ability to do something successfully or efficiently”. Taking forward this literal definition, UNIDO (2002) stated that within any function or job, when an individual successfully performs a task or an activity, the set of skills, related knowledge and attributes which she uses are called her competencies. Therefore the capability to apply or use a set of related knowledge, skills and abilities which are useful in performing tasks in a defined work setting or critical work functions. There is widespread acknowledgement that the overall success, performance, and growth of an MSME is heavily dependent on the competencies of the entrepreneur (Lerner et al., 1997). Lerner and Almor (2002) have stated that there is a definite linkage between women entrepreneur’s skills and the firm’s performance and development. Man, Lau and Chan (2002) also clarify that entrepreneurial competencies are the capability of the entrepreneur to successfully do a job. Another study by Birley (1989) explains that women business owners consider their social skills and interpersonal skills as the chief competencies required for a business.

According to another study by Chandler and Hanks (1994), an assumption is made that two key roles, in which entrepreneurs must be competent, are managerial and entrepreneurial. While the managerial aspect covers the ability to acquire and utilise resources to synchronise the business interest and activities, the entrepreneurial aspect consists of the ability to recognise and realise the opportunities. Chandler and Jansen (1992) also surveyed some companies in the US state of Utah and stated that the founder of the organisation must be competent in entrepreneurial, managerial and technical functional competencies. Mitchelmore, Rowley and Shiu, (2014) have studied the relationship between those competencies like personal and relational competencies, which the women small and medium enterprise owners generally consider the most significant for the success of the business and the competencies that were classified as most critical like acquiring finance, risk-taking ability, pro-activeness, strategic planning, implementation for opportunities, by the women entrepreneurs who had high-growth businesses.

Another in-depth study by Mitchelmore and Rowley (2013) reported that these competencies could be classified into 4 categories:

- Entrepreneurial competencies – comprising of recognition, idea generation, and realising opportunities.

- Business and management competencies – focusing on financial and budgeting skills, operational skills.
- Human relations competencies – dealing with leadership skills and delegation skills.
- Conceptual and relationship skills – consisting of interpersonal skills, communication skills and logical thinking skills.

Stefanovic, Prokic and Rankovic (2010) obtained **four** motivational factors – greater business achievement, independence, intrinsic factor and job security from their research on SMEs in Serbia using factor analysis and **seven** factors affecting entrepreneurs' success which are – position in society, interpersonal skills, approval and support, competitive product/service, leadership skills, always to be informed and business reputation

Bird (1995) identified the characteristics like motives, traits, specific knowledge, social roles and skills, self-images are some of the entrepreneurial competencies, that assist in the birth, survival and growth of the firm. A research by Rao, Rao and Dixit (1975) identifies some personal background, attitudinal, organisational and management variables that clearly shows the difference between successful and unsuccessful entrepreneurs. This examination of the existing literature emphasises that certain competencies are inevitable to becoming an entrepreneur. Having said that, in the context of women entrepreneurs, entrepreneurial competencies and managerial competencies along with support from the family can motivate and help a woman to start a business and survive in the market.

Problems and Challenges Faced by Women Entrepreneurs

According to Global Entrepreneurship Monitor (2010), in the global entrepreneurial activity, more than one-third are women. Women entrepreneurs face a lot of gender-biased problems, which ultimately affects the financial performance of the firm. In the research by Jamali (2009), it is observed that women play a very distinct role in the eradication of rural poverty and improvement of the financial condition of the family.

It is found that women face serious gender discrimination, which creates problems in getting opportunities, resources, assets and service, as reported in Women Watch by United Nations (2015). Moreover, a study by Myers and Majluf (1984) indicated that small business owners are dependent on their savings or the funds that they obtain from their family and friends as the initial source of finance. The major reason for this is the limited resources that these business owners have and their income from the business is not sufficient for repaying their debt obligations. A very interesting point came forward in research by Premaratne and Kudaliyanage (2016). It showed that in spite of being an Islamic state, Maldives demonstrated the highest performance in all of South Asia in certain indicators for women, e.g. education, health services, employment and women empowerment. Despite this, the women entrepreneurs in Maldives SME are still facing problems and challenges related to skill shortage, unavailability of adequate and timely finance, limited access to larger markets and limited support from the financial institution.

A research by Roomi and Harrison(2010) showed the peculiar problems faced by women entrepreneurs in five major cities of Pakistan – Karachi, Lahore, Peshawar, Quetta and

Rawalpindi/Islamabad. The main findings were that women in Pakistan are facing: socio-cultural barriers (Izzat and Pardah), barriers to capital (financial and social), and barriers to the development of entrepreneurial capacity (education and training). These barriers can be lessened by training programs in entrepreneurial competencies for women. According to Brush et al. (2009), women entrepreneurs face more socio-cultural challenges compared to their male counterparts. They are related to cultural expectations (e.g., values, attitudes, gender roles, etc.) and societal structures (e.g., family, reference groups or networks, status in society, etc.) that affect the development of women entrepreneurs. In a study in Indonesia, Tambunan (2007) examined the common constraints faced by SMEs, which were classified as lack of capital, difficulties in procuring raw materials, lack of access to information that is relevant for business, difficulties in marketing and distribution, low technological capabilities, high transportation costs, communication problems, problems caused by cumbersome and costly bureaucratic procedures, cumbersome and onerous government regulations and restrictions, lack of finance and low human resource capabilities. Danish & Smith (2012) analysed the problems faced by women entrepreneurs in Jeddah and identified the following access to loans and grants, liaising with network organisations, managing male & female staff, dealing with clients and customers, bureaucracy and procedures and business effect on personal and family life. Further, managing bureaucracy and procedures was found to be the most common problem. Ramadani (2015) identified the array of problems that women entrepreneurs are facing in Albania and found the following difficulty in establishing a balance between family and work, finance, insufficient time in order to enhance their skills through various training sessions, problems in creating high-quality contact networks, collection of quality information and lack of self-confidence. Entrepreneurial and managerial competencies amongst women can help them to become entrepreneurs and start on their own, grow and survive. But the sustainability of the firm is dependent on various factors like support from the family, skills, availability of adequate and timely finance, access to larger markets, networking etc. Furthermore, from the above-studied literature, it has been identified that gender biases, work-life balance, lack of finance, skill shortage, socio-cultural barriers, education and training, difficulties in Marketing etc., are the main problems and challenges faced by the women entrepreneurs, despite of being from different geographical locations.

Against this background, the researchers turn now to an analysis of women entrepreneurs in Gujarat based on a primary survey to understand the situation faced by the women of the state in terms of competencies required and the challenges faced by them.

Objectives of The Study

- To identify the competencies required by women entrepreneurs to start a business and to sustain the same successfully.
- To identify the problems and challenges faced by women entrepreneurs in running their business.

Research Methodology

A survey of women entrepreneurs was conducted in Gujarat (India) to collect primary data by using structured personal interview. The structured interview was designed with a list of competencies, problems and challenges faced by the women entrepreneurs that were compiled from previous theoretical and empirical research. Data was collected by using judgement sampling.

The sample size was 100, and the sample was drawn from various states of Gujarat like Ahmedabad & Gandhinagar, Vadodara, Rajkot, Mehsana, Patan and Gandhidham. The entrepreneurs selected were from varied industries such as:

- Bakery & Fast food
- Tiffin services
- Health and Wellness
- Boutique
- Beauty parlour & Salon
- Jewellery
- Pre-school and Day-care
- Educationist, Toy rental services
- Food blogger
- Builder
- Customised wooden gift articles manufacturer

Factor analysis was conducted in order to identify groups of competencies and the specific competencies that loaded onto each group. The most common problems and challenges faced by women entrepreneurs were identified through descriptive statistics. Chi-square is used to understand the association between demographic variables and the challenges faced by the women entrepreneurs.

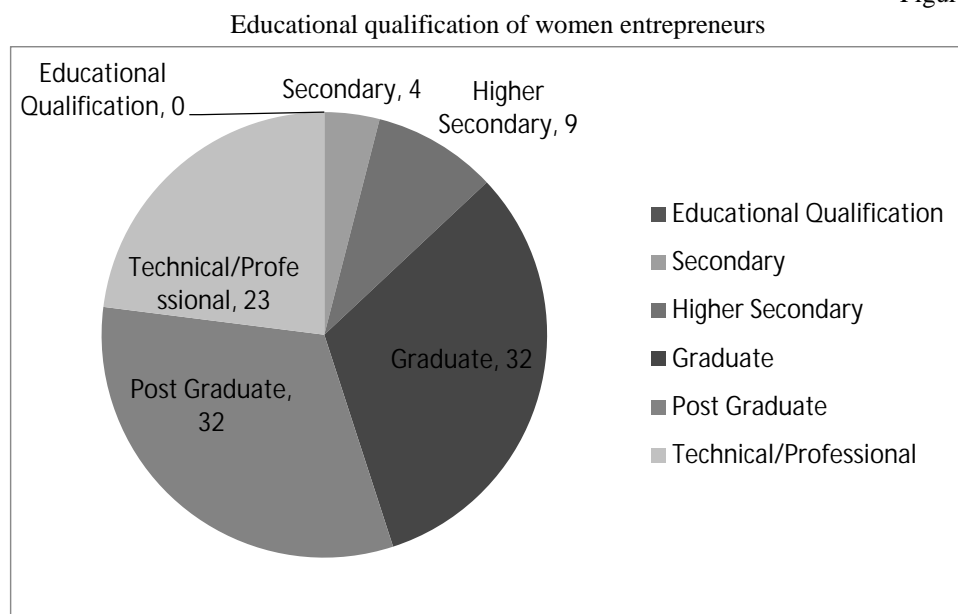
Data Analysis and Discussion

The data has been analysed in three sections. The first section presents the profile of the women entrepreneurs, which includes age, education, marital status, prior work experience. It also includes details such as motivation to become an entrepreneur and the source of finance for the business. The second section reports the requirement of competencies amongst women entrepreneurs to start a business and to sustain the same successfully. The third section discusses the problems and challenges faced by women entrepreneurs.

Profile of the women entrepreneurs

The entrepreneurs, who have participated in the survey, are from the varied age group starting from the early twenties to late fifties. The lowest age of the respondent is 22 years, whereas the highest age is 58 years. The majority of the respondents surveyed are in the age group of 41 to 45 years. 13% of respondents are in the age group of below 25 years and 5% are 55 years and above. The educational qualification of the respondents is as per Figure 1.

Figure 1



The marital status of the respondents is shown in Figure 2.

Our society is opening up towards the women who want to establish themselves in their career as well as who can maintain their family. Out of the total 100 respondents participated in the survey, we can see from the Figure 2 that 77% respondents are married and only 18% of them are unmarried followed by 4% divorced and only 1% is a widow. It is evident from figure 3 that out of the 100 respondents those who have participated in the survey, 63% have prior work experience before turning into an entrepreneur.

Figure 2

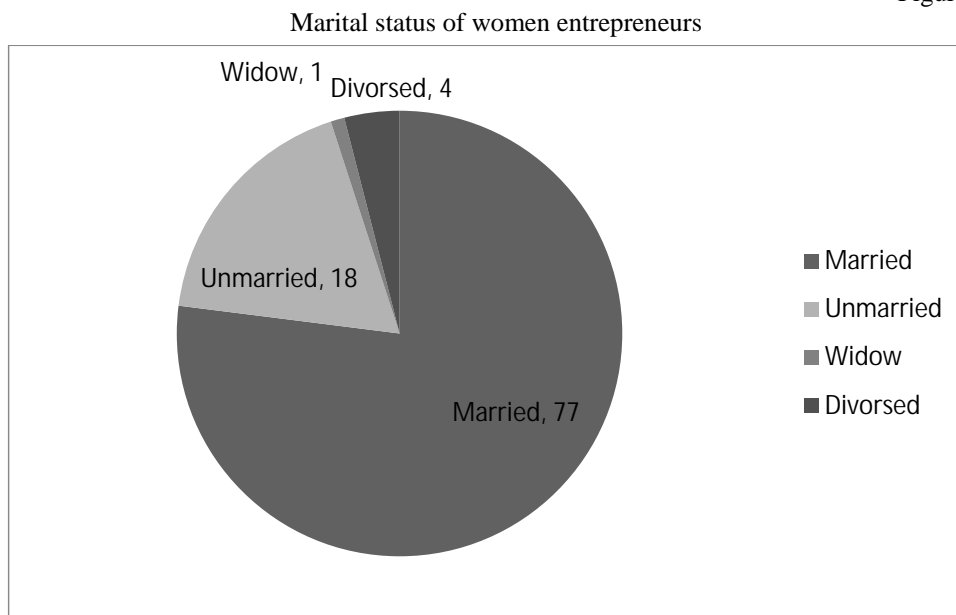
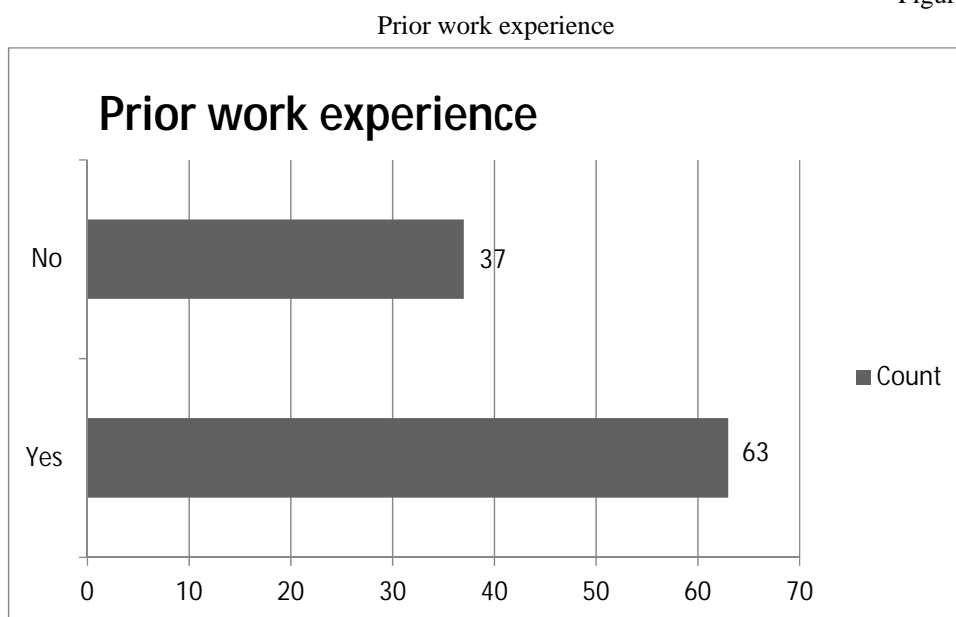
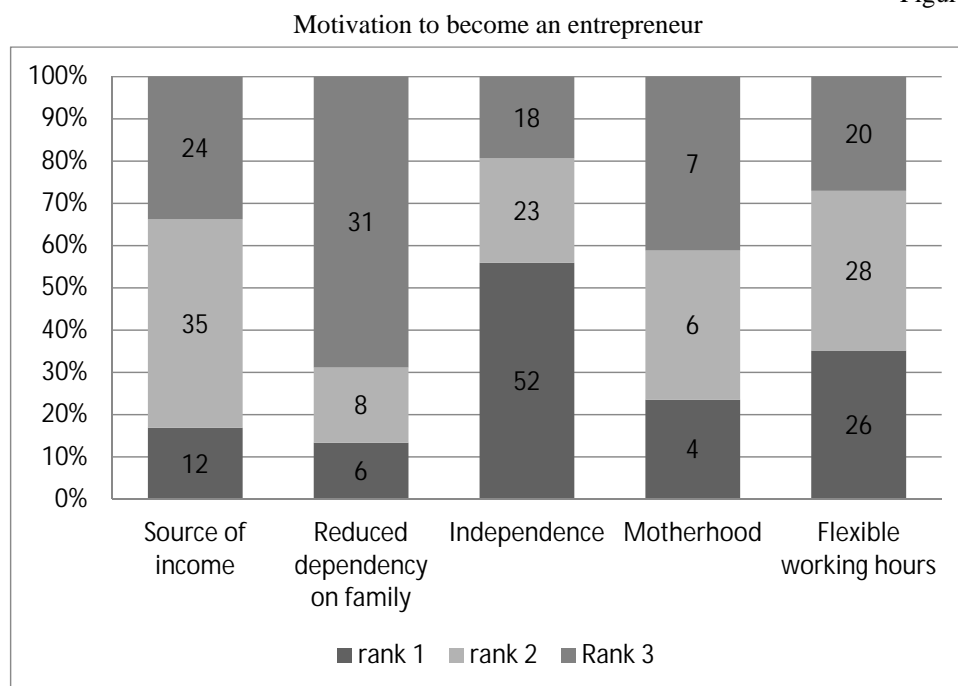


Figure 3



The main motivation for the respondents to become an entrepreneur is to have independence in their life. It can be seen in figure 4 that 52% of the respondents have given ranked 1 to 'Independence' followed by rank 2 to 'Source of Income', which is 35% and 'Reduced dependency on family' got the rank 3, which is 31%. Brush (1992) and Mukhtar (1992), analysed that the respondents, who own a small business felt that owning such a business improves their standard of living, empowered self confidence, improved skills and managerial capabilities, expanded social activities and communications and financial independence.

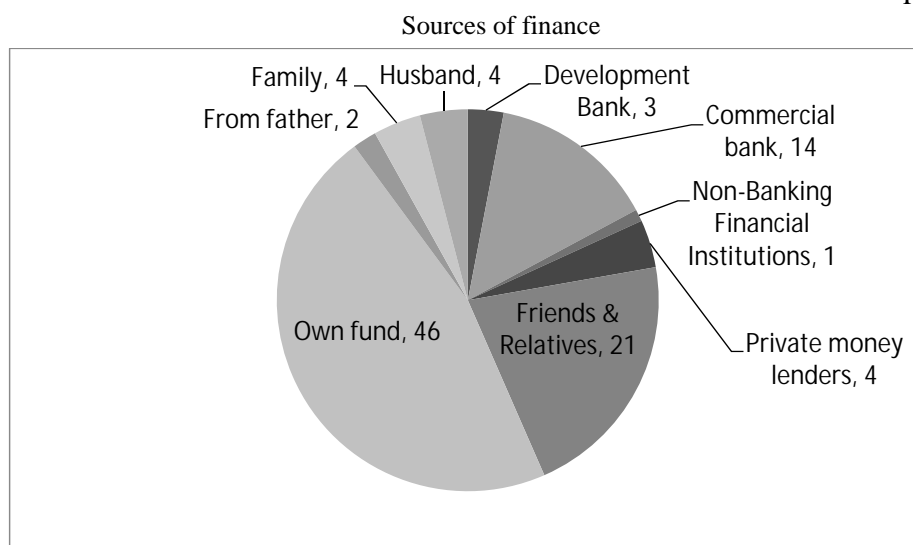
Figure 4



The majority of the respondents are seen to have used their personal finances, which includes their own funds and funding from friends & relatives, to start the business. From figure 5, it is clear that 46% of the respondents have used their own funds to commence with a business, followed by 21% getting funding from their friends & relatives. This reflects how the personal source of finance and savings of women is significant as compared to formal sources of funding to support women entrepreneurship. Only 14% of respondents have accessed finance from commercial banks, followed by 4% from private money lenders, husband and father respectively. The above scenario shows that either the circumstances for private finance is unique to that found in other studies, that show difficulties for women entrepreneurs in getting personal finance in starting stages of entrepreneurship (Andersson et al., 2007) or it shows a generalised form of bank lending practices to women (Carter et al., 2007). It shows the lack of knowledge with business and financing options available to establish and to finance firms (Ahmad, 2011). The profile of the women entrepreneurs and

the discussions in the previous researches show, that the women in Gujarat have both their own funds and sufficient support from the family, friends and relatives. Myers and Majluf (1984) indicated that small business owners are dependent on their savings or the funds that they obtain from their family and friends as the initial source of finance. The major reason for this is the limited resources that these business owners have and their income from the business is not sufficient for repaying their debt obligations.

Figure 5



Competencies amongst women entrepreneurs

In this study, according to the literature reviewed, it has been identified that competencies amongst women can help them to become entrepreneurs and start on their own, grow and survive. Based on which the questionnaire listed 36 competencies, required to become an entrepreneur, which were compiled from previous theoretical and empirical research (Mitchelmore, Rowley, 2013; Stefanovic, Prokic, Rankovic, 2010; Bird, 1995; Rao, Rao, Dixit, 1975). Respondents were asked the extent to which they consider themselves as having each of these competencies, on a five-point Likert scale, where 1 was “absolutely important” and 5 was “absolutely unimportant”.

A factor analysis of the 36 competencies was conducted. The “best fit” factor analysis accounted for 35.46% of the variance and was obtained by using principal component factor analysis with a Varimax with Kaiser Normalization rotation method. As recommended by Hair et al. (2006), all factor loadings are greater than 0.40, and all communalities exceed 0.50.

The Cronbach’s alpha model was used and values over 0.50 were considered. The Cronbach’s alpha of the entire instrument came as 0.940. The Cronbach’s alpha-values for

all the 36 competencies ranged from 0.936 to 0.942, indicating that the scale was internally consistent and reliable (Cronbach, 1951; Nunnally, 1978).

Table 2

Cronbach's alpha-value of the competencies

Competencies	Cronbach's Alpha values	Communalities
Idea Generation	0.938	0.663
Self Confidence	0.937	0.773
Ability to recognize Opportunity	0.938	0.643
Previous Work Experience	0.942	0.718
Ability to implement Business Strategy	0.939	0.539
Ability to Control and Check Quality of Work	0.938	0.641
Efficient Resource Utilization	0.939	0.734
Creative Thinking	0.939	0.77
Desire to Succeed	0.937	0.789
Ability to sense future Threats	0.939	0.725
Exposure to Business World	0.939	0.695
Technical Knowhow	0.94	0.73
Ability to Acquire Finance	0.94	0.778
Self-Motivation	0.937	0.716
Readiness for Challenges	0.937	0.789
Ability to build on own strength	0.936	0.74
Planning Skills	0.937	0.749
Operational Skills	0.937	0.778
Ability to Manage Finance	0.938	0.782
Family-Motivation	0.939	0.751
Interpersonal Relationship building	0.938	0.726
Ability to recognise and eradicate self-weakness	0.938	0.707
Risk Taking Ability	0.938	0.759
Delegation of work	0.939	0.772
Ability to handle Crisis Situation	0.938	0.704
Passion for Work	0.938	0.787
Ability to Adapt	0.937	0.739
Managing Customer Relationship	0.938	0.781
Proactive Attitude	0.938	0.708
Leadership Qualities	0.938	0.762
Effective Resource Planning	0.937	0.718
Communication Skills	0.937	0.777
Building Customer base	0.937	0.674
Team Management Skills	0.938	0.776
Effective Resource Management	0.937	0.854
Ability to Formulate Business Strategy	0.937	0.751

From Table 2, it can be concluded that this is a list of competencies, that women entrepreneurs believe they have as per their experience and perception and by extension, accordingly, all women entrepreneurs should have these above-mentioned competencies to start a business and to sustain the same successfully.

Descriptive Statistics of decision making parameters under consideration

The descriptive statistics for all the variables under investigation are calculated below. The mean, standard deviation and number of respondents (N) who participated in the survey are given. Looking at the mean, one can conclude that previous work experience is the most important variable (competencies) required to become an entrepreneur amongst women, according to the respondents. It has the highest mean of 3.09.

Table 3

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Idea Generation	100	1	5	1.35	0.757
Self Confidence	100	1	5	1.33	0.766
Ability to recognize Opportunity	100	1	5	1.63	0.939
Previous Work Experience	100	1	5	3.09	1.45
Ability to implement Business Strategy	100	1	5	1.87	0.96
Ability to Control and Check Quality of Work	100	1	4	1.39	0.723
Efficient Resource Utilization	100	1	5	1.84	1.012
Creative Thinking	100	1	5	1.53	0.881
Desire to Succeed	100	1	5	1.42	0.855
Ability to sense future Threats	100	1	5	2.08	1.079
Exposure to Business World	100	1	5	2.43	1.297
Technical Knowhow	100	1	5	2.32	1.27
Ability to Acquire Finance	100	1	5	2.22	1.219
Self-Motivation	100	1	5	1.41	0.889
Readiness for Challenges	100	1	5	1.58	1.093
Ability to build on own strength	100	1	5	1.63	1.002
Planning Skills	100	1	5	1.67	0.985
Operational Skills	100	1	5	1.69	0.95
Ability to Manage Finance	100	1	5	1.85	1.114
Family-Motivation	100	1	5	1.81	1.116
Interpersonal Relationship building	100	1	5	1.65	1.019
Ability to recognize and eradicate self-weakness	100	1	5	1.97	1.167
Risk Taking Ability	100	1	5	1.81	1.042
Delegation of work	100	1	5	2.02	1.231
Ability to handle Crisis Situation	100	1	5	1.68	1.004
Passion for Work	100	1	5	1.29	0.686
Ability to Adapt	100	1	5	1.65	0.957
Managing Customer Relationship	100	1	5	1.36	0.732
Proactive Attitude	100	1	5	1.65	0.957
Leadership Qualities	100	1	5	1.65	0.957
Effective Resource Planning	100	1	5	1.9	1
Communication Skills	100	1	5	1.51	0.893
Building Customer base	100	1	5	1.52	0.926
Team Management Skills	100	1	5	1.93	1.157
Effective Resource Management	100	1	5	1.78	0.917
Ability to Formulate Business Strategy	100	1	5	1.76	1.016
Valid N (listwise)	100				

Kaiser-Meyer-Olkin

The KMO measures the sampling adequacy, which should be greater than 0.5 for a satisfactory factor analysis to proceed. A common rule suggests that a researcher has at least 10-15 participants per variable. Kaiser (1974) recommend 0.5 as minimum (barely accepted), values between 0.7-0.8 acceptable, and values above 0.9 are superb. Here the KMO, as per Table 4 comes out to be 0.817; hence we can go ahead to process with factor analysis.

Bartlett's test

Bartlett's test (Bartlett, 1954) is an indication of the strength of the relationship among variables. This tests the null hypothesis that the correlation matrix is an identity matrix. An identity matrix is a matrix in which all of the diagonal elements are 1 and all off-diagonal elements are 0.

We can see from Table 4, that Bartlett's test of sphericity is significant. That is, its associated probability is less than 0.05. In fact, it is actually 0.00, that is significance level is small enough to reject the null hypothesis and accept the alternate hypothesis.

Table 4

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.817
Bartlett's Test of Sphericity	Approx. Chi-Square	2.379E3
	Df	630
	Sig.	.000

Factor analysis

Factor analysis is a statistical data reduction and analysis technique that strives to explain correlations among multiple outcomes as the result of one or more underlying explanations, or factors. The technique involves data reduction, as it attempts to represent a set of variables by a smaller number. Factor structures for the study were identified on the basis of significance and clarity of the factor loadings and the interpretability and meaningfulness of the factors within the theoretical framework. This resulted in some variables that did not fit well with other items in the structure being excluded and also in the change of name of some factors due to the grouping of variables thrown up by the analysis. The final framework comprised nine factors with 35 competencies in all. The name and reliability of the responses forming each of the nine factors are shown in Table 5.

Table 5

Results of Exploratory Factor Analysis

		Factors									
		1	2	3	4	5	6	7	8	9	10
Factor 1 – Growth competencies (Cronbach Alpha = .823)											
5	Ability to implement Business Strategy	0.503	0.077	-0.07	0.118	0.11	0.034	0.453	0	0.2	0
6	Ability to Control and Check Quality of Work	0.625	0.274	0.078	0.06	0.21	-0.126	0.275	0.16	-0.01	-0.1
16	Ability to build on own strength	0.402	0.287	0.345	0.181	0.1	0.344	-0.03	0.4	0.24	0
18	Operational Skills	0.666	0.2	0.156	0.194	0.15	0.103	-0.23	0.18	0.24	0.25
27	Ability to Adapt	0.746	0.095	0.196	0.082	0.22	0.223	0.091	0.08	0.07	0.11
29	Proactive Attitude	0.538	0.232	0.016	0.488	0.06	0.213	0.103	0.11	-0.12	-0.2
Factor 2 – Attitudinal competencies (Cronbach Alpha = .878)											
2	Self Confidence	0.256	0.66	0.077	0.138	0.11	0.324	0.087	0.09	0.32	0.09
8	Creative Thinking	0.021	0.828	0.102	0.008	0.08	-0.027	0.102	0.22	-0.01	0.09
9	Desire to Succeed	0.184	0.514	0.048	0.201	0.07	0.471	0.373	-0.1	0.16	0.23
14	Self-Motivation	0.297	0.49	0.288	0.19	0.3	0.185	0.157	-0.1	0.32	-0.1
26	Passion for Work	0.447	0.6	0.117	0.296	0.14	0.275	-0.04	0	-0.03	0.17
28	Managing Customer Relationship	0.333	0.586	0.004	0.119	0.5	0.052	0.184	0.06	0.14	0
Factor 3 – Strategic competencies (Cronbach Alpha = .757)											
15	Readiness for Challenges	0.218	0.255	0.761	0	0.14	0.187	0.044	0.1	0.18	0.01
17	Planning Skills	0.47	0.097	0.481	0.361	0.19	-0.163	0.014	0.26	0.09	0.14
24	Delegation of work	-0.11	0.121	0.662	0.018	-0.01	0.408	0.269	0.13	-0.09	0.21
25	Ability to handle Crisis Situation	0.305	-0.08	0.619	0.262	0.15	-0.029	0.132	0.01	0.31	0.13
Factor 4 – Entrepreneurial competencies (Cronbach Alpha = .808)											
1	Idea Generation	0.059	0.37	0.301	0.519	0.35	0.077	0.04	0.06	0	-0.2
23	Risk Taking Ability	0.152	0.094	0.32	0.616	0.12	-0.01	0.115	0.08	0.42	-0.2
35	Effective Resource Management	0.245	0.005	0.05	0.688	0.24	0.161	0.042	0.27	0.21	0.34
36	Ability to Formulate Business Strategy	0.165	0.182	0.021	0.726	0.13	0.229	0.213	0.14	0.11	0.14
Factor 5 – Personal competencies (Cronbach Alpha = .808)											
20	Family-Motivation	0.147	0.157	0.002	0.155	0.8	-0.108	0.031	0.11	-0.04	0.09
21	Interpersonal Relationship building	0.122	0.104	0.068	0.014	0.65	0.467	0.133	0.13	0.05	0.12
22	Ability to recognize and eradicate self-weakness	0.387	-0.06	0.349	0.201	0.58	0	0.147	0.16	-0.05	-0.1
32	Communication Skills	0.106	0.378	0.292	0.208	0.51	0.367	-0.09	0.05	0.3	0.04
33	Building Customer base	0.378	0.196	0.185	0.257	0.47	0.267	-0.01	0	0.29	0.1

		Factors									
		1	2	3	4	5	6	7	8	9	10
Factor 6 – Managerial competencies (Cronbach Alpha = .651)											
3	Ability to recognize Opportunity	0.133	0.432	0.121	0.27	-0.06	0.03	0.583	0.02	0.02	0.08
10	Ability to sense future Threats	0.035	0.045	0.323	0.036	0.19	0.086	0.731	0.06	0.15	0.12
11	Exposure to Business World	0.155	0.076	-0.02	0.046	0.03	0.441	0.561	0.38	0.07	0.03
Factor 7 – Aptitudinal competencies (Cronbach Alpha = .721)											
7	Efficient Resource Utilization	0.306	0.177	0.136	0.182	-0.06	0.121	0.075	0.72	-0.12	0.09
12	Technical Knowhow	-0.04	0.01	0.045	0.077	0.33	-0.045	0.102	0.74	0.21	0.11
31	Effective Resource Planning	0.196	0.138	0.267	0.352	0.13	0.16	0	0.47	0.16	0.42
Factor 8 – Financial competencies (Cronbach Alpha = .60)											
13	Ability to Acquire Finance	-0.19	0.099	0.016	0.172	-0.02	0.092	0.409	0.29	0.64	0.19
19	Ability to Manage Finance	0.391	0.181	0.253	0.141	0.04	-0.011	0.092	0.03	0.71	0
Factor 9 – Organisational competencies (Cronbach Alpha = .60)											
4	Previous Work Experience	0.051	0.068	0.037	-0.06	0.06	0.034	0.088	0.11	0.02	0.83
34	Team Management Skills	-0.01	0.154	0.514	0.27	0.02	0.116	0.137	0.09	-0.01	0.61

In order to establish convergent validity and discriminant validity of the constructs, the test suggested by Fornell and Larcker (1981) was used.

Table 6

Convergent and Discriminant Validity

Factor	Scale Composite Reliability	Cronbach's Alpha	AVE
Growth competencies	0.756	0.823	0.4
Attitudinal competencies	0.787	0.878	0.4
Strategic competencies	0.729	0.757	0.41
Entrepreneurial competencies	0.734	0.808	0.41
Personal competencies	0.746	0.808	0.4
Managerial competencies	0.66	0.651	0.4
Aptitudinal competencies	0.684	0.721	0.43
Financial competencies	0.625	0.6	0.45
Organisational competencies	0.686	0.6	0.53

The reliability of the factors was checked by calculating Cronbach Alpha. Table 6 shows composite reliability, Cronbach Alpha reliability and average variance extracted (AVE) for each factor. For each factor, the value of Cronbach Alpha was greater than 0.6. The values of scale composite reliability (SCR) were found to be greater than 0.6 for all the factors. AVE for the nine factors is greater than 0.40. AVE should be higher than 0.5. However, the value of 0.4 is acceptable due to the condition that if AVE value is less than 0.5, but the composite

reliability is higher than 0.6, the convergent validity of the construct is acceptable (Fornell, Larcker, 1981).

Therefore, the constructs of the framework presented in the paper possessed both convergent and discriminant validity can be inferred (Singh, Nandan, Chawla, 2015).

The first factor of competencies have been grouped as “Growth competencies” as they include:

- Ability to implement business strategy
- Ability to control and check the quality of work
- Ability to build on own strength
- Operational skills
- Ability to adapt
- Proactive attitude

The second factor of competencies have been grouped as “Attitudinal competencies” as they include:

- Self-confidence
- Creative thinking
- Desire to succeed
- Self Motivation
- Passion for work
- Managing customer relationship

The third factor of competencies have been grouped as “Strategic competencies” as they include:

- Readiness for Challenges
- Planning Skills
- Delegation of work
- Ability to handle Crisis Situation

The fourth factor of competencies have been grouped as “Entrepreneurial competencies” as they include:

- Idea Generation
- Risk-Taking Ability
- Effective Resource Management
- Ability to Formulate Business Strategy

The fifth factor of competencies have been grouped as “Personal competencies” as they include:

- Family-Motivation
- Interpersonal Relationship building
- Ability to recognise and eradicate self-weakness
- Communication Skills
- Building Customer base

The sixth factor of competencies have been grouped as “Managerial competencies” as they include:

- Ability to recognise an Opportunity
- Ability to sense future Threats
- Exposure to Business World

The seventh factor of competencies have been grouped as “Aptitudinal competencies” as they include:

- Efficient Resource Utilisation
- Technical Knowhow
- Effective Resource Planning

The eighth factor of competencies have been grouped as “Financial competencies” as they include:

- Ability to Acquire Finance
- Ability to Manage Finance

The ninth factor of competencies have been grouped as “Organisational competencies” as they include:

- Previous Work Experience
- Team Management Skills

All factors showed a significant factor loading and no blurred loading across factors was observed. All nine factors had attributes that were interpretable and groupable according to the theoretical framework. Based on the above factor interpretation, the researchers have formed 9 clusters of factors, namely, Growth competencies, Attitudinal competencies, Strategic competencies, Entrepreneurial competencies (Mitchelmore, Rowley, 2013), Personal competencies (Stefanovic, Prokic and Rankovic, 2010), Managerial competencies, Aptitudinal competencies, Financial competencies and Organisational competencies which were supported by previous researches under which the 36 competencies have been clubbed. Leadership qualities were one of the competencies, which came as a single factor as a result

of factor analysis was dropped from the final groups. Consequently, the results were considered viable and factor nomenclature was assigned on the basis of the groups of variables.

Problems and challenges faced by women entrepreneurs

The respondents were asked to rate the below-mentioned problems and challenges that they consider based on their perception and experience. From the table below, it is apparent that the major challenges which these women entrepreneurs are facing are related to:

- **Difficulty in Work-Life Balance (33%)** Danish & Smith (2012) found that the most significant challenge faced by women entrepreneurs in Jeddah is the effect of business on personal and family life. Ramadani (2015) identified that women entrepreneurs are facing difficulty in establishing a balance between family and work in Albania.
- **Difficulties in marketing (30%)** (Tambunan, 2007) examined the common constraints faced by SMEs, like difficulties in marketing and distribution. Premaratne and Kudaliyanage (2016) identified that women entrepreneurs in SMEs of Maldives are having limited access to larger markets.
- **High Socio-cultural Barriers (29%)** (Brush et al. 2009), Brush et al. (2009), women entrepreneurs face more socio-cultural challenges compared to their male counterparts. They are related to cultural expectations (e.g., values, attitudes, gender roles, etc.) and societal structures (e.g., family, reference groups or networks, status in society, etc.) that affect the development of women entrepreneurs. (Roomi, Harrison, 2010) investigated that Pakistani women entrepreneurs face particular barriers of socio-cultural like Izzat and Pardah.
- **Lack of finance (27%)** which is supported by other researchers that getting finance is a predominantly significant barrier to women entrepreneurs (Tambunan, 2007; Andersson et al., 2007; Robb, Coleman, 2010). Myers and Majluf (1984) indicated that small and medium enterprise owners mostly depend on their personal savings or funds obtained from their family members and friends as initial sources of finance. The complicated procedures like paperwork, keeping security against the loan, providing guarantor, the requirement of a male as one of the borrowers, when applying for a loan as found out from the survey are some of the factors which keeps them away from taking funds from the formal sources like banks, NBFCs etc.
- **Complicated Bureaucracy & Procedures (24%)** (Tambunan, 2007) examined the common constraints faced by SMEs like Problems caused by cumbersome and costly bureaucratic procedures and Cumbersome and onerous government regulations and restrictions. Danish & Smith (2012) analysed the challenges faced by women entrepreneurs in Jeddah are Bureaucracy and procedures, Liaising with network organisations and dealing with clients and customers.

From the survey analysis, which is supported by existing literature, that the challenges encountered by women entrepreneurs in the state of Gujarat (India), are similar to what have been identified in other developing countries of the world.

Table 7

Survey Responses of women entrepreneurs regarding problems and challenges (%)

Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Gender Biases	23	25	22	19	11
Difficulty in Work Life Balance	19	16	35	33	7
Lack of Finance	11	26	31	27	5
Skill Shortage	22	33	14	22	9
High Socio-Cultural Barriers	19	24	18	29	10
Lack of Education and Training	34	28	23	12	3
Difficulties in Marketing	14	29	20	30	7
Low Technological Capabilities	18	31	27	17	7
Complicated Bureaucracy & Procedures	12	23	30	24	11
Problems in Networking	17	37	25	19	2

Chi-square tests

H₀1: There is no significant association between age and the parameters of problems and challenges faced by the women entrepreneurs

H₁1: There is a significant association between age and the parameters of problems and challenges faced by the women entrepreneurs

Table 8

Chi-square tests interpretation

Null Hypothesis	Alternate hypothesis	Results
There is no significant association between age and gender biases	There is a significant association between age and gender biases	0.055
There is no significant association between age and difficulty in work-life balance	There is a significant association between age and difficulty in work life balance	0.004*
There is no significant association between age and lack of finance	There is a significant association between age and lack of finance	0.692
There is no significant association between age and skill shortage	There is a significant association between age and skill shortage	0.41
There is no significant association between age and high socio-cultural barriers	There is a significant association between age and high socio-cultural barriers	0.408
There is no significant association between age and lack of age and training	There is a significant association between age and lack of age and training	0.568
There is no significant association between age and difficulties in marketing	There is a significant association between age and difficulties in marketing	0.737
There is no significant association between age and low technological capabilities	There is a significant association between age and low technological capabilities	0.254
There is no significant association between age and complicated bureaucracy & procedures	There is a significant association between age and complicated bureaucracy & procedures	0.86
There is no significant association between age and problems in networking	There is a significant association between age and problems in networking	0.508

From the above Table 8, the researchers have analysed that there is a significant association between age and the parameter of challenges’ difficulty in the work-life balance, which is the most important challenge faced by the women entrepreneurs as identified in the survey. This is also supported by various pieces of literature, that have been studied (Danish and Smith, 2012; Ramadani, 2015). Apart from this, no significant association between age and other parameters of the problems and challenges faced by the women entrepreneurs like lack of finance, skill shortage, high socio-cultural barrier etc., have been identified.

H₀2: There is no significant association between marital status and the parameters of problems and challenges faced by the women entrepreneurs

H₁2: There is a significant association between marital status and the parameters of problems and challenges faced by the women entrepreneurs

Table 9

Chi-square tests interpretation

Null Hypothesis	Alternate hypothesis	Results
There is no significant association between marital status and gender biases	There is a significant association between marital status and gender biases	0.766
There is no significant association between marital status and difficulty in work-life balance	There is a significant association between marital status and difficulty in work-life balance	0.309
There is no significant association between marital status and lack of finance	There is a significant association between marital status and lack of finance	0.474
There is no significant association between marital status and skill shortage	There is a significant association between marital status and skill shortage	0.351
There is no significant association between marital status and high socio-cultural barriers	There is a significant association between marital status and high socio-cultural barriers	0.35
There is no significant association between marital status and lack of education and training	There is a significant association between marital status and lack of education and training	0.412
There is no significant association between marital status and difficulties in marketing	There is a significant association between marital status and difficulties in marketing	0.683
There is no significant association between marital status and low technological capabilities	There is a significant association between marital status and low technological capabilities	0.343
There is no significant association between marital status and complicated bureaucracy & procedures	There is a significant association between marital status and complicated bureaucracy & procedures	0.916
There is no significant association between marital status and problems in networking	There is a significant association between marital status and problems in networking	0.544

From the above Table 9, the researchers have identified that irrespective of the marital status of the women, there is no significant association with the problems and challenges faced by the women entrepreneurs. One of the reason can be that the women in India do not still want to portray their marital life in public. Moreover, quite a few of the respondents were from

business families, therefore their family might have been a key support in establishing their business. It can be seen that 77% of the respondents are married and they are running their business efficiently.

H₀3: There is no significant association between education and the parameters of problems and challenges faced by the women entrepreneurs

H₁3: There is a significant association between education and the parameters of problems and challenges faced by the women entrepreneurs

Table 10

Chi-square tests interpretation

Null Hypothesis	Alternate hypothesis	Results
There is no significant association between education and gender biases	There is a significant association between education and gender biases	0.054
There is no significant association between education and difficulty in work-life balance	There is a significant association between education and difficulty in work-life balance	0.363
There is no significant association between education and lack of finance	There is a significant association between education and lack of finance	0.369
There is no significant association between education and skill shortage	There is a significant association between education and skill shortage	0.563
There is no significant association between education and high socio-cultural barriers	There is a significant association between education and high socio-cultural barriers	0.954
There is no significant association between education and lack of education and training	There is a significant association between education and lack of education and training	0.28
There is no significant association between education and difficulties in marketing	There is a significant association between education and difficulties in marketing	0.926
There is no significant association between education and low technological capabilities	There is a significant association between education and low technological capabilities	0.565
There is no significant association between education and complicated bureaucracy & procedures	There is a significant association between education and complicated bureaucracy & procedures	0.824
There is no significant association between education and problems in networking	There is a significant association between education and problems in networking	0.667

From the above Table 10, the researchers have identified that despite a rise in educational qualification, it does not reduce/impact or mitigate the problems and challenges faced as an entrepreneur. In the sample, around 64% are graduates, of which 32% are post-graduates followed by 23% are either having technical or professional qualification. Therefore it is possible that the data is inclined towards highly qualified respondents and hence the problems that lack of qualification could cause are not being reflected in the sample. Problems and challenges faced by women entrepreneurs are independent and educational qualifications have no role to play in reducing them. This finding is supported by other researches that

educated women are the driving force of the new businesses (OECD, 2004). Hamad (2005) mentioned that education is not only the reason of the empowerment of women, but also it is significant to “the economic survival of the country in years to come”.

Conclusion and Way Forward

The researchers have found that in global scenarios, there are various competencies that are required in entrepreneurs for running a successful business. These competencies have a deeper impact among businesses run by women entrepreneurs. With the help of the factor analysis, the researchers have found 9 different groups of competencies such as:

1. Growth competencies
2. Attitudinal competencies
3. Strategic competencies
4. Entrepreneurial competencies
5. Personal competencies
6. Managerial competencies
7. Aptitudinal competencies
8. Financial competencies
9. Organisational competencies

Similar to our results, Chandler and Hanks (1994), identified that two groups of skills were necessary for the entrepreneurial position and the management position, whereas Chandler and Jansen (1992), found out three groups of competencies like entrepreneurial skills, management skills and technical function. Mitchelmore and Rowley (2013), found that along with entrepreneurial competencies and management competencies, two more groups of competencies, i.e. personal & relationship competencies and human relations competencies, are relevant for business. Previous studies have also recommended that one of the areas where women entrepreneurs may outperform men is in their abilities to develop strong interpersonal relationships (Birley et al., 1987), personal competencies have also emerged in our study. Rao, Rao and Dixit (1975) identify some personal background, attitudinal, organisational and management variables that clearly shows the difference between successful and unsuccessful entrepreneurs. This is in line with our study. Man et al. (2002) have identified ten factors of entrepreneurial competencies like opportunity, commitment, relationship, operational, human, analytical, innovative, learning, strategic and personal strength competencies. Most of these competencies have reflected in our factor analysis results. However, they appear in different clusters. In our research, we have identified a few more competencies like growth competencies, strategic competencies, aptitudinal competencies and financial competencies, which were not studied in this format in the previous researches.

From Global Entrepreneurship Monitor (2012) it was found that if women believe that they have the potential or competencies for entrepreneurship, they will focus on the fact that they will work out entrepreneurial opportunities. Accordingly, the above-concluded competencies

can be used as a framework for developing the training programmes for women entrepreneurship. Hence, the researchers found that these competencies affect in development and growth of the business run by women entrepreneurs. Moreover, the researchers have found that just like global scenarios, even in Gujarat, the problem and challenges faced by entrepreneurs are highly gender-specific. Despite a highly conducive business environment, women face various difficulties in establishing their business. By using descriptive statistics, the researchers have concluded that 'Difficulty in work-life balance is the challenge, that most (33%) respondents have faced in their entrepreneurial journey. 'Difficulty in Marketing' and 'High socio-cultural barriers' being the close second and third with 30% and 29% of women, facing these challenges respectively. Overall it can be concluded that despite these challenges and with the help of the competencies, women entrepreneurs across Gujarat are flourishing and entrepreneurship seems to be gaining popularity amongst women in Gujarat.

Limitations

The survey has been conducted in the state of Gujarat with a sample size of 100 respondents, which is only one state of the entire country. This reflects a state-specific results of women entrepreneurs competencies and challenges faced. A similar study with a larger sample size, if conducted in all the states of India, would give a results on a larger scale.

Practical Implications

The outcome of this paper can be used by researchers, government agencies, non-government organisations and incubation centres to understand and develop policies like:

- Training programmes – It is of utmost importance to provide technical and skill development to encourage and promote women entrepreneurship. This is one of the ways in which women empowerment can happen and the socio-cultural barrier of our country towards women can be changed. Other trainings, like helping and guiding the entrepreneurs in how to do marketing of their products and services, are also required.
- Awareness programmes – It is necessary to create awareness about the existing government support available for the women entrepreneurs that will help women to know about the procedural requirement for availing the benefits. This will eventually reduce the complicated bureaucracy and procedures.
- Financial assistance programmes – Lack of financial support is one of the major problem faced by women entrepreneurs. Due to the lack of knowledge and the complicated procedures, women pull themselves back from accessing the formal source of finance from banks and financial institutions. The policy should be framed in such a manner, that is easily understood and accessed by the women entrepreneurs.

These policy changes will help more and more women to become entrepreneurs and run their business successfully.

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