# Promoting Women Entrepreneurship in Indian Micro, Small and Medium Enterprises: An Empirical Analysis

**THESIS**

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Under the Supervision of

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# CERTIFICATE

This is to certify that the thesis entitled **"Promoting Women Entrepreneurship in Indian Micro, Small and Medium Enterprises: An Empirical Analysis"** submitted by **Ms. Sakshi Chhabra**, ID No. **2014PHXF0011P** for award of Ph.D. of the Institute embodies original work done by her under my supervision.

**(Signature of Supervisor)**

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# Abstract

The Indian economy has been witnessing a drastic change since mid-1991, with new policies of economic liberalization, globalization and privatization initiated by the Indian Government. Entrepreneurship amongst women has been a recent phenomenon. The MSME's sector in India has played a pivotal role in the development of the country's economy. Women entrepreneurs play an important role in the sustained economic development and social progress. American Express OPEN in 2012 [1] ranks India at 16$^{th}$ in terms of revenue generation by women owned enterprises. Global Entrepreneurialism Report, 2015 [2] has ranked India on top for the highest percentage of successful women entrepreneurs. Nearly half (49 percent) of successful entrepreneurs in India are female entrepreneurs.

Literature suggests that women entrepreneurs differ significantly from men entrepreneurs in terms of characteristics, background, motivation, entrepreneurial skills and the problems they face. This has led to increased interest among researchers to study 'Women entrepreneurship' as a special interest group. Rapid increase in number of women owned enterprises across different countries has attracted several researchers' interest. With this growing phenomenon, this study also includes understanding the Entrepreneurial Ecosystem particularly the role of Government policies and programmes in promoting women owned enterprises in India.

This study aims to identify, propose and test the relationship between antecedents of entrepreneurial intention among women entrepreneurs. The scope of the study is themed towards understanding the characteristics, motivational factors, issues and challenges and institutional framework among women entrepreneurs in Indian micro, small and medium enterprises.

This study has five objectives. The first four objectives relate to identifying the characteristics, motivational factors, issues and challenges, institutional framework i.e. understanding the antecedents that can influence the entrepreneurial intention among women entrepreneurs. Since, attitudes and intentions serve as precursors of entrepreneurial intention, we have referred to entrepreneurial intention to indicate the effect of the antecedents on both of these variables in a general sense. The fifth objective is to propose and test the structural models that provide an insight into the determinants of entrepreneurial intention.

To achieve the first four objectives, the literature was examined exhaustively to identify the possible characteristics, motivational factors, issues and challenges, and various government policies and programmes that promote women entrepreneurship. This is followed by

understanding the various antecedents of entrepreneurial intention through intention theories. Subsequently, hypotheses were formulated and few conceptual models were proposed. Pre-validated scale items were used to measure the constructs. The descriptive research design used in this study involves data collection through a questionnaire disbursed through online, meet up groups, entrepreneurial events, and Laghu Udyog Bharti groups. Data was collected from clusters as defined in IFC report [3]. To understand the role of characteristics, motivational factors and institutional framework for entrepreneurial intention among women, an entrepreneurial intention scale, comprising the list of perceived desirability, feasibility and entrepreneurial potential was used in this study. Data from a sample of 489 respondents was collected, out of which, 471 samples was fit for analysis after removing incomplete responses. For the second objective we empirically tested the proposed relationships using Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA) and Structured Equation Modelling (SEM).

The overall structural model states perceived desirability and feasibility leads to willingness to act towards starting an enterprise (i.e. entrepreneurial intention). Results of this study indicates women entrepreneurs with more desirability and feasibility possess more willingness to act, more adaptable to unexpected situation, have more perseverance and passion towards long term goal, have more focus and commitment which leads to more entrepreneurial intention.

The results of the present study suggest that it's the perceived desirability and feasibility that leads to willingness to act among women entrepreneurs which in turn leads to forming their entrepreneurial intention.

The study also highlights various issues and challenges faced by women entrepreneurs in Indian MSME's, this is followed by listing of various policies and programmes by Ministry of MSME (Government of India) for fostering women entrepreneurship in India. Major issues faced by women entrepreneurs in Indian MSME's includes finance, lack of awareness on Government policies and programmes.

This study provides an in-depth explanation for the empirically validated conceptual models for understanding the entrepreneurial intention among women. These findings lay the foundation for theory and practice in the field of women entrepreneurship in MSME's in India. The imitations associated with each model is stated, and the recommendations for the future research is also presented in this report.

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# Abbreviations

| | |
|---|---|
| MSME | Micro, Small and Medium enterprises |
| GEM | Global Entrepreneurship Monitor |
| PT | Personality Traits |
| SN | Subjective Norms |
| EE | Entrepreneurial ecosystem |
| MOV | Motivational factors |
| PD | Perceived Desirability |
| PF | Perceived Feasibility |
| EP | Entrepreneurial Potential |
| LO | Learned Optimism |
| CF | Cognitive Flexibility |
| RI | Role Identity |
| EIN | Entrepreneurial Intensity |
| ESE | Entrepreneurial Self Efficacy |
| IN | Intention |
| GR | Grit |
| SCCT | Social Cognitive Career Theory |
| ACS | Action Control Scale |
| WE | Women entrepreneurship |
| LUB | Laghu Udyog Bharathi |
| DIC | District Information Center |

# CHAPTER 1

# INTRODUCTION

## 1.1 Introduction

The 21st century has witnessed a paradigm shift in the role of women from being simply a home maker to a career oriented professional. This has led to improvement in their economic strength as well as their position in the society. In the present context modern women don't want to confine themselves within the boundaries of their houses [1].

Women entrepreneurship is "an act of owning a business which makes women economically independent". Women entrepreneurs play an important role in the sustained economic development and social progress. Women entrepreneurship is considered to be instrumental in women's empowerment and improvement in their quality of life. In 2012, 126 million women were managing new businesses in 67 countries around the world. In addition to this 98 million were running established businesses. Globally men make up 52% of all entrepreneurial activity and remaining 48% of them are constituted by women entrepreneurs. The gender gap in entrepreneurship is defined as the difference between men and women in terms of numbers engaged in entrepreneurial activity. The gender gap in entrepreneurial activities varies across the world and it is observed that 1.5% to 45.4% of women adult population are involved in entrepreneurial activities [2].

Entrepreneurial research can be carried out at three levels of analysis: micro, meso and macro level. Entrepreneurial activity originates at the individual level and can always be traced back to a single person, the entrepreneur. Entrepreneurship is, hence, induced by an individual's attitudes or motives, skills and psychological endowments. This often falls under the "micro" unit of analysis of entrepreneurship research. Meso level of research study deals with entrepreneurship research at firm level and the focus on the business entity or the enterprise. It primarily involves studying factors that determine the success and failure of new enterprises, intrapreneurship/corporate entrepreneurship, strategic alliances, governance structure, innovations etc. Macro level research study focus on the impact of entrepreneurship on economic development, regional development, social change, population ecology and institutional theory [3].

Most entrepreneurship research on individual level analysis has focused on the entrepreneurial activities of male entrepreneurs. Carter and Cannon [4] in their study criticized earlier research findings stating there is no significant difference in male and female entrepreneurs.

Several research studies were conducted with a focus on studying the gender differences in entrepreneurship. Studies by Hisrich and Brush, Zapalska [5,6] observe that women entrepreneurs are different from that of men in terms of characteristics, background, motivation, entrepreneurial skills and the problems faced by them. Brush, Bird and Mitchell [7] identified that men and women use different strategies and organizational structures while managing business enterprises.

Jacques Ascher [8] in his study found that Micro, Small and Medium Enterprises (MSME's) are the fundamental drivers for creating, running and growing businesses. Consequently, the economic growth in a country is also dependent on the growth of MSME sector and this is no different for Indian Economy as well. Globally MSME's contributes to about 90 percent of the business enterprises. MSME sector in India provides second largest source of employment after agriculture sector [9].

The early empirical research in the field of entrepreneurship focused on the psychological characteristics of business founders, although these research studies were not closely linked to contemporary developments in psychology. Sari et al. [10] in their study pointed that the trait approach was often employed, and suggested the endless lists of entrepreneurial traits. This line of research approach was unable to give the answer to the question "What makes an individual to start new firm?". Few studies have convincingly argued that personal characteristics have a more reliable influence on the decision to start a firm than the psychological traits [11-14]. An alternate to trait approach has been suggested by Aldrich et al. [15] in their study to view firm's creation in a wider context, according to them this is done by applying an aggregate level of analysis and to look for regional or national level variables that can explain variations in the rate of new firm formation. This approach has been relatively successful and through this strong and generalizable relationships have been established [16,17]. Yet, there is a need for disaggregate level of understanding of the processes leading to new firm formation. Therefore, few researchers have tried to develop integrated explanatory models that take into account the general psychological characteristics of potential entrepreneurs, domain specific attitudes, personal background, and situational variables [18,19].

Entrepreneurial intention also plays a vital role in the decisions related with starting a new firm. Lubica [20] has defined Intention as a direct antecedent of behavior. Stronger the intention for behavior, the bigger the success of behaviour prediction or actual behaviour. The study of entrepreneurial intentions has distinctive advantages for comparison between entrepreneurs and

non-entrepreneurs. The choice of new firm formation is influenced by entrepreneurial attitude, intention and behavior. The intention-based theories offer testable, models on how exogenous factors [demographic profile, personal characteristics, contextual variables] affect entrepreneurial attitudes, intentions, and behavior" [21].

## 1.2 Women Entrepreneurship: A Glance at Indian and Global Scenario

Women's participation in economic activities is not new in India. Women's involvement in the production process can be dated back to the Mohenjo-Daro and Harappa civilization where they were equally involved in clay modelling and other arts along with men. In the Vedic era there is clear evidence of women's involvement in agricultural activities and weaving. They even handled the production of Soma - an intoxicant juice. There are documents supporting women's participation in the international distribution system since early 1950's. In 1970's Government of India began to focus and promote self-employment among women. As a result of these initiatives, in late 1970's the concept of women entrepreneurship gained prominence [22].

Out of total enterprises in India, women owned enterprises account for 25 per cent. American Express OPEN report on 'State of Women Owned Business' ranks India at 16$^{th}$ in terms of revenue generation by women owned enterprises [23]. In 2009, a study carried out by Centre for Women's Business Research indicates women entrepreneurs in India were growing twice as fast as the other business since 1997 to 2002 [24].

Global Entrepreneurship Report, 2015 [25] ranked India at 70$^{th}$ position among 77 countries. India has obtained a score of 25.3 in the Female Entrepreneurship Index of GEDI and the study suggested a need for significant changes to reduce the barriers faced by female entrepreneurs in India. This study also reported that nearly half (49 percent) of successful entrepreneurs in India were female entrepreneurs. A majority of these businesses were in the micro sector [26]. As per Global Entrepreneurship Index Report of 2018, India is ranked 68$^{th}$ among 137 countries globally. The ratio of female to male labour force participation in India's main sectors of employment has been ranked at the lowest among the 15 indicators used in this index. This study further identified that women entrepreneurs in India were opportunity driven than necessity driven. Another study reported that the product innovation is the highest strength possessed by the entrepreneurial ecosystem in India and there is a lot of improvement required in technology absorption [27].

The MasterCard Index of Women Entrepreneurs (MIWE) 2018 report has ranked India on 52nd position among 57 nations. This study mentions that the 'underlying conditions' for women entrepreneurs in India are less favourable when compared to countries that got a high index score. This study also indicates women entrepreneurs are prone to shutting down their business due to lack of financing. This study suggests to work on increasing women enrolment in postsecondary education, increasing access to financial loans to women entrepreneurs and single window clearances, tax breaks and other measures to promote women entrepreneurship in the country [28].

A study by Purva khera [29] in 2018 reveals that in India, closing the gender gap could lead to a 6.8-percent gain in GDP. Another study estimated that advancing women's equality in India could boost its GDP by $0.7 trillion in 2025 or 16 per cent as compared to the 'business as usual' scenario [30]. Entrepreneurship remains critical to harness the economic potential of women and thus, can achieve the sustainable development goals (SDGs) by 2030. World Economic Forum's Gender Gap Report of 2018 [30] indicates 68% of Global Gender Gap. Till now, no country has achieved parity, and the top seven countries in the rankings have closed at least 80% of the gap. In terms of Economic Participation and Opportunity sub index, out of 29 countries for which data are available, women spend, on average, twice as much time on these activities than men, with a peak of five to one in Japan, Korea and India.

Ministry of MSME report states that MSMEs constitute 95 per cent of all industrial units in India contributing to 8 per cent of national GDP, 50 per cent of country's total manufactured exports, 45 per cent of India's total industrial employment [31]. Sixth Economic Census in 2016 states women constitute around 14% of the total entrepreneurship i.e. 8.05 million out of the total 58.5 million entrepreneurs. Out of this, 13.3% of women entrepreneurs work in agriculture sector and remaining work in non-agriculture sector [32].

Various research studies on women entrepreneurship has been carried out across the world and details are presented in Table 1.1.

**Table 1.1: Research Studies on Women Entrepreneurs & Women Entrepreneurship**

| Themes | Global Studies | | Indian Studies |
|---|---|---|---|
| | Country | Author(s) & Year | Author(s) & Year |
| Background, Profile, Characteristics | USA, Puerto Rico, Ireland, China, Hungary, Arab Countries, Australia | Cooper & Dunkelberg (1981), Hisrich & O'Brien (1981), Hisrich & Brush (1984), Hisrich (1986), Neider (1987), Hisrich & Brush (1991), Hisrich & Fan (1991), Hisrich & Fulop (1994), Zapalska(1997), Hisrich & Ayse Ozturk (1999), Bennett & Dann (2000), Dechant & Al Lamky (2005), Cherkas, Hunkin, & Spector (2008), Nicolaou & Shane (2009), Westley, F & Antadze, N (2010), Stevens, R, Moray, N & Bruneel, J (2015), Yitshaki, R & Kropp, F (2016), Cain, M. K., Zhang, Z., & Yuan, K. H. (2017). UYount, KM, Crandall, A et al (2019), Colbert, A. E., Barrick, M. R., & Bradley, B. H. (2021) | Singh's (1985), Singh & Sengupta (1986), Shah's (1987), Duchesneau and Gartner (1990), Singh (1992), Surthi & Sarupriya (2003), Singh (1992) as cited by Rami Alasadi (2007), Nicolaou, Shane, Cherkas, Hunkin, & Spector, (2008), Arakeri Shanta V (2011), Verma, R, Sinha, T & Khanna, T (2013), Torri, MC & Martinez, A (2014), Abd Rani, S. H., & Hashim, N. (2017), Rizwan Ullah Khan et al (2021) |
| Business Success Factors | USA | Hisrich & Brush (1991), N & Bruneel, J (2015), 'Yitshaki, R & Kropp, F (2016), Cain, M. K., Zhang, Z., & Yuan, K. H. (2017). | Singh et.al (1986), Surthi & Sanupriya (2003), MC & Martinez, A (2014), Abd Rani, S. H., & Hashim, N. (2017), Rizwan Ullah Khan et al (2021) |
| Business Organizational Characteristics | USA, Puerto Rico, Ireland, Arab Countries, Arab Countries | Cooper & Dunkelberg (1981), Hisrich (1986), Neider (1987), Dechant & Al Lamky (2005) | Mehta(2008), Ebrahim (2013), Javad et al (2014), Hashim, N. (2017), Rizwan Ullah Khan et al (2021) |

**Table 1.2: Research Studies on Women Entrepreneurs & Women Entrepreneurship (Contd.)**

| Themes | Global Studies | | Indian Studies |
|---|---|---|---|
| | Country | Author(s) & Year | Author(s) & Year |
| Business Problems | USA, Hungary, Turkey, Arab Countries | Schwartz (1976), Hisrich & O'Brien(1981), Hisrich & Fulop (1994), Hisrich & Ayse Ozturk (1999), Dechant & Al Lamky (2005), Kelley, D. J., Baumer, B. S., et al(2017), Welter, F., Baker, T., & Wirsching, K. (2019), Rubin T.N et al (2020), Joyce A. Strawsera Stillman and Diana (2021) | Singh, Sengal, Tinani & Sengupta (1986),Vinze (1987), Kanitkar & Contractor (1992), Khajuria & Sinha T.N. (2000), Koshy & Joseph (2000), Surthi & Sanupriya (2003), Mohiuddin (2006), Lalitha Rani(2006), Iyer (2007), Benerjee & Talukdars (2007), Gupta M (2008), Pandey T. (2016), Nair T.K et al (2020) |
| Promotion to Entrepreneurial Development Programmes | Arun (2008), Hariprasad (2011), Indira (2014), Himani (2017) Sudha,chitra (2019) | Yamoah Emmanuel Erastus, Arthur Stephen, Issaka Abdullai (2014), Rubin T.N et al (2020), Joyce A. Strawsera Stillman and Diana (2021) | Singh & Sengupta (1986), Manimala, M.J (2008), Pandey T.(2016), Nair T.K et al (2020), M. Chanchal (2021) |

After an extensive analysis of these studies the following key themes emerged.

- *Background, Profile, Characteristics:* It includes the personality characteristics a woman entrepreneur acquires and how that influences an individual to establish a business.
- *Motivation:* Factors that motivate people to start business enterprises; driving force behind the entrepreneurial behaviour and action; an inner state, dynamic force that causes a person to act towards the attainment of goals.
- *Business Organizational Characteristics:* Refers to the type of enterprise created, organizational characteristics, structure & strategy.
- *Business Success Factors:* Factor that contributes to business success.
- *Business Problems:* Issues and challenges that an entrepreneur faces during establishing, managing and running the business.
- *Promotion to Entrepreneurial Development:* Initiatives taken by government to promote entrepreneurial activities among women.

## 1.3 Focus of Thesis: Purpose and Rationale

### 1.3.1 Need for the Study

Rapid increase in number of women owned enterprises across different countries has attracted several researchers' interest. Several studies were conducted with a focus on studying the gender differences in entrepreneurship. Studies by Hisrich and Brush and Zapalska [5,6] observe that women entrepreneurs are different from that of men in terms of characteristics, background, motivation, entrepreneurial skills and the problems faced by them. Brush, Bird and Mitchell [7] in their study identified that men and women use different strategies and organizational structures while managing business enterprises.

This study has identified various literature gaps. Most of the research studies are cross sectional or longitudinal studies focusing on specific regions with in India viz. Tamilnadu, Jammu & Kashmir, Meghalaya, Andhra Pradesh, Karnataka, Uttar Pradesh and Kerala [33-55]. However, there is no attempt made to conduct a nation-wide comprehensive research study to understand the profile, motivation, issues and challenges of women entrepreneur in MSME's in India.

It has been observed that entrepreneurial intention plays an important role for any decision or behaviour to happen. It is defined as a state of mind that ultimately leads an individual towards forming a new business concept and making a career in entrepreneurship. Krueger & Brazeal in 1994, in their study highlight that entrepreneurial potential plays an important role in the formation of intention which in turn leads to behavior. They have also mentioned that we want more potential entrepreneurs; and a need to identify and establish policies that increase their perceived feasibility and perceived desirability. Hence, to understand the intention of a person there is a need to study entrepreneurial potential. However, there is not much source available to measure entrepreneurial potential [56].

OECD report [57] highlights that policies and programmes tend to be "men streamed" and too often do not take into account the specific needs of women entrepreneurs and would-be women entrepreneurs. Therefore, differences in women entrepreneurial dimensions have to be taken into account by the government and policy makers while drafting and implementing various policies, programs & institutional support for promoting women entrepreneurship.

### 1.3.2 Problem Statement

There has been a paradigm shift in demographics of corporate landscape in India. It has been found that a large number of women are trying to enter the economic wave. As stated by the National Sample Survey Organization in 2017, only 14% of business establishments in India are being run by women entrepreneurs. The survey also revealed that most of the business run by women are in micro sector and about 79 % of them are self-financed [58]. The data clearly indicates that despite initiatives taken by women for venture creation, it seems there are still various challenges they need to overcome.

### 1.3.3 Objectives of the Study

The research objectives of this study are:

1. To study the characteristics of women entrepreneurs in Micro, Small and Medium Enterprises (MSMEs)
2. To explore the motivational factors that contributes to entrepreneurial activities.
3. To investigate the issues faced by the women entrepreneurs in MSMEs
4. To identify the institutional framework that promotes women entrepreneurship in MSMEs.
5. To design and develop an analytic framework for promoting Women Entrepreneurship in MSMEs.

## 1.4 Organization of the Dissertation

The dissertation work is divided and organized as follows

**Chapter 1: Introduction**, provides a background of the research study, research problem and research objectives.

**Chapter 2: Literature Review**, provides a thorough review of the literature covering the concept of women entrepreneurship, personal characteristics, motivational factors and issues and challenges faced by women entrepreneurs and the antecedents of entrepreneurial intention.

**Chapter 3: Research Methodology**, introduces the probable antecedents of entrepreneurial intention identified from thorough review of literature. The conceptual framework for entrepreneurial intention have been proposed for identifying the personal characteristics, motivational factors and issues and challenges faced by women entrepreneurs in India. The hypotheses related to the entrepreneurial intention are framed that are empirically testable. The research approach, research design adopted, development of the questionnaire, data collection methods, sampling method, sampling frame, sampling unit, sample size determination and various techniques used for preliminary data analysis and final data analysis are discussed.

**Chapter 4: Data Analysis**, provides a detailed account of the statistical analysis conducted to test the conceptual models is provided in this chapter. With a sample of 471 respondents, this study has empirically tested the proposed relationships using Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA) and Structural Equation Modelling (SEM).

**Chapter 5: Institutional Framework**, details the existing central and state government policies and programmes available for entrepreneurs. This study discusses these policies and programmes in lines with the functional areas of business i.e. finance, human resource, marketing and operations management.

**Chapter 6**: **Discussions and Findings**, presents the results of the statistical analysis in detail. The study has imparted strong theoretical bases for accepting and rejecting the hypotheses. Following this discussions, we have outlined the major findings of the study, listed the contributions and its implications for theory and practice. The limitations of the study and scope for the future research are also stated.

## 1.5 Conclusion

This study aims at understanding the role of personal characteristics, motivation, subjective norms and entrepreneurial ecosystem in entrepreneurial intention among women entrepreneurs in Indian micro, small and medium enterprises (MSME's). This study also investigate the issues faced by the women entrepreneurs in MSMEs in India.

# CHAPTER 2

# LITERATURE REVIEW

## 2.1 Review Process

Review process helps in consolidating all the relevant factors that will help in promoting women entrepreneurship in Indian Micro, Small and Medium enterprises. It comprises the following steps.

**Step 1: Review Planning**

This step illustrates the approach used for carrying out the review process. Maria J Grant & Andrew Booth in 2009 [59] have cited 14 review types. A simple analytical framework- Search, Appraisal, Synthesis and Analysis (SALSA) was used to examine the review type (Refer to Appendix A). The literature review has been carried out by using systematic approach type against SALSA framework.

Systematic approach seeks to systematically search for, appraise and synthesis research evidence, often adhering to guidelines on the conduct of a review. The framework for this approaches includes 'S' (Search) which "Aims for exhaustive, comprehensive searching, 'AL' (Appraisal) for quality assessment that may determine inclusion/exclusion, 'S' (Synthesis) is typical narrative with tabular accompaniment, 'A' (Analysis) focuses on the known and defines the recommendations for practice. It also highlights the unknown; uncertainty around findings and recommendations for future research. This approach has been used, as it has several advantages over the others. It collates all known knowledge on a topic area. The other "perceived strength "is that it facilitates other to repeat the process, as it provides transparency in the reporting of its methods.

**Step 2: Review Execution**

This step includes the procedure to execute the literature review through systematic approach. The following steps were carried out:

1. Defining the topic: This step includes defining the topic for the research study. The topic for this study is defined as "Women Entrepreneurship in Indian Micro, Small and Medium Enterprises (MSMEs)"
2. Formulating the research questions: This step includes formulating research questions as per objectives of the study and is explained in Chapter 3.

3. Identifying the keywords: This step includes identifying keywords for searching the research articles. For this study the keywords used are “Women Entrepreneurship”, “Small and Medium Enterprises”, “Micro”, “MSME”, “SME”, “Characteristics”, “Issues”, “India”, “Challenges”, “Problems”, “Constraints”, “Women Entrepreneurs” and “Entrepreneurial Intentions”
4. Searching the database: This step includes searching articles from database. For this study Proquest, Emerald, JSTOR, and Google Scholar databases were used. Also, it maps with the Searching phase(S) from SALSA Framework.
5. Read and assess papers: This step includes inclusion & exclusion criteria for selecting the articles. For this study more than nine hundred articles were obtained after using keyword from the above mentioned databases, after reading the abstract & title, the articles which were not relevant to the objectives of the study were excluded and remaining 179 articles were studied in detail. This process maps with Appraisal (AL) phase from SALSA framework.
6. Producing summary tables: This step includes summarizing data in a tabulated format after reviewing. This step maps with the Synthesis(S) phase from SALSA framework.
7. Development of conceptual model: This step includes analyzing the summarized data, studying theoretical models and then building a conceptual model that covers all the necessary objectives required for the study. This step maps with the Analysis phase from SALSA framework.

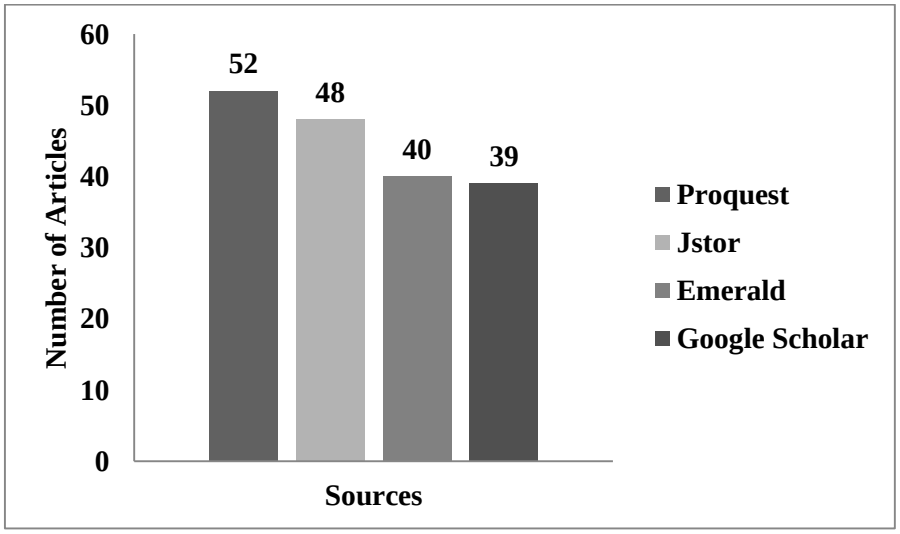



**Figure 2.1: Distribution of Articles By Database**

Figure 2.1 reveals the total number of articles that have been studied from different databases. The literature review consisted of studying one hundred and seventy-nine articles. Out of these articles fifty-two were from Proquest, forty-eight from JSTOR, forty from Emerald and thirty-nine from Google scholar.

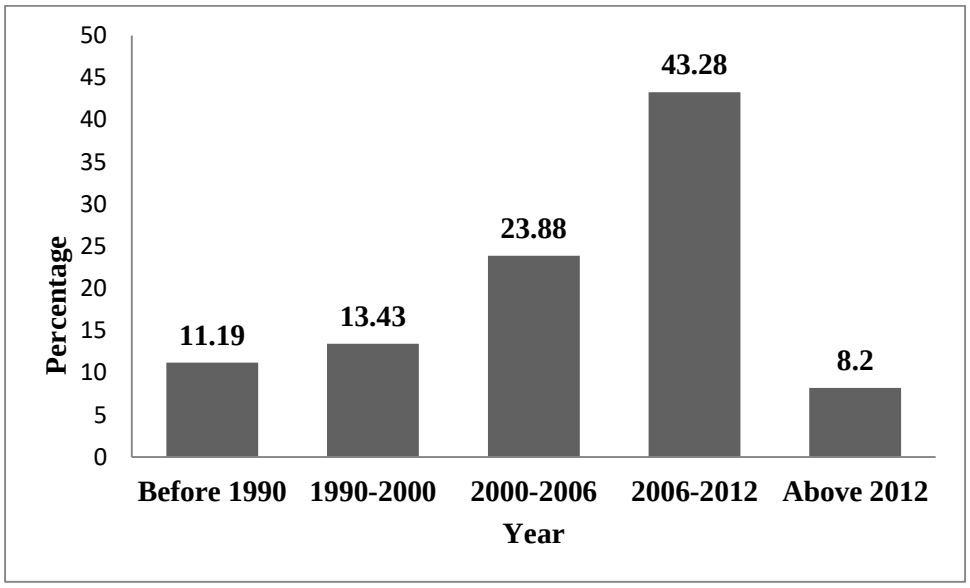



**Figure 2.2: Distribution of Articles by Year of Publishing**

Figure 2.2 shows percentage share of articles based on the year of publication. It can be observed that out of the total articles studied 11.19 per cent were published before 1990, 13.43 per cent were published between 1990-2000 and 23.88 per cent from 2000-2006. Maximum number of articles were published between the years 2006-2012 having a percentage of 43.28, while 8.22% articles were from the year 2013 to 2021.

Figure 2.3 displays the classification of articles by different themes emerged. While doing the literature review, it was observed that thirty-four articles were under “Characteristics” theme, thirty-five were under “Motivation”, thirty-seven under “Issues & challenges”, fourteen were under “Institutional ecosystem”, thirty-two were under “Entrepreneurial intention” theme. In addition to this, a mixed theme was observed in twenty-seven articles

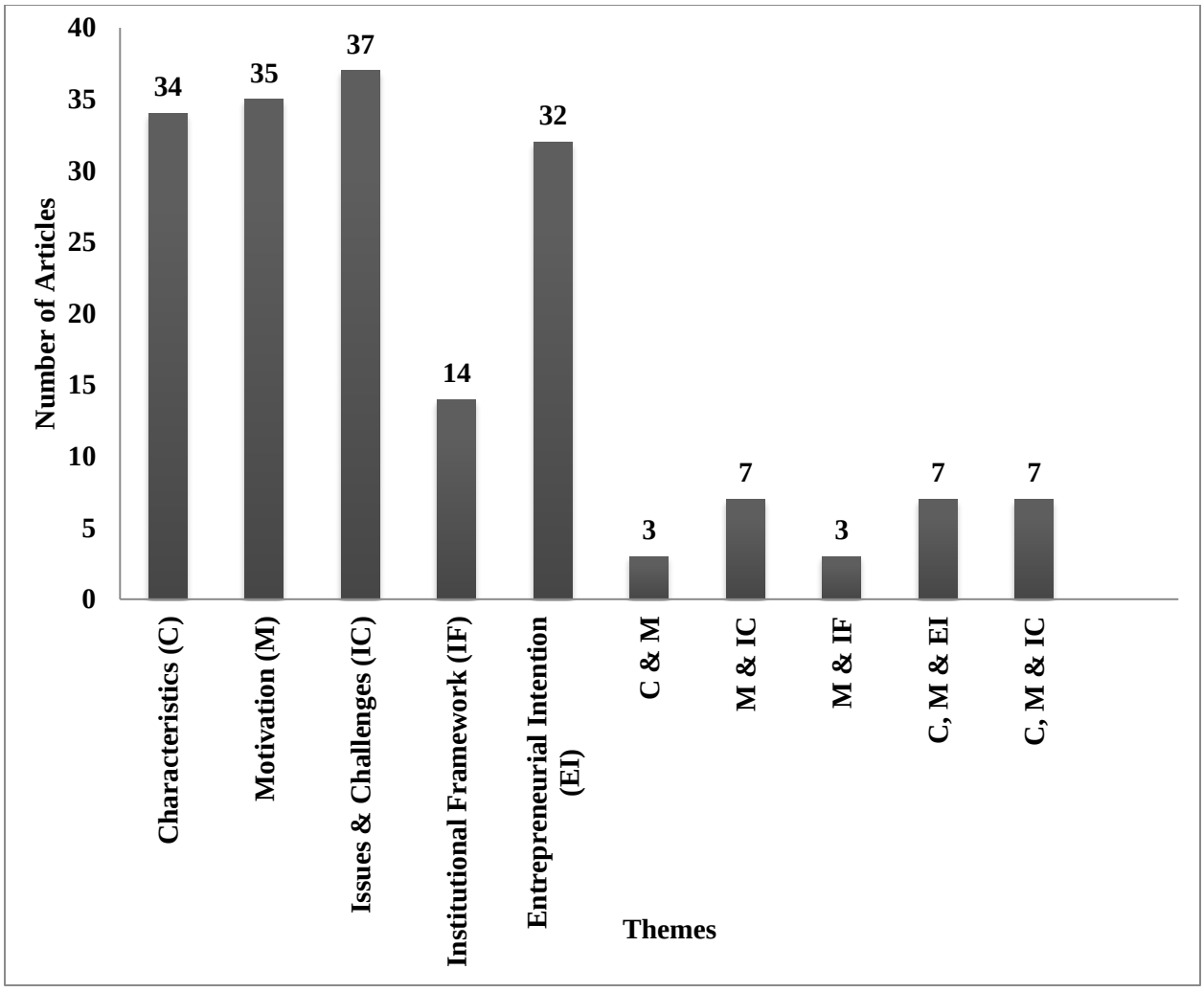



**Figure 2.3: Distribution of Articles by Themes**

After an extensive analysis of these studies, review of literature has been divided into six major sections:

- Defining women entrepreneurship
- Characteristics
- Motivations
- Issues and challenges
- Institutional framework and Entrepreneurial ecosystem
- Entrepreneurial intention

## 2.2 Defining Women Entrepreneurship

Entrepreneurship is a multidimensional concept which is approached from several disciplines and this has led to a situation of non-existence of a commonly accepted definition. Entrepreneurship involves generation of new ideas and innovation that leads to economic growth. This is catalyzed by the entrepreneur's risk taking ability. Culture factors like beliefs, values system influences the entrepreneurial activity in a given society.

The basic definition of entrepreneurship is an economic activity being performed by an individual or group of individuals. It focuses on innovations and creating new combinations of already existing materials and forces. Women entrepreneurship is a subset of entrepreneurship. Rana Zehra Masood in 2011 [60] has defined women enterprise as "An enterprise owned and controlled by a women having a minimum financial interest of 51% of the capital and giving at least 51% of the employment generated in the enterprise to women." Government of India, Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 defines women entrepreneurship as "a business entity which is owned and managed by a woman". [61]

Women entrepreneurship as a subset of entrepreneurship; it also faces the difficulty of single or commonly accepted definition for the same. Researchers have defined women entrepreneurship in several ways; Table 2.1 summarizes some of these definitions.

**Table 2.1: Select Definitions of Women Entrepreneur and Women Entrepreneurship**

| Author(s) & Year | Definition of Women Entrepreneurship |
|---|---|
| Medha Dubhashi Vinze (1985) | A woman entrepreneur is a person who is an enterprising individual with an eye for opportunities and an uncanny vision, commercial acumen, with tremendous perseverance and above all a person who is willing to take risks with the unknown because of the adventurous spirit she possesses. [62] |
| Kamal Singh (1992) | A woman entrepreneur can be defined as a confident, innovative and creative woman capable of achieving self-economic independence individually or in collaboration, generates employment opportunities for others through initiating, establishing and running the enterprise by keeping pace with her personal, family and social life. [62] |
| Moore and Buttner, 1997 as cited by Farr-Wharton and Brunetto, 2009 | Female entrepreneurs are defined as those who use their knowledge and resources to develop or create new business opportunities, who are actively involved in managing their businesses, and own at least 50 per cent of the business and have been in operation for longer than a year. [63] |

**Table 2.1: Select Definitions of Women Entrepreneur and Women Entrepreneurship (Contd.)**

| Author(s) & Year | Definition of Women Entrepreneurship |
|---|---|
| Moore, D. P., Moore, J. L., and Moore J. W. as cited by Farr-Wharton and Brunetto, 2009 | Female entrepreneurs are defined as those who use their knowledge and resources to develop or create new business opportunities – whether this be informally in a home environment without formally registering their business or formally via business registration, hiring office premises, etc. - who are actively involved in managing their businesses, are responsible in some way for the day-to-day running of the business, and have been in operation for longer than a year. [63] |
| Industrial Policy 2010 of Bangladesh | A woman will be termed as a woman entrepreneur if she is the `owner or proprietor of a private or proprietary enterprise' or `is the director of a private company' registered with the `joint stock' or `shareholding enterprise' or owning at least 51% share among the shareholders'. [64] |
| Rana Zehra Masood (2011) | An enterprise owned and controlled by a women having a minimum financial interest of 51% of the capital and giving at least 51%of the employment generated in the enterprise to women. [60] |
| Yogita Sharma (2013) | Woman or a group of women who initiate, organize and run a business enterprise. Woman entrepreneur is any woman who organizes and manages any enterprise, usually with considerable initiative and risk. [65] |
| Ruba Rummana (2014) | A woman will be termed as an entrepreneur if she is the `owner/proprietor/director of a private/ proprietary enterprise/private company' registered with the `joint stock' or `shareholding enterprise', owning at least 51% annual turnover and share among the shareholders' and generates employment opportunities for others by administering the enterprise. [66] |

MSMED Act, 2006 classifies MSMEs into manufacturing and service enterprises [Micro Small & Medium Enterprises Development (Amendment) Bill, 2014] [61]. MSMEs are classified based on the investment made. Manufacturing enterprises are defined as those engaged in manufacturing or production of goods pertaining to any industry specified in the first schedule to the Industries (Development and Regulation) Act, 1951. Service enterprises are those enterprises engaged in providing or rendering of services. Definition given by MSMED is furnished in Table 2.2.

**Table 2.2: Definition of Micro, Small and Medium Enterprises**

| Revised Classification applicable w.e.f 1st July 2020 | | | |
|---|---|---|---|
| Composite Criteria: Investment in Plant & Machinery/equipment and Annual Turnover | | | |
| **Classification** | **Micro** | **Small** | **Medium** |
| **Manufacturing Enterprises and Enterprises rendering Services** | Investment in Plant and Machinery or Equipment: Not more than Rs.1 crore and Annual Turnover ; not more than Rs. 5 crore | Investment in Plant and Machinery or Equipment: Not more than Rs.10 crore and Annual Turnover ; not more than Rs. 50 crore | Investment in Plant and Machinery or Equipment: Not more than Rs.50 crore and Annual Turnover ; not more than Rs. 250 crore |

Source: New definition of MSME https://msme.gov.in/know-about-msme

Ministry of MSME report in 2018 states MSMEs constitute 95 per cent of all industrial units in India and contributing to 8 per cent of National GDP, 50 per cent of country's total manufactured exports and 45 per cent of India's total industrial employment [31].

As per the MSME report of 2018-19 [67], the Micro, Small and Medium Enterprises (MSME) have contributed significantly in the socio-economic development of country by promoting entrepreneurship and generating largest employment opportunities at lower capital cost after agriculture. The report also highlighted that the MSMEs are widening their scope by producing products and services across different sectors of economy. Furthermore, as per 4$^{th}$ census of MSME sector, Women owned enterprises account for 26 million units (7.36% of total MSME units in India) and employ an estimated 59.7 million people [68].

Definition of MSME given under Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 is considered for this study.

## 2.3. Characteristics of Women Entrepreneurs

Kolveried as cited by Anuradha Basu et al., as cited by Indarti N and Langenberg M [69] in their study on women entrepreneurship stated that the demographic characteristics such as age, gender, education and experience have an influence on entrepreneurial intention and endeavour. Several characteristics of women entrepreneurs have been identified by the researchers under various studies. Table 2.3 summarizes these characteristics.

**Table 2.3: Characteristics of Women Entrepreneurs**

| Characteristics | Author(s) & Year |
|---|---|
| Risk Taking | Duchesneau and Gartner (1990), Singh (1992) as cited by Rami Alasadi (2007), Nicolaou, Shane, Cherkas, Hunkin, & Spector, (2008), Nicolaou & Shane (2009), Arakeri Shanta V. ( 2011), Gupta, D. D. (2013), Vijaya, C., & Lokeshwari, M. (2016), Munshi, S., Munshi, A.(2018), Singh, V. P. (2019), Jerinabi, U., & Santhiyavalli, G(2020) |
| Opportunity Seeking | Singh (1992), Hill and Narayana (1990) as cited by Rami Alasadi (2007), Nicolaou, Shane, Cherkas, Hunkin, & Spector (2008), Arakeri Shanta V. (2011), Vijaya, C., & Lokeshwari, M. (2016), Munshi, S., Munshi, A.(2018), |
| Inventor | Nicolaou, Shane, Cherkas, Hunkin, & Spector (2008), Arakeri Shanta V. (2011), Arakeri Shanta V. ( 2011), Vijaya, C., & Lokeshwari, M. (2016), Munshi, S., Munshi, A.(2018), Chandra M.(2020) |
| Flexible | Singh(1992), Hill and Narayana (1990) as cited by Rami Alasadi (2007), Arakeri Shanta V. ( 2011), Vijaya, C., & Lokeshwari, M. (2016), Munshi, S., Munshi, A.(2018), Ogidi, A. E. (2019). |
| Internal Control | Nicolaou, Shane, Cherkas, Hunkin, & Spector (2008), Arakeri Shanta V. (2011), Vijaya, C., & Lokeshwari, M. (2016), Munshi, S., Munshi, A. (2018), Ogidi, A. E. (2019). S. M Mohan(2020) |
| Self-Confident | Hill and Narayana (1990) as cited by Rami Alasadi (2007), Nicolaou, Shane, Cherkas, Hunkin, & Spector(2008), Arakeri Shanta V.( 2011), Vijaya, C., & Lokeshwari, M. (2016), Munshi, S., Munshi, A.(2018), Kumar, S. M., Mohan(2020) |
| Proactive, Visionary, Desire for Independence, All-rounder, Inventor | Nicolaou, Shane, Cherkas, Hunkin, & Spector (2008), Arakeri Shanta V. (2011), Vijaya, C., & Lokeshwari, M. (2016), Munshi, S., Munshi, A.(2018), Kumar, S. M., Mohan(2020) |
| Need for achievement, High Energy, Decisive, Self-Motivated, Devotion to Job | Hill and Narayana (1990) as cited by Rami Alasadi (2007), Arakeri Shanta V.( 2011), Vijaya, C., & Lokeshwari, M. (2016), Munshi, S., Munshi, A.(2018), Kumar, S. M., Mohan(2020) |

## 2.4. Women Entrepreneurship and Motivation

To accomplish entrepreneurial goals, the entrepreneur must have a drive which activates him/her to persistently exert a certain level of effort [70]. Entrepreneurial motivation is the drive of an entrepreneur to maintain an entrepreneurial spirit in all their actions. It is an inner state, dynamic force that causes a person to act towards the attainment of goals. [71]

Literature review has resulted in identifying the factors that drive women entrepreneurs to start a business. A summary of these factors along with their contributors are presented in Table 2.4.

**Table 2.4: Motivation Factors of Women Entrepreneurs**

| Motivation Factors | Researchers |
|---|---|
| Choose profession as a challenge | Belcourt et al. (1991), Singh (1993), Das (2001), Shane and Von Glinow (2003), Patole, M., & Ruthven, O.(2010), Chandra(2013), Rao, C. H. (2016), Gupta, D. D. (2019), S.N Gupta(2020) |
| Fulfilment of one's ambition | Singh & Gupta (1984), Singh et al. (1985), Shah (1990), Belcourt et al. (1991), Singh (1993), Nair (1996), Lerner et al. (1995), Buttner & Moore (1997), Das (2001), 6. Goyal, M. and Parkash, J.(2011), Junare, S.O and Ranjana Singh (2016), Gupta S.N (2020) |
| Desire to become independent | Schwartz, (1976), Hisrich and O"Brien (1981), Singh & Gupta (1984), Singh et al. (1985), Cromie (1985), Rani (1986), Holmquist and Sundin (1988), Shah (1990), Carterand Canon (1992), Singh (1993), Tulsi et. Al (1995), Das (2001), Shane and Von Glinow (2003), Gitile et., al. (2008), Neal P. Merod (2008), McGraw and Roger (2010), Rachmawati (2011), S.O and Ranjana Singh (2016), Gupta S.N (2020) |
| Career development | Carter and Allen (1997), Lupiyoadi (2007), Alma (2011), Chandra(2013), Rao, C. H. (2016), Gupta, D. D. (2019), S.N Gupta(2020) |
| By circumstances | Singh et al. (1985), Albina Joshi (2014), Rachmawati (2011), S.O and Ranjana Singh (2016), Gupta S.N (2020) |
| Desire to generate income | Schwartz, (1976), Singh & Gupta (1984), Singh et al. (1985), Shah(1990) Singh et al. (1985), Harper (1992), Schiller and Crewson (1997), Nair (1996), , Carter and Allen (1997), McGraw and Schiller and Crewson (1997), Carter et al. (2004), Neal P. Merod (2008), Roger (2010), Albina Joshi (2014), Rachmawati (2011), S.O and Ranjana Singh (2016), Gupta S.N (2020) |

**Table 2.4: Motivation Factors of Women Entrepreneurs (Contd.)**

| Motivation Factors | Researchers |
|---|---|
| Provide employment to others | Singh et al.(1985), Noor et al(2006), Albina Joshi(2014), Rachmawati (2011), S.O and Ranjana Singh (2016), Gupta S.N (2020) |
| Desire for self & social recognition | Nelson (1968), Pillai (1989), Noor et al.(2006), Gitile et., al. (2008), Rachmawati (2011), S.O and Ranjana Singh (2016), Gupta S.N (2020) |
| Desire to work | Pillai (1989), Schiller and Crewson (1997), Shane & Von Glinow, (2003), Agustiar and Edward (2005), Lupiyoadi (2007) |
| Entrepreneurial spirit | Anna (1990), Estaw (1991), Tulsi et. al (1995), Hisrich and Peters (2005), Mahmudi (2005), Albina Joshi(2014), Rachmawati (2011), S.O and Ranjana Singh (2016), Gupta S.N (2020) |
| Utilization of own experience & education | Shah (1990), Tulsi et. al (1995), Albina Joshi (2014), Rao, C. H. (2016), Gupta, D. D. (2019), S.N Gupta(2020) |
| Keeping oneself busy | Singh & Gupta (1984), Singh et al. (1985) |
| Family support & encouragement | Tulsi et. al. (1995), Noor et al. (2006), Rao, C. H. (2016), Gupta, D. D. (2019), S.N Gupta(2020) |
| Need for job satisfaction | Schwartz (1976), Albina Joshi (2014), Rao, C. H. (2016), Gupta, D. D. (2019), S.N Gupta(2020) |
| Knowledge and skills | Masud et al. (1999), Albina Joshi (2014) Rao, C. H. (2016), Gupta, D. D. (2019), S.N Gupta(2020) |

## 2.5. Women Entrepreneurship: Issues & Challenges

Opportunity identification, motivation, financing strategies, and performance have been identified as some micro-level factors which affect women entrepreneurship [72]. Reynolds et al. [73] identified macro level variables like structural characteristics of a given country and region affecting entrepreneurial activity. Baughn et al. [74] noted that the level of entrepreneurial activity can be seen as embedded in a country's economic, socio-cultural and legal environment. Arenius and Minniti [75] grouped macro-level factors influencing entrepreneurship into two categories: socio-economic factors and contextual factors and to supplement these with micro-level perceptual factors. Various issues and challenges faced by women entrepreneurs in starting, and managing their business enterprises are summarized in Table 2.5.

**Table 2.5: Issues and Challenges Faced by Women Entrepreneurs**

| Issues & Challenges | Author(s) & Year |
|---|---|
| Discriminating treatment from Society, Lack of self-confidence, Poor self-image, Faulty socialization | Azad (1989), Albina Joshi (2014), Krishnamoorthy,V. and Balasubramani,R.(2015), Kumar (2016), A.M. and Verma (2017), R.M.( 2019). |
| Lack of encouragement from family, Role conflict | Azad (1989), Rao (1991), Kirve & Kanitkar (1993), Albina Joshi (2014), Martin & Roberts (1984), Surupia (1983), Azad (1989), Rathore & Chhabra (1991), Vijayakumar, A. and Jayachitra S. (2013), Albina Joshi (2014), Madhurima (2018), L.and Sahai, S. (2020). |
| Traditional ideology and cultural values | Azad (1989), Singla & Syal (1997), Albina Joshi (2014), Kumar (2016), A.M. and Verma (2017), R.M.( 2019). |
| Confining to home only | Azad (1989) |
| Economic backwardness | Rao (1991), Venkatapathy (1993), Kumar (2016), A.M. and Verma (2017), R.M. ( 2019). |
| Lack of motivation | Rao (1991), Birley & Westhead (1994), Moore & Buttner (1997), McElwee & Al-Riyami (2003), Vijayakumar, A. and Jayachitra S. (2013), Albina Joshi (2014), Manisha and MenanI, S. (2019), Rao (2020) |
| Preference for secure job | Rao (1991), Kaur&Prashar (1993), Albina Joshi (2014), Manisha and MenanI, S. (2019), Rao (2020) |
| Time constraint | Hisrich & Brush (1987), Harper (1992), Carter (1994), Albina Joshi (2014), Manisha and MenanI, S. (2019), Rao (2020) |
| Lack of financial support | Jyothi & Prasad (1989), Srivastava & Chaudhary (1991), Sethi (1994), Tulsi et. al (1995), Chaudhary et.al (1997), Vijayakumar, A. and Jayachitra S. (2013), Jawahar & Shubhra Bhardwaj (2020) |
| Lack of awareness | Jyothi & Prasad (1989), Harper (1992), Kirve & Kanitkar (1993), Venkatapathy (1993), Chaudhary (1997), Naik, S. (2013), Palaniappan, G and Ramanigopal,C.S.(2017),C Chandra(2020) |
| Low educational qualification | Jyothi & Prasad (1989), Vijayakumar, A. and Jayachitra S. (2013), Albina Joshi (2014), Chandra(2020) |
| Low economic levels | Jyothi & Prasad (1989), Ramanigopal, C.S.(2017),C Chandra(2020) |
| Male dominance | Jyothi & Prasad (1989), Sethi (1994), Ravichandran, D.N.(2019). |

**Table 2.5: Issues and Challenges Faced by Women Entrepreneurs (Contd.)**

| Issues & Challenges | Author(s) & Year |
|---|---|
| Lack of infrastructural facilities | Jyothi & Prasad (1989), Vijayakumar, A. and Jayachitra S. (2013), Jawaharlal Nehru & Shubhra Bhardwaj (2013), Albina Joshi (2014), Ravichandran, D.N.(2019). |
| Role stress | Klein (1995), Jawaharlal Nehru & Shubhra Bhardwaj (2013), Albina Joshi (2014), Ravichandran,D.N.(2019). |
| Marketing Problem, Stiff Competition, Less entrepreneurial attitude, Ability to take low risks | Vijayakumar, A. and Jayachitra S. (2013), Jawaharlal Nehru & Shubhra Bhardwaj (2013), Ravichandran,D.N.(2019). |
| Lack of entrepreneurial training | Hisrich and Fulop (1994), Rutashobya & Nchimbi (1999), Carter (2000), Chen et al. (2002), Woldie & Adersua (2004), Verhuel and Thurik (2006), Marlow & Patton (2005), DTI (2005), Kibanji and Munene (2009), Mordi et al (2010), Vijayakumar, A. and Jayachitra S. (2013), Jawaharlal Nehru & Shubhra Bhardwaj (2013), Ravichandran, D.N. (2019). |
| Health problems | Jawaharlal Nehru & Shubhra Bhardwaj (2013), Ravichandran, D.N. (2019). |

## 2.6. Institutional Framework and Entrepreneurial Ecosystem

As cited by Yamoah Emmanuel Erastus et al. [76] OECD defines institutional framework as "the set of governmental and other institutions responsible for the design and implementation of SME policies". Frederic Sautet [77] explains the vital role of institutions in the expansion of entrepreneurial activity and also observes poor economic performance in countries are not due to entrepreneurship but the lack of right institutional framework for promoting entrepreneurship. Laxmi B. Parab, R. L. Hyderabad [78] in their study specify that no attempt has so far been made to analyze the state and institutional support for women entrepreneurship development.

As per OECD Report, distinguishing features of entrepreneurial ecosystems include a core of large established businesses, including some that have been entrepreneur-led (entrepreneurial blockbusters), entrepreneurial recycling – whereby successful cashed out entrepreneurs reinvest their time, money and expertise in supporting new entrepreneurial activity, and an information-rich environment in which this information is both accessible and shared [79]. The various definition of entrepreneurial ecosystem is summarized in Table 2.6.

**Table 2.6: Definition of Entrepreneurial Ecosystem**

| Author & Year | Definition of Entrepreneurial Ecosystem |
|---|---|
| Cohen (2006) | It is an interconnected group of actors in a local geographic community committed to sustainable development through the support and facilitation of new sustainable ventures [80]. |
| Isenberg (2010) | Entrepreneurship ecosystem consists of a set of individual elements-such as leadership, culture, capital markets, and open-minded customers—that combine in complex ways [81]. |
| Isenberg (2011) | Entrepreneurship ecosystem consists of conducive policy, markets, capital, human skills, culture, and supports [82]. |
| Feld (2012) | Ecosystem is defined by four characteristics:(a) It is led by entrepreneurs; (b) it is inclusive where everyone is welcomed;(c) the involved people are committed for long term (at least 20 years) to the ecosystem; and (d) there are many opportunities for gathering, i.e, a lot of events [83]. |
| Cohen (2006) | It is an interconnected group of actors in a local geographic community committed to sustainable development through the support and facilitation of new sustainable ventures [80]. |
| Isenberg (2010) | Entrepreneurship ecosystem consists of a set of individual elements such as leadership, culture, capital markets, and open-minded customers - that combine in complex ways [81]. |
| Isenberg (2011) | Entrepreneurship ecosystem consists of conducive policy, markets, capital, human skills, culture, and supports [82]. |
| Feld (2012) | Ecosystem is defined by four characteristics:(a) It is led by entrepreneurs; (b) it is inclusive where everyone is welcomed;(c) the involved people are committed for long term (at least 20 years) to the ecosystem; and (d) there are many opportunities for gathering, i.e, a lot of events [83]. |
| Mason and Brown (2014) | A set of interconnected entrepreneurial actors (both potential and existing), entrepreneurial organizations (e.g., firms, venture capitalists, business angels, and banks), institutions (universities, public sector agencies, and financial bodies), and entrepreneurial processes (e.g., the business birth rate, numbers of high growth firms, levels of "blockbuster entrepreneurship," number of serial entrepreneurs, degree of sell-out mentality within firms, and levels of entrepreneurial ambition) which formally and informally coalesce to connect, mediate and govern the performance within the local entrepreneurial environment [84]. |
| Stam (2015) | A set of interdependent actors and factors coordinated in such a way that they enable productive entrepreneurship [85]. |
| Mack and Mayer (2016) | It is defined as the interacting components of entrepreneurial systems, which foster new firm creation in a specific regional context [86]. |
| Roundy, Brockman, and Bradshaw (2017) | It is defined as communities of agents, social structures, institutions, and cultural values that produce entrepreneurial activity [87]. |

**Table 2.6: Definition of Entrepreneurial Ecosystem (Contd.)**

| Author & Year | Definition of Entrepreneurial Ecosystem |
|---|---|
| Spigel (2017) | Defined as union of localized cultural outlooks, social networks, investment capital, universities, and active economic policies that create environments supportive of innovation-based ventures. Entrepreneurial ecosystems are combinations of social, political, economic, and cultural elements within a region that support the development and growth of innovative start-ups and encourage nascent entrepreneurs and other actors to take the risks of starting, funding, and otherwise assisting high-risk ventures [88]. |

Source: *Adapted from Edward J. Maleck, 'Entrepreneurship and entrepreneurial Ecosystems', Wiley Online Journal, 2017 [89]*.

Global Entrepreneurship Monitor (GEM) research affirms that the increasing rate of entrepreneurship prevalent at national and regional levels within a country drives its economic growth [90]. The opinion of national experts (NES, 2016) revealed insights on factors impacting the environment for entrepreneurship. These factors are known as Entrepreneurial Framework Conditions (EFCs) of the country. GEM classifies the EFCs into nine categories as mentioned Table 2.7 [91].

**Table 2.7: Entrepreneurial Framework Condition Parameters and Description**

| Entrepreneurial Framework Conditions Parameters | Description |
|---|---|
| Financial support | The availability of financial resources, equity and debt for new and growing firms ,including grants and subsidies. |
| Government policies | The extent to which government policies (such as taxes/ regulations) are either size-neutral or encourage new and growing firms. |
| Government programmes | The presence and quality of direct programmes to assist new and growing firms, at all levels of government. |
| Research and development transfer | The extent to which national research and development will lead to new commercial opportunities, whether or not these are available for new, small and growing firms. |
| Education and training | The extent to which each level of education and training system incorporates training in creating/managing new, small or growing business entities. There are two sub divisions:<br>• Primary and Secondary School entrepreneurship education and training; and<br>Post-school entrepreneurship education and training. |
| Commercial and professional infrastructure | The presence of commercial, accounting and other legal services and institutions that allow or promote the emergence of small , new and growing business. |

**Table 2.7: Entrepreneurial Framework Condition Parameters and Description (Contd.)**

| Entrepreneurial Framework Conditions Parameters | Description |
|---|---|
| Internal market openness | The extent to which commercial arrangements undergo constant change and redeployment as new and growing firms compete with and replace existing suppliers, subcontractors and consultants. There are two sub-divisions:<br>• Market dynamics, i.e. the extent to which markets change dramatically from year to year; and<br>• Market Openness, i.e. market burdens and the extent to which new firms are free to enter existing markets. |
| Access to physical infrastructure | Ease of access to available physical resources-communication, utilities, transportation, land or space-at a price that doesn't discriminate against new, small and growing firms. |
| Cultural and social norms | The extent to which existing social and cultural norms encourage or do not discourage, individual actions that might lead to new ways of conducting business or economic activities which might, in turn, leads to greater dispersion in personal wealth and income. |

Source: *Adapted from Book "Entrepreneurship Education and Research in the Middle East and North Africa (MENA): Perspectives on Trends, Policy and Educational Environment", Nezameddin Faghih and Mohammad Reza Zali, 2018, Springer Publication [92]*.

## 2.7. Entrepreneurial Intention & Theories

Entrepreneurial intention is defined as a state of mind that leads an individual towards forming a new venture and making a career in entrepreneurship. Entrepreneurial intention plays a vital role for any decision to take place for starting any firm. Intention is a direct antecedent of behaviour; and stronger the intention for behaviour, the bigger the success of behaviour prediction or actual behaviour [93].

Krueger & Brazeal in 1994 [56] states that entrepreneurial potential leads to intention and intention leads to behaviour. There are very few instruments available to measure entrepreneurial potential of an individual. Institutional framework and entrepreneurial eco system should focus on improving perceived feasibility and perceived desirability which results in increased entrepreneurial potential.

Literature review revealed thirteen intention based theories. Summary of these theories/models are presented in Table 2.8. Among these, extended social cognitive career theory

and entrepreneurial potential model are studied most predominantly. These two models holistically cover the major constructs mentioned in other leading entrepreneurial intention theories. This study addresses the above gaps by developing a conceptual model which adapts extended social cognitive career theory and entrepreneurial potential model.

**Table 2.8: Summary of Entrepreneurial Intention Theories**

| Theories | Assumptions | Constructs | Nature of Investigation |
|---|---|---|---|
| Theory of reasoned action (TRA) [94] | Individual's positive or negative feelings affect the target behavior. | Attitude toward behaviour, subjective norm. | Empirically tested |
| The entrepreneurial event model (SEE); Shapero & Sokol (1982) [95] | Each entrepreneurial event occurs as a result of a dynamic process providing situational momentum that has an impact upon individual whose perceptions and values are determined by their social and cultural inheritance & their previous experience. | Perceived desirability, perceived feasibility and propensity to act. | Empirically tested |
| Theory of planned behaviour (TPB); Ajzen (1991) [96] | Entrepreneurial activity is a behavior that is always planned. | Attitude toward behaviour, subjective norm, perceived behavioural control. | Empirically tested |
| Theory of planned behaviour entrepreneurial model (TPBEM); Krueger and Brazeal (1994) [56] | Starting a new business is an intentional process that is influenced by three antecedents. | Perceived desirability, perceived social norms and perceived control. | Empirically tested |
| The entrepreneurial intention model (EIM); Boyd and Vozikis (1994)[97] | Political, economic climate, individual's abilities and personalities affect one's thought for venture creation. | Self -efficacy | Empirically tested |

**Table 2.8: Summary of Entrepreneurial Intention Theories (Contd.)**

| Theories | Assumptions | Constructs | Nature of Investigation |
|---|---|---|---|
| Entrepreneurial potential model; Kruger & Brazeal (1995) [98] | Entrepreneurial potential requires potential entrepreneurs. | Perceived venture desirability, perceived venture feasibility, entrepreneurial potential, and propensity to act. | Not empirically tested but adapted from TPB |
| Davidsson model; Per Davidsson (1995, 2003) [99,100] | Primary determinant of entrepreneurial intention is a person's conviction that starting and running one's own firm is a suitable alternative for him/her. | Personal background, general attitudes, domain attitudes, conviction, situation between conviction and intention. | Empirically tested |
| Social entrepreneurship intention model; Mair & Noba (2005) | Intention is shaped by perceived desirability and perceived feasibility in forming a societal enterprise | Perceived desirability, perceived feasibility | Empirically tested |
| Davidsson model; Per Davidsson (1995, 2003) [99,100] | Primary determinant of entrepreneurial intention is a person's conviction that starting and running one's own firm is a suitable alternative for him/her. | Personal background, general attitudes, domain attitudes, conviction, situation between conviction and intention. | Empirically tested |
| New Factors were introduced by Nga & Shamuganathan (2010) [101] | Explore the relationship between Big 5 personalities and social entrepreneurial intention | Agreeableness, conscientiousness, extraversion, neuroticism and openness | Empirically tested |

**Table 2.8: Summary of Entrepreneurial Intention Theories (Contd.)**

| Theories | Assumptions | Constructs | Nature of Investigation |
|---|---|---|---|
| Model of volition in Entrepreneurship; Lubica Hikkerova, Samuel Nyock Ilouga and Jean Michel Sahut (2010) [102] | Volition is a determinant psychological factor in entrepreneurial intention. | Level 1- Pre-decision phase<br>Level 2- Pre-action phase<br>Level 3- Action phase | Not an empirical study<br>Longitudinal study |
| Extended model of TPBEM; Ernst (2011), Adapted from TPBEM [103] | Social entrepreneurial personality, social entrepreneurial human capital and social entrepreneurial social capital (perceived knowledge of institutions, perceived network and perceived support) | Attitude towards behaviour, perceived control and subjective norms, social entrepreneurial personality traits, social entrepreneurial human capital. | Empirically tested |
| Formation of entrepreneurial intention model; Evan J. Dougals (2013) [104] | Proposes considering the type of a new venture individual intends to start. The model integrates individual opportunity into the entrepreneurial intention model. | (I-O) Nexus:-The opportunity (O), The Individual (I) | Empirically tested |

.

## 2.8. Research Gaps

Women entrepreneurship has been largely neglected by society in general. The line of business (primarily retail, education and other service industries) chosen by women are often perceived as being less important to economic growth and development. Studies by Hisrich and Brush and Zapalska [5,6] observe that women entrepreneurs are different from that of men in terms of characteristics, background, motivation, entrepreneurial skills and the problems faced by them. Brush, Bird and Mitchell [7] identified men and women use different strategies and organizational structures while managing business enterprises. In addition, studies on intention theories [94-104] have also identified various antecedents that lead to entrepreneurial intention.

An in-depth literature review on characteristics of women entrepreneurs is presented in section 2.3 above and it was observed that most of the existing studies were highlighting several characteristics such as risk taking, self-confidence, visionary, innovation, etc. However, none of these studies have studied the relationship between characteristics and entrepreneurial intention. Motivation is the drive that influences an individual to start a venture. Literature review presented in section 2.4 classifies the motivational factors into pull and push factor. It is observed that the relationship between motivational factors and entrepreneurial intention among women entrepreneurs in Indian MSMEs is not explored. Literature review (section 2.5 above) on issues and challenges faced by women entrepreneurs identified several factors and it is observed that there is a need to understand these factors in depth in order to promote women entrepreneurship in India. From the literature review on institutional framework & ecosystem (section 2.6) it is observed that no attempt has so far been made to present the institutional support for women entrepreneurship development in India in a holistic manner.

Most of the research studies were cross sectional or longitudinal studies focusing on specific regions with in India viz. Tamilnadu, Jammu & Kashmir, Meghalaya, Andhra Pradesh, Karnataka, Uttar Pradesh and Kerala [33-55]. There is no attempt made to conduct a nation-wide comprehensive study to understand the characteristics, motivation, issues and challenges of women entrepreneur in MSMEs in India.

## 2.9 Summary

This chapter discusses the literature review technique used in this study and compilation of definitions on women entrepreneurship. The study finds the working definition of "Women entrepreneurship". An in depth discussion on characteristics, motivation, issues and challenges in establishing and managing firms, institutional framework and entrepreneurial ecosystem, entrepreneurial intentional theories are presented. This is followed by the proposed research model for this study. This model is based on the Extended social cognitive career theory (SCCT) and entrepreneurial potential model (EPM). The proposed model states intentions towards being an entrepreneur results from perceived desirability, perceived feasibility, entrepreneurial potential and prior exposure to entrepreneurship. Perceived desirability includes personal characteristic, motivation and subjective norms. Perceived feasibility includes entrepreneurial ecosystem and entrepreneurial self-efficacy. Entrepreneurial potential includes learned optimism, entrepreneurial intensity, cognitive flexibility, role identity and grit.

# CHAPTER 3

# METHODOLOGY

## 3.1 Introduction

In chapter 2, literature review has been discussed in detail and an attempt has been made to understand the research gaps for the study. These research gaps have demonstrated the need for understanding entrepreneurial intention among women entrepreneurs in India. This chapter is divided into six sections. Section 3.1 presents an introduction. Section 3.2 discusses the research problem. Research questions are stated in Section 3.3. Section 3.4 deals with research parameters and definition. Section 3.5 highlights the development of hypothesis, propositions made for the study and this is followed by discussion on research design adopted for this study. Section 3.6 provides information on the research questionnaire design. Section 3.7 discusses the data collection process and sampling. Section 3.8 discusses the statistical tools and techniques that has been planned to be used for data analysis of this research study. The chapter ends with a summary.

## 3.2 Research Problem

Women represent approximately half of the total world population. In the age of globalization, digitalization and start-up booms, India is clearly seeing a revolution vis-à-vis women entrepreneurs [105]. One of the important reasons of studying women entrepreneurship has been its larger negligence by society in general and in particular the line of business (primarily retail, education and other service industries) chosen by women are often perceived as being less important to economic development and growth than high-technology and manufacturing. Furthermore, mainstream policies and programmes don't take into account the specific needs of women entrepreneurs and would-be women entrepreneurs.

Increased interests in entrepreneurship has led to an associated growth of research into the emerging trends in women entrepreneurs. Many researchers have cited several factors which contribute to the motivation, issues and challenges and the characteristics of women entrepreneurs. Most of these research studies are cross sectional or longitudinal studies focusing on specific regions with in India [33-55]. So far no attempt has been made to conduct a nation-wide comprehensive research study to understand the profile, motivation, issues and challenges of faced women entrepreneurs in MSME's in India. Similarly, there is no single source which provides a

comprehensive overview of institutional framework particularly policies and programmes of central and state government available to promote and facilitate women entrepreneurship in India.

To design a framework for promoting women entrepreneurship in Indian MSMEs, we need to understand the characteristics, motivational factors, issues and challenges faced by women entrepreneurs. Thus, the research problem that requires a comprehensive investigation is: *"What are characteristics, motivational factors, issues and challenges faced by women entrepreneurs in Indian MSMEs?"*

The above research problem has led to the following research objectives:

a. To study the characteristics of women entrepreneurs in Micro, Small and Medium Enterprises (MSMEs).
b. To explore the motivational factors that contribute to entrepreneurial activities.
c. To investigate the issues and challenges faced by the women entrepreneurs in MSMEs.
d. To identify the institutional framework that promotes women entrepreneurship in MSMEs.
e. To design and develop an analytic framework for promoting women entrepreneurship in MSMEs.

The above mentioned objectives (a) to (e) have been addressed through understanding the various constructs of entrepreneurial intention.

## 3.3 Research Questions

In Chapter 2, the literature review has clearly pointed the rapid increase in number of women owned enterprises across different countries. The literature also highlights significant factors like personal characteristics, motivation through family, government support, the perceived desirability and feasibility among women for choosing entrepreneurship as a career. In order to understand these factors and objectives as described in 3.1, present research shall study various constructs for entrepreneurial intention among women entrepreneurs. The proposed problem statement has led to following research questions in order to address this issue:

**RQ 1** : Does the personal characteristic play a significant role for entrepreneurial intention to happen among women entrepreneurs?

**RQ 2** : Does a motivational factor play a significant role for entrepreneurial intention to happen among women entrepreneurs?

**RQ 3** : Does a subjective norm play a significant role for entrepreneurial intention to happen among women entrepreneurs?

**RQ 4** : Is it the government support through entrepreneurial ecosystem that lead to entrepreneurial intention among women entrepreneurs?

**RQ 5** : Does self-efficacy lead to entrepreneurial intention among women entrepreneurs?

**RQ 6** : Does entrepreneurial potential play a significant role for entrepreneurial intention to happen among women entrepreneurs?

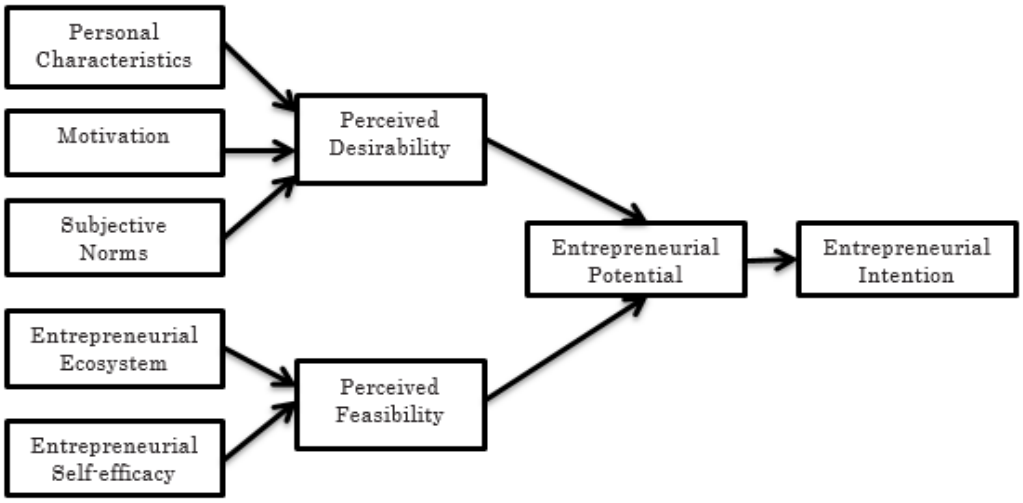
**RQ 7** : Are there any causal relationships among the constructs in the proposed model?

## 3.4 Research Framework, Parameters & Statistical Measures

Based on the literature review on theories of entrepreneurial intention, it is observed that extended social cognitive career theory model (SCCT) and entrepreneurial potential model (EPM) were the most frequently quoted theories. Extended SCCT theory focus on testing the interdependence of variables like individual's personality, education, role model, perceived supports and entrepreneurship intention [101]. Krueger & Dr Brazeal in 1994 [56] mentioned that "entrepreneurial potential requires potential entrepreneurs." [98]. Entrepreneurial potential model (EPM) focus on entrepreneurial potential of an individual. This theory also includes the constructs of 'theory of planned behaviour' and Shapero's model of the entrepreneurial event'. [96].

The conceptual model used for this study has been adapted from extended social cognitive career theory (SCCT) and entrepreneurial potential model (EPM). The same is presented below:

**Figure 3.1: Proposed Framework for the Study**




To understand the proposed framework, the research parameters are defined as below:

*Personal Characteristics* - It is defined as a feature that helps to distinguish an individual. To study these characteristics 'BIG 5 personality model (OCEAN)' is considered for this study. This model provides a comprehensive framework that comprises of personality constructs [11]. These constructs are:

- Agreeableness: Represents the extent to which an individual has the tendency to be compassionate and supportive than mistrustful with others. Those individuals who have high agreeableness are considered to be more attracted towards entrepreneurship.
- Conscientiousness: Represents the extent to which an individual is self-motivated, hardworking and goal oriented. Those individuals who have high conscientiousness are considered to be more attracted towards entrepreneurship.
- Extraversion: Represents the extent to which an individual is empathetic, proactive, dominant, and energetic. Individuals scored high on extraversion tend to be more attracted towards entrepreneurship.
- Neuroticism: It defines the degree of emotional stability in an individual. People who are low on neuroticism tend to be self-confident, high on self-esteem and are composed. The individuals who scored low on neuroticism are tending to be more attracted towards entrepreneurship.

- Openness: Measures the extent to which an individual tends to be inquisitive, innovative, inventive and creative. Individuals who scored high on openness tend to be more attracted towards entrepreneurship.

A 10-item Big Five inventory (BFI) postulated by Rammstedt, B. & John, O. P [106] has been adopted for this study. The items are measured on a five point Likert scale for this study.

*Motivation* - It is defined as the drive that induces women to become an entrepreneur. This can be further classified as push and pull factors. Push factors are also called as necessity driven factors that forces women to become an entrepreneur. It includes factors like unemployment, dissatisfaction from job, family constraints and financial constraints. Pull factors, also called as opportunity driven factors are the ones' which provide opportunity and pull women to choose entrepreneurial activity as a career. It includes factors like market opportunity, self-recognition, desire to be independent, family support and autonomy. In this research scales from various studies have been adapted to measure motivation, [107-109]. The survey instrument in this research contains 17 quantitative items that are measured on a five-point Likert scale.

*Subjective Norms* - Refers the extent to which role models or significant others influence an individual's decision to choose entrepreneurship as a career option. In this study subjective norms are measured through a 3-item scale formulated by Kolvereid. This scale uses five point Likert scale [69].

*Entrepreneurial Ecosystem* - OECD defines institutional framework "as the set of governmental and other institutions responsible for the design and implementation of SME policies". The individuals who tend to have more support from entrepreneurial ecosystem (focus is made on support from government) are highly motivated and found to have more intention towards entrepreneurship [92]. In this study to understand the role of entrepreneurial ecosystem, a 9-item scale has been adapted from GEM study.

*Entrepreneurial self efficacy* - It is defined as the belief that individual has on its skills that will help one in performing certain actions in order to achieve goals [110] Moberg 10 item

entrepreneurial self-efficacy scale has been used for measuring ESE. All the items are measured on 7-point Likert scale [110].

*Entrepreneurial Potential* – It is defined as the individual who has desirability and also feasibility to become an entrepreneur but she is not willing to act on it. Entrepreneurial potential is measured through following constructs [111].

- Learned optimism (LO): It is the degree attained or attainable by entrepreneur or a non-entrepreneur under implied or specified conditions. Seligman 1992 [112] states that "optimists are higher achievers and have better overall health. Pessimism on the other hand is much more common, pessimists are more likely to give up in the face of adversity or to suffer from depression. Seligman invites pessimists to learn to be optimists by thinking about their reactions to adversity in a new way. The resulting optimism, one that grew from pessimism is a learned optimism". Individuals who are high on learned optimism tend to have high entrepreneurial potential and hence tend to have intention towards entrepreneurship [113]. In this study, learned optimism is measured by using 21-item scale developed by Martin Seligman. All items in this scale are measured on a five-point Likert scale.
- Entrepreneurial intensity (EIN): This measures the focus and commitment of entrepreneurs regarding their entrepreneurial ventures. For measuring EIN, a 4-item scale has been adopted from panel study of entrepreneurial dynamics, PSED [114]. All items are measured on a 7-point Likert scale. EP-ACS (Entrepreneurial potential-action control scale) - The action control scale consists of three subscales that are action orientation subsequent to failure vs. preoccupation (AOF), prospective and decision-related action orientation vs. Hesitation (AOD) and action orientation during (successful) performance of activities (intrinsic orientation) vs. volatility (AOP). In order to measure action vs state orientation among individual, 27 item scale developed by Julius kuhl ACS 90 has been used [119].
- Cognitive flexibility (CF): It is the ability to adapt the cognitive processing strategies to face new and unexpected conditions in the environment [115]. To measure cognitive flexibility, this study has used the cognitive flexibility scale (CFS) postulated by Martin and Rubin in 1995 [115]. This scale consists of 12- items and uses a 6-point Likert scale.

- Role identity (RI): It is defined as how one see oneself as an entrepreneur. This study uses 2-item Likert scale developed by Krueger 2017 [116].
- Grit (GR): It is defined as "perseverance and passion for long-term goals" [117]. The individuals having grit tend to possess high intentions towards entrepreneurship. A 10-item Duckworth GRIT scale has been used to measure grit. The items are measured on a five point Likert scale.

*Perceived desirability (PD)* is defined as the personal attractiveness that individual has towards becoming an entrepreneur. A 3-item scale developed by Krueger in 2017 [116] has been used for measuring perceived desirability. All items are measured on a 5-point Likert scale.

*Perceived feasibility (PF)* is defined as how oneself sees capable of becoming an entrepreneur. The individual who is high on feasibility tends to have more willingness to act as an entrepreneur [116]. A 3-item scale developed by Krueger has been used for measuring perceived desirability. All items are measured on a 5-point Likert scale.

In order to evaluate the above mentioned research parameters of entrepreneurial intention and to understand the population of women entrepreneurs in MSMEs in India, the following statistical measures will be used for the study.

Mean being an unbiased estimator of the population (women entrepreneurs) will be used for understanding the characteristic of sample. Median will be used in order to understand the distribution of data. Standard deviation will help us with the information on how measurements for a group are spread out from the average (mean or expected value). In addition, Kurtosis will provide us with the clarity on outliers in a data set that will be obtained through women respondents. Skewness will help us in understanding the symmetry in a distribution. The obtained value will measure the amount of probability in the tails.

In order to ascertain the reliability of the summated scales, Cronbach’s alpha will be calculated. This statistic will be performed for every antecedent that is used in measuring entrepreneurial intention among women. Validity check will be performed by running Pearson’s correlation test through SPSS. This statistic will be performed for 95 items to test the validity of the scales in order to bring down a large number of correlated variables to a convenient set of

variables. Furthermore, it will help us in understanding the correlation between the various antecedents of entrepreneurial intention among women.

Factor analysis has been planned for this study as a scale reduction technique to ensure that the future respondents would not face any difficulty in understanding and answering the questionnaire. Later, the changes will be incorporated in the final questionnaire. Exploratory factor analysis has been planned to identify the underlying relationships between measured variables. For verifying assumptions prior to rotation, it is planned to compute the Bartlett's Test.

Structural equation modeling will be used to study the interrelationships in the hypothesized models as per the proposed framework. This analysis will be accrued out on the data obtained in pilot study and field study obtained from women entrepreneurs.

## 3.5 Hypothesis Development

In this study, the investigation of various models that specify the relationships of the theoretically relevant antecedents of entrepreneurial intention among women entrepreneurs has been carried. Before doing that, several propositions have been represented, followed by hypothesized relationships through several conceptual frameworks. Several conceptual frameworks have been proposed in this study to facilitate the understanding of the personal characteristics, motivational factors, issues and challenges, institutional framework to understand the entrepreneurial intention of women entrepreneurs in India. In this section, each framework is discussed in detail. The hypotheses related to the respective conceptual framework is also stated.

This research begins discussion with the hypothesized relationships by bringing the antecedents from each category. It first posits that the antecedents of the values/decision making styles *i.e.* perceived desirability, perceived feasibility and entrepreneurial potential will affect the entrepreneurial intention among women entrepreneurs. It then proposes that there is a relationship of antecedents from entrepreneurial potential i.e. learned optimism, cognitive flexibility, role identity, grit and entrepreneurial intensity with entrepreneurial intention. Next, it proposes that perceived desirability constructs i.e. personal characteristics, motivation and subjective norms will affect the entrepreneurial potential. Then, it proposes that perceived feasibility constructs i.e. support from government policies and programs (entrepreneurial ecosystem) and entrepreneurial self-efficacy will affect the entrepreneurial potential. Lastly, it proposes that there is a mediating

effect of entrepreneurial potential on perceived desirability, perceived feasibility towards entrepreneurial intention. In addition it proposes that the four categories *i.e.* perceived desirability, perceived feasibility and entrepreneurial potential will collectively affect the entrepreneurial intention among women in India.

### 3.5.1 Propositions for the Study

Entrepreneurship represents planned, intentional behavior [94-104] and thus it is essential to research using entrepreneurial intention theories. Literature review of entrepreneurial intention theories strongly suggests two critical notions. Firstly, attitudes lead to intention and intention leads to behavior. Secondly, attitudes and intentions are perception-based. Entrepreneurial potential model is based on Ajzen's theory of planned behavior [96] and Shapero's model of the entrepreneurial event [95]. Krueger & Dr. Brazeal [56] in his study highlights the role of entrepreneurial potential in measuring the entrepreneurial intention.

Social cognitive career theory (SCCT) states that "People act on their judgments of what they can do" i.e. self-efficacy, as well as "on their beliefs about the likely effects of various action" i.e. outcome expectation [118]. The extension of SCCT model explicitly explains that the self-efficacy and outcome expectations are influenced by environment factors. Environmental factors include two basic categories which are objective and subjective environment. Objective environment includes economic conditions, parental behaviors, peer influences and "how individuals make sense of, and respond to, what their environment provides" Subjective environmental factor is something subjected to an individual's interpretation, for instance, opportunities, resources, barriers or affordances [118].

There are numerous studies [119-121] which support that the self-efficacy and outcome expectations are influenced by environment factors. These studies have tested the interdependence of narrower variables like individuals' personal characteristics, education, role model, and perceived supports on entrepreneurship intention. Several studies [119-122] have highlighted that personal characteristics can affect one's judgments or belief in a given circumstance, and also directly affects one's intention. These studies have also concluded that someone who is self-confident and optimistic and communicates well with others will believe more in her capabilities which in turn will increase her entrepreneurial intention.

This study is guided by the above mentioned discussion and highlights direct and indirect relationship among the constructs in the proposed model. The four major propositions are formed on the basis of entrepreneurial potential model and extended social cognitive career theory for determining the interrelationships among the various constructs of entrepreneurial intention.

**P 1** **:** There is a significant relationship between entrepreneurial potential and entrepreneurial intention.

**P 2** **:** There is a significant relationship between perceived desirability and entrepreneurial potential.

**P 3** **:** There is a significant relationship between perceived feasibility and entrepreneurial potential.

**P 4** **:** Perceived desirability and feasibility has a significant effect on entrepreneurial potential towards entrepreneurial intention.

The propositions, P1 to P4 help in understanding the constructs used for measuring the entrepreneurial intention which in turn address the first four objectives of this research study i.e. understanding the personal characteristics, motivational factors and support from institutional framework in shaping the entrepreneurial intention among women entrepreneurs (mentioned earlier as a, b, c and d) and with the help of these propositions study arrives at last objective i.e. design and developing an analytical framework for promoting women entrepreneurship in Indian MSMEs.

The proposition that the constructs in the entrepreneurial intention process are causally related leads to the following overall hypothesis, under which all the other hypotheses in this study are subsumed.

### 3.5.2 Research Hypothesis

The research questions designed (presented above) demonstrate the need for understanding the constructs of entrepreneurial intention among women. In order to understand the phenomenon for this study, this research has deduced various hypothesis based on literature review explaining the tentative existence of relationship among constructs of entrepreneurial intention.

Proposition ‘P1’ discusses the relationship between the constructs of entrepreneurial potential and entrepreneurial intention. The hypothesis H1 to H1d is derived through this proposition explaining the existence of significant relationship between entrepreneurial potential and entrepreneurial intention. The hypotheses are stated as follows:

**H1** **:** There is a significant relationship between learned optimism and entrepreneurial intention

**H1a** **:** There is a significant relationship between entrepreneurial intensity and entrepreneurial intention

**H1b** **:** There is a significant relationship between cognitive flexibility and entrepreneurial intention

**H1c** **:** There is a significant relationship between role identity and entrepreneurial intention

**H1d** **:** There is a significant relationship between grit and entrepreneurial intention.

Similarly, proposition ‘P2’ discusses the relationship between the perceived desirability and entrepreneurial intention. Perceived desirability has been measured through personal characteristics, motivational factors and subjective norms. Entrepreneurial potential is measured through learned optimism, cognitive flexibility, role identity, grit and entrepreneurial intensity.

The hypotheses ‘H2 to H2d’ were derived through this proposition explaining the existence of significant relationship between the sub constructs of perceived desirability and entrepreneurial potential. The hypotheses are stated as follows,

**H2** **:** There is a significant relationship between personal characteristics and learned optimism.

**H2a** **:** There is a significant relationship between personal characteristics and entrepreneurial intensity.

**H2b** **:** There is a significant relationship between personal characteristics and cognitive flexibility.

**H2c** **:** There is a significant relationship between personal characteristics and role identity.

**H2d** **:** There is a significant relationship between personal characteristics and grit.

The hypothesis ‘H3 to H3d’ explains the existence of significant relationship between motivational factors and entrepreneurial potential. The hypotheses are stated as follows:

**H3** **:** There is a significant relationship between motivation and learned optimism.

**H3a** **:** There is a significant relationship between motivation and entrepreneurial intensity.

**H3b** **:** There is a significant relationship between motivation and cognitive flexibility.

**H3c** **:** There is a significant relationship between motivation and role identity.

**H3d** **:** There is a significant relationship between motivation and grit.

The hypothesis ‘H4 to H4d’ explains the existence of significant relationship between subjective norms and entrepreneurial potential. The hypotheses are stated as follows,

**H4** **:** There is a significant relationship between Subjective norms and learned optimism.

**H4a** **:** There is a significant relationship between subjective norms and entrepreneurial intensity.

**H4b** **:** There is a significant relationship between subjective norms and cognitive flexibility.

**H4c** **:** There is a significant relationship between subjective norms and role identity.

**H4d** **:** There is a significant relationship between subjective norms and grit.

Proposition ‘P3’ discusses the relationship between the constructs of perceived feasibility and entrepreneurial intention. The hypotheses ‘H5 to H6d’ were derived through this proposition explaining the existence of significant relationship between perceived feasibility and entrepreneurial potential. The hypothesis ‘H5 to H5d’ explains the existence of significant relationship between entrepreneurial ecosystem and entrepreneurial potential. The hypotheses are stated as follows,

**H5** : There is a significant relationship between entrepreneurial ecosystem (support from government) and learned optimism.

**H5a** : There is a significant relationship between entrepreneurial ecosystem (support from government) and entrepreneurial intensity.

**H5b** : There is a significant relationship between entrepreneurial ecosystem (support from government) and cognitive flexibility.

**H5c** : There is a significant relationship between entrepreneurial ecosystem (support from government) and role identity.

**H5d** : There is a significant relationship between entrepreneurial ecosystem (support from government) and grit.

The hypothesis 'H6 to H6d' explains the existence of significant relationship between entrepreneurial self-efficacy and entrepreneurial potential. The hypotheses are stated as follows,

**H6** : There is a significant relationship between entrepreneurial self-efficacy and learned optimism.

**H6a** : There is a significant relationship between entrepreneurial self-efficacy and entrepreneurial intensity.

**H6b** : There is a significant relationship between entrepreneurial self-efficacy and cognitive flexibility.

**H6c** : There is a significant relationship between entrepreneurial self-efficacy and role identity.

**H6d** : There is a significant relationship between entrepreneurial self-efficacy and grit.

Proposition 'P4' discusses the positive effect of perceived desirability and feasibility on entrepreneurial potential towards entrepreneurial intention. The hypotheses 'H7 to H11d' were derived through this proposition explaining the existence of significant relationship between perceived feasibility and entrepreneurial potential towards entrepreneurial intention. The hypothesis 'H7 to H9d' explains the positive effect of perceived desirability on entrepreneurial potential towards entrepreneurial intention. The hypotheses are stated as follows,

**H7** : Personal characteristics have a significant effect on learned optimism towards entrepreneurial intention.

**H7a** : Personal characteristics have a significant effect on entrepreneurial intensity towards entrepreneurial intention.

**H7b** : Personal characteristics have a significant effect on cognitive flexibility towards entrepreneurial intention.

**H7c** : Personal characteristics have a significant effect on role identity towards entrepreneurial intention.

**H7d** : Personal characteristics have a significant effect on grit towards entrepreneurial intention.

**H8** : Motivation has a significant effect on learned optimism towards entrepreneurial intention.

**H8a** : Motivation has a significant effect on entrepreneurial intensity towards entrepreneurial intention.

**H8b** : Motivation has a significant effect on cognitive flexibility towards entrepreneurial intention.

**H8c** : Motivation has a significant effect on role identity towards entrepreneurial intention.

**H8d** : Motivation has a significant effect on grit towards entrepreneurial intention.

**H9** : Subjective norms have a significant effect on learned optimism towards entrepreneurial intention.

**H9a** : Subjective norms have a significant effect on entrepreneurial intensity towards entrepreneurial intention.

**H9b** : Subjective norms have a significant effect in cognitive flexibility towards entrepreneurial intention.

**H9c** : Subjective norms have a significant effect on role identity towards entrepreneurial intention.

**H9d** : Subjective norms have a significant effect on grit towards entrepreneurial intention.

The hypothesis ‘H10 to H11d’ explains the positive effect of perceived feasibility on entrepreneurial potential towards entrepreneurial intention. The hypotheses are stated as follows:

**H10** : Entrepreneurial ecosystem (support from government) has a significant effect on learned optimism towards entrepreneurial intention.

**H10a** : Entrepreneurial ecosystem (support from government) has a significant effect on entrepreneurial intensity towards entrepreneurial intention.

**H10b** : Entrepreneurial ecosystem (support from government) has a significant effect on cognitive flexibility towards entrepreneurial intention.

**H10c** : Entrepreneurial ecosystem (support from government) has a significant effect on role identity towards entrepreneurial intention.

**H10d** : Entrepreneurial ecosystem (support from government) has a significant effect on grit towards entrepreneurial intention.

**H11** : Entrepreneurial self-efficacy has a significant effect on learned optimism towards entrepreneurial intention.

**H11a** : Entrepreneurial self-efficacy has a significant effect on entrepreneurial intensity towards entrepreneurial intention.

**H11b** : Entrepreneurial self-efficacy has a significant effect on cognitive flexibility towards entrepreneurial intention.

**H11c** : Entrepreneurial self-efficacy has a significant effect on role identity towards entrepreneurial intention.

**H11d** : Entrepreneurial self-efficacy has a significant effect on grit towards entrepreneurial intention.

This exploratory study highlights the existence of relationship among the various drivers of entrepreneurial intention. This research has intended to understand the existence of these relationships among women entrepreneurs in Indian MSMEs.

On the basis of above mentioned hypothesis, the proposed model has been designed for addressing the research problem for this study. The same has been presented in figure 3.2.

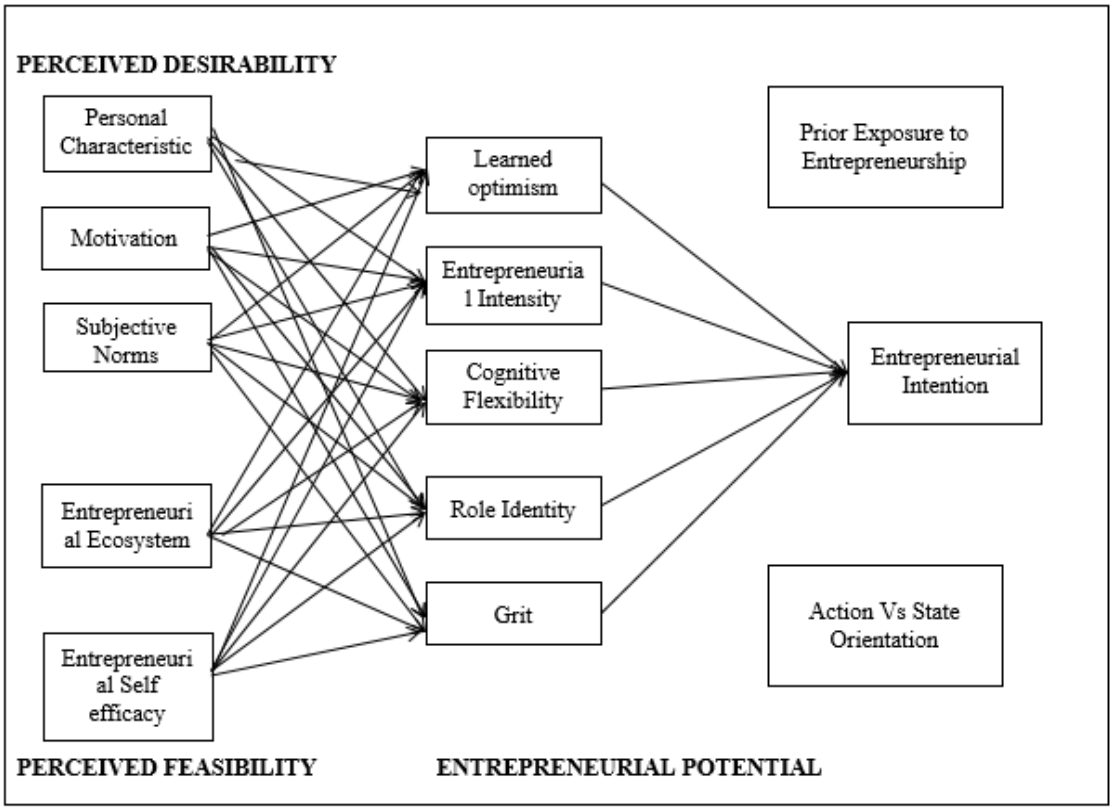



**Figure 3.2: Hypothesized Model for the study**

# 3.6 Research Questionnaire Design

## 3.6.1 Background on the Operationalization of Constructs

On the basis of theoretical assumptions of entrepreneurial potential model and extended social cognitive theory and exploratory analysis, this research has come across various constructs of entrepreneurial intention. In order to obtain valid empirical results, the research has defined the constructs for measuring entrepreneurial intention. The constructs include perceived desirability, perceived feasibility and entrepreneurial potential. Among these constructs entrepreneurial intention is the dependent or endogenous construct, and entrepreneurial potential is the mediate endogenous constructs. The framework proposes that these constructs would influence entrepreneurial performance. The independent or exogenous constructs are perceived desirability and perceived feasibility. Thus, it was hypothesized that these exogenous constructs would influence the mediate endogenous constructs, which in turn would influence the entrepreneurial intention among women entrepreneurs.

#### 3.6.1.1 Exogenous Constructs

The exploratory study explains the various exogenous constructs for measuring entrepreneurial intention. The exogenous constructs are perceived desirability, perceived feasibility, entrepreneurial ecosystem and entrepreneurial self-efficacy.

##### *3.6.1.1.1 Perceived Desirability*

Perceived desirability (PD) is defined as the personal attractiveness that individual has towards becoming an entrepreneur. In this research a 3 item Krueger scale has been used for measuring perceived desirability with all items measured on 5-point Likert scale [116]. The sub constructs for perceived desirability are personal characteristics, subjective norms and motivation. These are explained in detail in the following paragraphs.

*Personal Characteristic* is defined as a feature or trait that helps to distinguish an individual. The most popular way of measuring traits is by administering BIG 5 personality test (OCEAN). This test provides a comprehensive framework that comprises of personality constructs instead of varied personalities variables. In order to measure personality traits a 10-item Big five inventory (BFI) scale has been used which has been adapted from various scales [106-107]. The items were measured on a five point Likert scale from 1= strongly disagree to 5 = strongly agree. Personality constructs include agreeableness, conscientiousness, extraversion, neuroticism and openness. Agreeableness represents an individual who has the tendency to be compassionate and supportive rather than mistrustful for others. Conscientiousness represents an individual who are self-motivated, hardworking and are goal oriented. Extraversion represents an individual who are empathetic, creative, proactive, dominant, and energetic. Neuroticism defines the degree of emotional stability in an individual. People who scored low on neuroticism tend to be self-confident, high on self-esteem and are composed.

Openness represents an individual who tends to be inquisitive, innovative, inventive and creative. Individuals with high on all these personality constructs are attracted more towards entrepreneurship.

*Subjective Norms* refers to what is significant in an individual's life that makes him think about choosing entrepreneurship as a career. An individual who are motivated by fellow people tend to

be more attracted towards entrepreneurship. The subjective norm is measured through a 3-item scale taken from Kolvereid [69] using five point Likert scale from 1= strongly disagree to 5 = strongly agree.

*Motivation* is defined as the drive or factors that motivate women to become an entrepreneur. The motivation scale used in the research has been adapted from various studies [108,109]. The survey instrument contained 17 quantitative items all measured on five-point Likert scales. Motivation can be either necessity driven or opportunity driven. Necessity driven forces (also called as push factors) a woman to become an entrepreneur. It includes factors like unemployment, dissatisfaction from job, family constraints and financial constraints. Opportunity driven factors (also called as pull factors) act as an opportunity and pulls a woman to choose entrepreneurial activity as a career. It includes factors like market opportunity, self-recognition, desire to be independent, family support and autonomy.

#### *3.6.1.1.2 Perceived Feasibility*

Perceived feasibility (PF) is defined as how one self sees capable of becoming an entrepreneur. The individual who are high on feasibility tends to have more willingness to act as an entrepreneur. A 3- item Krueger scale has been used in the research for measuring perceived desirability with all items measured on 5-point Likert scale [116].

#### *3.6.1.1.3 Entrepreneurial ecosystem*

OECD defines SME institutional framework "as the set of governmental and other institutions responsible for the design and implementation of SME policies". The individuals who tends to have more support from entrepreneurial ecosystem (focus is made on support from government) are highly motivated and found to have more intention towards entrepreneurship [84]. A 9-item scale has been adapted from GEM study [98] and used in this research, in order to understand the support from government policies and programmes.

#### *3.6.1.1.4 Entrepreneurial self efficacy*

Entrepreneurial self efficacy (ESE) is defined as the belief that individual has on its one of the skills that will help them in performing certain actions in order to achieve something. Moberg 10 item entrepreneurial self-efficacy scale (ESE) has been used in this research for measuring ESE.

All the items are measured on 7-point Likert scale, 1 being “low” and 7 being “high”. The individuals who are high on entrepreneurial self-efficacy tend to be more confident in performing any activity and they possess high intentions towards entrepreneurship [110].

#### 3.6.1.2 Mediate endogenous constructs

Entrepreneurial potential model has highlighted the mediating role of entrepreneurial potential for shaping the entrepreneurial intention. Potential entrepreneurs are defined as the individuals who are desirable and feasible to become an entrepreneur but are not willing to act on it. Individuals with high entrepreneurial potential are found to have high intention towards entrepreneurship [116]. As mentioned by Krueger in 2015 [111] entrepreneurial potential is measured through learned optimism, cognitive flexibility, role identity and grit.

*Learned optimism* is the degree attained or attainable by entrepreneur or a non-entrepreneur under implied or specified conditions. As stated by Seligman in his book on learned optimism in 1992 that “optimists are higher achievers and have better overall health. Pessimism, on the other hand, is much more common; pessimists are more likely to give up in the face of adversity or to suffer from depression. Seligman invites pessimists to learn to be optimists by thinking about their reactions to adversity in a new way. The resulting optimism—one that grew from pessimism—is a learned optimism”. Individuals who are high on learned optimism tend to have more intention towards entrepreneurship. In order to measure learned optimism Martin Seligman 21-item scale has been used in the research with all items measured on five-point Likert scale [112].

*Cognitive flexibility* is the ability to adapt the cognitive processing strategies to face new and unexpected conditions in the environment. To measure cognitive flexibility, this research has used the cognitive flexibility scale (CFS) developed by Martin and Rubin [115]. It consists of 12- items. The CFS is a 6-point Likert-type measuring tool in which 1 stands for "strongly disagree" and 6 stands for "strongly agree”.

*Entrepreneurial intensity* measures the focus and commitment of entrepreneurs regarding their entrepreneurial ventures. The individuals who are high on entrepreneurial intensity (EIN) tend to have more intention towards entrepreneurship. For measuring EIN, a 4-item scale has been adopted from panel study of entrepreneurial dynamics, PSED [114].

*Role identity* is defined as how one sees oneself as an entrepreneur. The individuals' who are high on role identity tend to have high entrepreneurial potential and hence tends to have intention towards entrepreneurship. This research has used the 2-item scale given by Krueger in 2017 [111]. *Grit* is defined as "perseverance and passion for long-term goals". The individuals having grit tend to possess high intentions toward entrepreneurship. A 10-item Duckworth GRIT scale has been used in this research to measure grit. The items are measured on a five point Likert scale from 1= "not at all like me" to 5 = "very much like me" [117].

### 3.6.2 Questionnaire Development

In chapter 2, study conducted a literature review to identify the antecedents from various categories *viz.* perceived desirability, perceived feasibility, entrepreneurial potential toward entrepreneurial intention. Based on this extensive literature review, research objectives and hypotheses are framed. Consequently, several conceptual models are proposed for investigating the relationship between the antecedents of entrepreneurial intention among women entrepreneurs. This study has adopted a descriptive research design because this type of design is considered appropriate for the aim of the study is to establish and understand the relationship between the variables selected in the study.

Survey method is planned to be used for collecting the data with a structured questionnaire and the instrument for data collection is developed from the existing scale items from the literature review. The primary data collected through the survey method is used for empirically testing of the hypotheses in the study. From a thorough review of literature, pre-existing scale items are identified for measuring the constructs in the study. A total of 95 scale items of all the antecedents proposed in the model are generated. Likert, five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree) is followed for each of the scale item. A detail account of the original scale items is given in Appendix B. Table 3.1 details the studies from where the scale items are taken, along with the number of scale items under each construct.

The questionnaire designed for this study is based on the existing scales and it uses adapted approach. Before going for the pilot study, the research has consulted experts in the field of entrepreneurship in order to modify the questionnaire. On the basis of expert suggestions, the instrument is planned for further modification. All the factors that are used in proposed framework for our study has been taken into consideration by experts and the final call is made using expert opinion. The factors like personal characteristics, subjective norms and motivational factors are

selected on the advice of experts in the field of entrepreneurship from academicians, researchers, entrepreneurs and industrialists. On the basis of expert opinion, three constructs are considered under perceived desirability i.e. personal characteristics, motivational factors and subjective norms. Perceived feasibility is measured through entrepreneurial self-efficacy and support from entrepreneurial ecosystem. Entrepreneurial potential has been measured through learned optimism, grit, role identity, entrepreneurial intensity and cognitive flexibility. After the completion of expert opinion process, this research has taken a final call on proposed framework with the help of Dr. Norris Krueger who has designed the entrepreneurial potential model. This is followed by questionnaire development.

**Table 3.1: Constructs and Sources of Scales**

| S. No | Constructs | Scales Used | No. of items |
|---|---|---|---|
| 1 | Personal characteristics | "BFI inventory scale", BFI-10; Rammstedt & John, 2007 | 10 |
| 2 | Motivational factors | Hung M. Chu, Chu & Katsioloudes, 2005 | 10 |
| 3 | Subjective norms | Kolvereid, 1996 | 2 |
| 4 | Entrepreneurial ecosystem (Support from government policies and programs) | OECD Report, 2015 | 5 |
| 5 | Entrepreneurial self-efficacy | Karlsson & Moberg, 2013 | 10 |
| 6 | Learned optimism | Revised LOT-R Scale, Michael Scheier and colleagues, 1994 | 6 |
| 7 | Cognitive flexibility | Martin and Rubin,1995 | 12 |
| 8 | Entrepreneurial intensity | Panel study of entrepreneurial dynamics, PSED | 4 |
| 9 | Role identity | Krueger, 2017 | 2 |
| 10 | Grit | Duckworth et al., 2007 | 10 |
| 11 | Action control scale (ACS90) | Adapted from Kuhl, J., & Beckmann, J., 1994 | 21 |
| 12 | Entrepreneurial intention | Krueger, 2017 | 2 |

The questionnaire for this study is divided into three sections (refer Appendix B) accompanied by a covering letter. Covering letter indicates the nature of the research, a request for cooperation, and an outline of benefits to the respondent. The first section of the questionnaire

details the purpose of the study and captures the demographic information of the respondent i.e. age, gender, education and occupation. The second section focuses on measuring the antecedents of entrepreneurial intention among women viz. personal characteristics, motivational factors, subjective norms, entrepreneurial ecosystem, entrepreneurial self-efficacy, learned optimism, cognitive flexibility, entrepreneurial intensity, grit and role identity. The last section comprises of an open ended question on issues and challenges faced by women entrepreneurs followed by comments and suggestions for the instrument.

To validate the questionnaire a pilot study is planned. Exploratory factor analysis is used to develop a valid questionnaire for the women entrepreneurs in Indian MSMEs. Factor analysis is a data reduction and data summarization technique. In this technique *"relationship among sets of many interrelated variables are examined and represented in terms of a few underlying factors."* [123]. Principal components analysis with varimax rotation is used to assign the factor score coefficients to find out the minimum number of factors accounting for maximum variance. Each construct is checked using KMO's and Bartlett's test of sphericity as a sufficient condition for conducting factor analysis. The KMO values for each construct is above 0.50 and Bartlett's test shows ($p<0.001$), signaling the suitability of factor analysis in the given data. Since, Sarstedt M [124] advocates that, a cut off score of 0.50 or 0.60 is sufficient for factor analysis, for this study a cut off score of 0.50 is used to assess the validity of the scales. The items below cut off are removed from the final scales. Most of the variables are loaded strongly (>0.5) on respective factors. In order to ascertain the reliability of the summated scales, Cronbach's alpha is calculated. The result reports minimum of 0.7 Cronbach's alpha, which is within the acceptable reliability range [124]. Originally, these behavioral constructs consist of 94 scale items. It is performed for 94 statements in order to test the validity of the scales and to bring down a large number of correlated variables to a convenient set of variables. Using factor analysis, 94 scale items are reduced to 62 scale items. The final scale items are found to be reliable and valid in the Indian context. Thus, by performing the factor analysis this research has validated the scale items of the constructs included in the study. Refer Appendix 3 for the list of final scale items included in the study.

The Cronbach alpha coefficients will be calculated in the study to check the reliability of instrument. The pilot study will further help us to evaluate the challenges and potential problems in data collection, data entry and data analysis. In order to the collect the data, permission for

research with enterprises registered with Laghu Udyog Bharti and MSME offices in various states (as mentioned in cluster) are taken. The data has been collected randomly from each clusters. The pilot study is carried out through a self-administered, mail and survey questionnaires which are given to women entrepreneurs. The mailing to each entrepreneur included a cover letter and the questionnaire (refer Appendix B). The respondents were able to return the questionnaires by mail and in person. To increase the response rate, one week after the questionnaires were mailed to the entrepreneurs, a reminder phone call was also made to each of them.

Pilot study has helped in identifying the ambiguous statements in the questionnaire by thoroughly examining the respondents' interpretation of the questionnaire. It is observed that respondent took about 15-20 minutes to complete the questionnaire. The length of questionnaire has affected the response rate. Therefore, present research has planned to conduct the factor analysis for this study as a scale reduction technique to ensure that the future respondents would not face any difficulty in understanding and answering the questionnaire. The changes are incorporated in the final questionnaire.

## 3.7 Data Collection Process and Sampling

To understand the construct of entrepreneurial intention among women entrepreneurs, a nationwide study will be conducted using cluster and snowball sampling and survey method. Data is planned to be collected from various geographical clusters such as high, medium, low and very low women owned enterprises as defined in IFC report. The strength of the study lies in collecting data from the real setting than taking women entrepreneur sample as a surrogate data. Figure 3.3 depicts the data collection process.

Every state has its own ministry of MSME offices. They often conduct training programs for skill development for women entrepreneurs. They act as an authentic source for collecting information of registered enterprises under the MSME act by government of India.

Laghu Udyog Bharati (LUB) works for the cause of micro and small enterprises across the state. They often conduct entrepreneurial meets for growing networks among women entrepreneurs. They emphasize on discussing issues and challenges faced by women entrepreneurs. Most states have their own women entrepreneurial group for example Association of women entrepreneurs of Karnataka (AWAKE), Association of lady entrepreneurs of Andhra Pradesh (ALEA) etc.

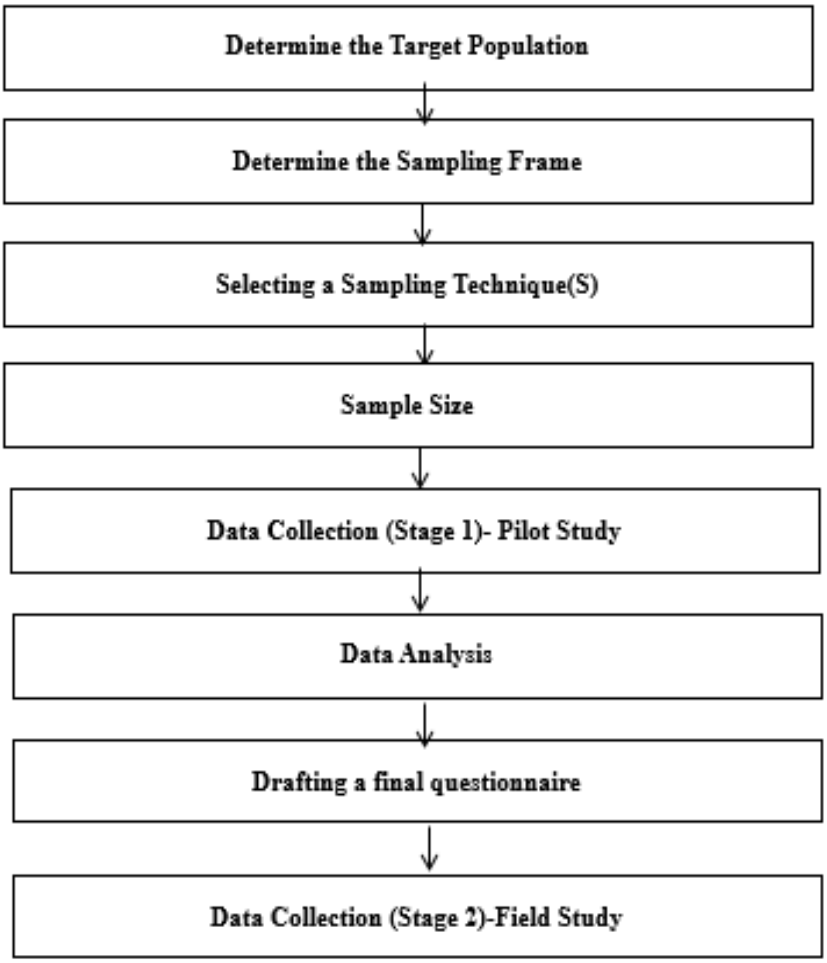



**Figure 3.3: Data Collection Process**

Federation of Indian women entrepreneurs are working towards the national and international co-operation amongst women entrepreneurs with a singular motive i.e. Together towards a glorious future. FIWE is one of India's premier institution for women thoroughly devoted towards entrepreneurship development in the country. It has branches in different states of India with a membership base of 15,000 individual members/professionals and 28 member associations spread throughout India. Small-scale entrepreneurs account for approximately 60 percent of FIWE's combined membership, with large firms representing 5 percent and micro-enterprises the remaining 35 percent [125].

Procuring the women entrepreneur details from MSMED and DIC offices was challenging. This was addressed by sharing a document stating the research purpose. Seeking time from the participants for the survey was also very difficult and hence, approaching them through proper

channel was vital. Considering the challenges in the data collection process, it was necessary to identify the sampling frame from valid source. Another challenge was the identification of women entrepreneurs with their enterprises registered under the MSMED act, Government of India. A qualifying question was asked so that the respondents were screened out at the beginning of the survey. Table 3.2 below outlines the target population, sampling frame, sampling technique and sample size.

**Table 3.2: Key Elements of Data Collection**

| | |
|---|---|
| **TARGET POPULATION**<br>• Element<br>• Sampling Units<br>• Extent | Women entrepreneurs (Govt. registered units as per MSME Act),<br>Micro, Small & Medium Enterprises Pan-India |
| **SAMPLING FRAME** | MSME office, DIC (District Information Center), Laghu Udyog Bharati (LUB) |
| **SAMPLING TECHNIQUE** | Cluster and snowball |
| **SAMPLE SIZE** | Pilot study- 103<br>Field Study- 471 |

## 3.7.1 Sampling Design & Sample Size

The study will use cluster and snowball sampling method for collecting the data. Snowball sampling is used by researchers to identify potential subjects when the subjects are hard to locate. It provides a means of accessing vulnerable and more impenetrable social groups [123]. Since the respondents constitute a relatively small proportion of the Indian population and they are geographically dispersed across the country, snowball sampling is deemed appropriate for obtaining answers from respondents. Cluster sampling uses clusters as defined by IFC report [9] for women owned enterprises. To reach the women entrepreneurs in Indian MSME's, some degree of trust was essential to initiate the contact. Chain referral method aided entry to the settings when the conventional approaches failed to succeed. On one hand, seeking an appointment from the women entrepreneur from their busy schedule to participate in the survey was a daunting task. On the other hand, procurement of sampling frame from MSME offices and DIC and seeking their permission to conduct surveys was challenging. MSME offices did not seem comfortable in sharing details of women entrepreneurs. For this study, research planned to join the training

programs conducted by MSME's for women entrepreneurs in order to grow networks with them and later seeking an appointment for further information.

IFC study [9] states that in India, high cluster states have more women owned enterprises and includes 4 states, medium cluster includes 2 states and low cluster with 7 states and remaining 20 states come sunder very low cluster in terms of prevalence of women owned enterprises. The details are presented in Table 3.3. Ensuring the inclusion of right respondents is one of the most important steps in the data collection process. Hence, for this study women entrepreneurs from each cluster has been planned in the study.

**Table 3.3: Distribution of Women Owned MSME's by Clusters**

| Cluster | State-wise Share (Percent) | Number of state/Union Territories | States/ Union Territories | Combined Share (Percent) |
|---|---|---|---|---|
| High | >10.00 | 4 | Kerala, Karnataka, Tamil Nadu, West Bengal | 51.9 |
| Medium | 5.00-10.00 | 2 | Andhra Pradesh, Madhya Pradesh | 11.5 |
| Low | 2.00-4.99 | 7 | Rajasthan, Maharashtra, Punjab, Uttar Pradesh, Bihar, Gujarat, Odisha | 26.7 |
| Very Low | <1.99 | 20 | Rest of India | 9.9 |

As mentioned in the study, around 3.01 million women-owned enterprises represent about 10 percent of all MSME's in the country. Collectively, they contribute 3.09 percent of industrial output and employ over 8 million people. Approximately 78 percent of women enterprises belong to the services sector. Women entrepreneurship is largely skewed towards smaller sized firms, as almost 98 percent of women-owned businesses are micro-enterprises [9].

Determining appropriate sample size is critical for obtaining reliable estimates from the study. From the sample size of 50 which we have planned for conducting a pilot study, its mean, standard deviation, confidence level and level of precision will be calculated. The following formula is used for calculating the final sample size [123]. Research study has used the formula for finite population as the registered women enterprise units are mentioned are finite in IFC report as presented in Table 3.4.

**Table 3.4: Key Statistics on Women Owned MSME's in India**

| Type of Enterprise | Registered | Unregistered | Total | Total vs all women owned businesses (percent) | Total vs all MSME's (percent) |
|---|---|---|---|---|---|
| Micro | 274,059 | 2,655,318 | 2,929,377 | 97.62 | 9.40 |
| Small | 40,722 | 30, 414 | 71,136 | 2.37 | 0.23 |
| Medium | 276 | - | 276 | 0.01 | 0.01 |
| Total | 315,057 | 2,685,732 | 3,000,789 | 100.00 | 10.25 |

The sample size has been calculated for finite population (total number of women enterprise across nation=315,057.

$$n = \frac{z^2 \times \hat{p}(1-\hat{p})}{\varepsilon^2}$$

$$n = \frac{1.96^2 \times 0.5(1-0.5)}{0.05^2} = 384.16$$

where

z is the z score (95% confidence level is 1.96)

ε is the margin of error (margin of error of 5%.)

N is population size

$\hat{p}$ is the population proportion

According to the formula, a sample size of 385 or more is appropriate for this study.

### 3.7.2 Approach for Data Collection Process

The questionnaire has been sent to all the cluster states viz. high, medium, low and very low states. An attempt has been made to do nation-wide study. The protocol for selecting the entrepreneurs has been to choose women from every cluster and every state listed in the geographical classification by IFC. The sample needs to include at least approximately 200 respondents because a minimum of about 200 responses are required for the structural equations modeling technique that is used in the main part of the data analysis [123]. The detailed description has been explained in Section 3.7.

### 3.8 Data Analysis and Statistical Techniques

A number of analytical tools have been used to explain the relationship between various constructs of entrepreneurial intention as presented in Table 3.5.

**Table 3.5: Summary of Statistical Tools Used**

| Technique | Objective of Use | Software Used | Related Hypothesis |
|---|---|---|---|
| Descriptive statistics | To describe the sample and summarize the raw data | IBM SPSS (Version 22) and Excel | NA |
| Inferential statistics | To evaluate the relationships between various constructs of conceptual model. | IBM SPSS (Version 22) | NA |
| Cronbach's alpha | To evaluate the reliability of indicators of constructs | IBM SPSS (Version 22) | NA |
| Pearson's correlation | To examine the correlations between the of independent variables in regression | IBM SPSS (Version 22) | NA |
| Exploratory factor analysis | To reduce the large number of variables into fewer numbers of factors | IBM SPSS (Version 22) | NA |
| Structural equation modeling | To examine relationships among the constructs | SPSS AMOS (Version 20) | -H1-H11 |

## 3.8.1 Data Preparation and Preliminary Data Analysis

Data preparation is the process of treating the missing values, checking for inaccuracies, inconsistencies, cleaning, coding, and tabulating the data for further analysis. In the preliminary data analysis, descriptive statistics, cross tabulations, histograms and charts will be generated to visualize the trends and patterns in the data. Pearson Product Moment Correlation will be calculated with the help of SPSS. Correlation will help us in providing a rough idea about the

relationship between the variables in the study. It accounts for association between the variables. Preliminary data analysis helps in establishing a basic understanding of the relationships between variables in this study.

For preliminary data analysis it is planned to collect demographic information from women entrepreneurs as it will help us in understanding their backgrounds. The demographical information about women entrepreneurs is captured in the first section of the questionnaire. As mentioned in the studies by Carree and Thurik [126-128] in their studies that 'entrepreneurial activity is a key instrument of innovation, employment and economic growth'. Furthermore, few studies have explored the characteristics possessed by entrepreneurs to create & develop new business and thereafter how societies and economies grow and prosper [128]. The firm's superior performance is the main goal of every enterprise owned by women. Therefore, it is very important to identify the factors that lead towards the success of the business. Many studies in the past have demonstrated the impact of several factors on the firm's performance. However, it's necessary to investigate the influence of demographic characteristics and personal characteristics of the women entrepreneurs on their enterprise's performance and their significance on how these factors motivated them to choose entrepreneurship as a career.

In order to understand various dynamics of entrepreneurial activities among women, it is important to identify the factors that lead towards the success of the business. Socio-economic status of any society has a direct reference with the progress and development of each member of that community. The community of women entrepreneurs is no exception to this convention. In this context, it is important to throw light on the socio-economic characteristics in the various clusters states. The development and growth of entrepreneurial activities among women to a great extent depends upon their socio-economic status. The demographic characteristics and personal characteristics determines how various entrepreneurial activities among women lead to entrepreneurial development in the region. These characteristics are a composition of variables like age, occupation, family size & structure, marital status, educational standards, work experience, and income. There are many studies which pointed out the importance of socio-cultural factors in creating new businesses [96-100]. Personal and economic factors also contribute immensely in shaping of entrepreneurial behaviour of new entrepreneurial firms ranging from self-employment to building enterprises [97]. However, besides economic traits, few studies establish the fact that entrepreneurial variations are better understood by considering the social environment

in which the firm is created, because they consider entrepreneurship as a social phenomenon [118].

Numerous studies have emphasized the role of demographic characteristics such as age, religion, gender, experience, background and education of entrepreneurs towards their entrepreneurial behaviors and firm's performance [105]. Although there has been considerable research based on psychological and cultural approaches to entrepreneurship, the influence of socio-economic factors on enterprise development remains under studied [105]. Therefore, the focus here is to integrate, from a theoretical as well as practical perspective, the socio-economic factors and entrepreneurial activities among women entrepreneurs. In the similar context, the present study attempts to understand the socio-cultural characteristics among women entrepreneurs that influence their decisions to create new enterprises. Section I of the questionnaire collects information of the respondents on their age, educational qualification, family size, work experience, year of establishment and the type of enterprise.

#### 3.8.1.1 Age

The competencies of a women to cater various responsibilities exhibit variation with respect to their age. Age works as an important deciding factor in performing various entrepreneurial activities. The literature available on the issue illustrate that executing managerial and administrative responsibilities, risk bearing and various decision making abilities, performing financial, marketing and operational functions get influenced with the age of women entrepreneurs. Welmela et al. in 2011 [129] states that skills of people improve with the age and they learn to manage time effectively. Also, the person's age is considered as a significant demographic characteristic in understanding his or her entrepreneurial behaviours and intentions. An attempt has been made in this research to study the relationship between age and entrepreneurial behaviour of women entrepreneurs. This will help us in understanding the behavioural aspects of development of women enterprises.

#### 3.8.1.2 Educational Qualification

Education is rightly considered as one of the most effective tools to bring about socio-economic change in any society. As we discuss the socio-economic background of the women entrepreneurs in the rural and urban areas of our study, we find education is one of the important points to be

analysed. Education helps to understand the latest technological development and the latest market trends available. Unawareness of the recent developments creates problems in setting up and running of business enterprise. Education has been argued to indicate an individual's knowledge and skills. The education level of entrepreneurs is a vital influence in forecasting the financial success of a new business [130]. Martin in 2015 [131] said that education plays a subsidiary role in promoting entrepreneurship, because entrepreneurs are born. A higher level of education upturns the person's management skills, and thus influences the choice of entrepreneurship options [132].

#### 3.8.1.3 Marital Status and Family Structure

Few studies have mentioned that majority of the entrepreneurial activities were handled by married ladies who were able to balance between the work and their family life. The structure of the family plays an important role in deciding upon the entrepreneurial venture of the females. There are studies that establish the fact that family composition, to a large extent influences the working life of women. Entrepreneurial behaviour is influenced by many social factors like family type; family size, number of children in the family and number of dependent members [132]. Therefore, the family structure remains a key factor to be analyzed for the growth of entrepreneurial activities among women in India. The size of the family is one of the important reasons for the women to enter into the entrepreneurial venture. Size of the family and the number of dependents become an important basis for the females to move out and support the finances of the household.

#### 3.8.1.4 Type of Enterprise

The first section of an instrument attempts to capture the information about the type of enterprise i.e. either micro, small or medium on the basis of initial investments made by women entrepreneurs for manufacturing and services. A recent study by MSME [105] states that women entrepreneurs make a significant contribution to the Indian economy. There are nearly three million micro, small, and medium enterprises with full or partial female ownership. Around 78 percent of women-owned businesses operate in the services sector.

In order to understand the reasons behind the choices of business taken by women entrepreneurs and understanding the factors that has motivated women to take up such businesses,

the attempts have been made in the study to further understand the entrepreneurial intention among women entrepreneurs through asking questions on the type of enterprise.

### 3.8.2 Reliability and Validity Analysis

Reliability measures the degree to which the instrument can yield same results on repeated trials. In order to evaluate a survey instrument, an internal consistency check has been planned using Cronbach's alpha test. On the other hand, validity is defined as the degree to which variable represents all facets of a given construct. In order to examine the validity of an instrument Pearson's correlation test has been planned for this study. Pearson correlation coefficients between the research variables, as well as the variance inflation factor would be calculated in order to detect multicollinearity.

According to Julius Kuhl [133], multicollinearity is a threat to the interpretation of the influence of independent variables on the dependent variable in a regression. Multicollinearity is a result of strong correlations between independent variables, Multicollinearity exists when the predictors are highly correlated with each other [134]. If independent variables are highly correlated, the influence of each of those variables on the dependent variable may be misinterpreted. In order to understand to perform the check for multicollinearity the present research study has examined the correlations (continuous and ordinal variables) and associations (nominal variables) between independent variables

### 3.8.3 Exploratory Factor Analysis

Exploratory factor analysis has been planned to identify the underlying relationships between measured variables. For verifying assumptions prior to rotation, the research study has planned to compute the Bartlett's Test A significant result (Sig. $< 0.05$) indicates matrix is not an identity matrix; i.e., the variables do relate to one another and the correlation matrix is factorable [123] to run exploratory factor analysis.

### 3.8.4 Confirmatory Factor Analysis

In order to test whether the data is fitting the hypothesized measurement model, confirmatory factor analysis (CFA) will be used in the study. It is a multivariate statistical procedure, which is

used to test how well the measured variables represent the constructs. CFA is critical for this study because the scales are borrowed from the other studies and therefore, the reliability and validity needs to be examined. The investigation is conducted by estimating the loadings of each item. The absolute, parsimonious and incremental fit indices are estimated using Chi square test, comparative fit index (CFI), Goodness of Fit Index (GFI), Average Goodness of Fit Index (AGFI), Tucker Lewis Index (TLI), Root Mean Square Residual (RMR) and Root Mean Square Error of Approximation (RMSEA)for evaluating the model fit [135]. The statistics have been reported as estimating the best model fit indices. For the purpose of analysis, AMOS 20 is used.

### 3.8.5 SEM Analysis

SEM analysis has been performed using AMOS in order to understand the relationship between the factors influencing entrepreneurial intentions and hence evaluating the conformity of the model which has been explained in Chapter 4.

To study the interrelationships in the hypothesized models, SEM analysis is planned to perform on a dataset obtained through pilot and field data set obtained from women entrepreneurs responses with AMOS 20 statistical package Structural Equation Modeling has been used for specifying and testing the structural models in the study. SEM is very flexible, because it deals not only with a single simple or multiple linear regression, but with a system of regression equations [135]. In this study, however, there are multiple relationships to be tested and SEM has been used to check the overall model fit and to see the new relations among all the variables in the study. It makes provision of the measurement error in the model. It is based on the realistic assumption that the indicators are not perfect measures, and thus generates statistically consistent parameter estimates.

## 3.9 Summary

This chapter presented the design of the proposed model for understanding the entrepreneurial intention among women entrepreneurs in Indian MSMEs, which is based on an extensive review of the relevant literature. The hypotheses and research framework have also been discussed in this chapter. It has also been explained how the constructs and variables are selected and

operationalized for the investigation of the relationships among the constructs. Then, the data collection and sampling procedure, as well as the survey instrument has also been described. Finally, this chapter indicates the statistical techniques used for the preliminary data analysis and for testing the hypotheses. The results of the statistical analysis and hypotheses testing are presented in the next chapter.

# CHAPTER 4

# DATA ANALYSIS

## 4.1 Introduction

In chapter 3, we have discussed the methodology used for the research. This chapter discusses the results of the data analysis and hypothesis testing. This chapter has been divided into five sections. Section 4.1 provides an overview to the chapter. Section 4.2 presents the steps followed for performing data analysis of the study. Furthermore, the sections 4.1.1-4.1.4 explains the descriptive, inferential, exploratory factor and SEM analysis that has been used for the study. Section 4.3 discusses the sample characteristics of the respondents. Section 4.4 discusses the reliability of entrepreneurial intention instrument used in pilot and field data collection. Section 4.5 discusses the results obtained from Pearson's correlation test for examining convergent and discriminant validity among the constructs of entrepreneurial intention among women entrepreneurs. Section 4.6 analyze the structural relationship between the constructs of entrepreneurial intention, followed by results and discussion of the results.

## 4.2 Data Analysis Process

The purpose of this research is to determine (a) the interrelationships among the components of entrepreneurial intention among women entrepreneurs, (b) motivational factors that contribute to entrepreneurial activities, (c) role of entrepreneurial potential in raising entrepreneurial intention, (d) issues faced by the women entrepreneurs in MSMEs, (e) institutional framework that promotes women entrepreneurship in MSMEs. and (f) to develop an analytic framework for promoting women entrepreneurship in MSMEs. Steps followed in data analysis are depicted in Figure 4.1.

### 4.2.1 Descriptive Analysis

The measures for variability, modality and central tendency is used in this study to understand the distribution of data obtained from the respondents. This is carried out by examining the cluster around mean, mode, or median, range, interquartile range (IQR), variance, and standard deviation. The peaks observed in the graphs explain the skewness and kurtosis of the curve.

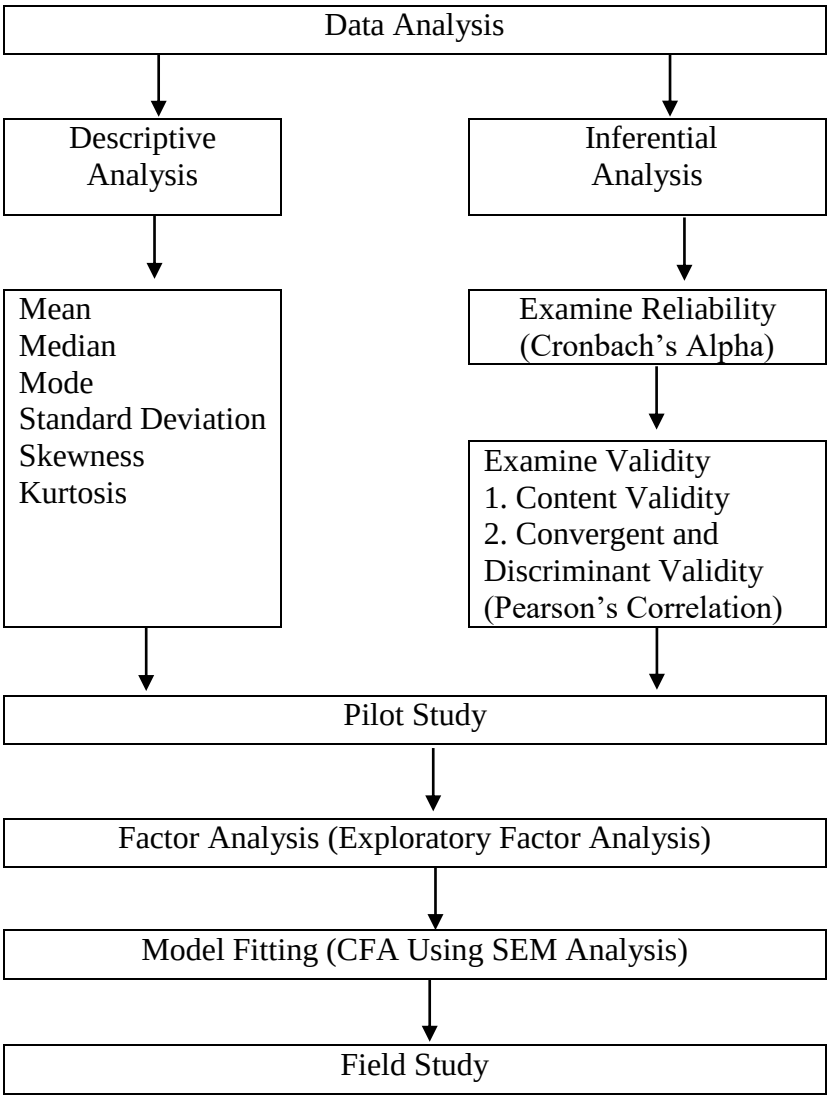



**Figure 4.1: Steps for Data Analysis**

### 4.2.2 Inferential Analysis

To understand the relationships between various constructs of entrepreneurial intention, reliability and validity tests through Cronbach's alpha and Pearson's correlation values have been used in this study.

### 4.2.3 Factor Analysis

Factor analysis is used to reduce the large number of variables into fewer numbers of factors for all the constructs of entrepreneurial intention i.e. personal characteristics, motivation, subjective norms, support from entrepreneurial ecosystem, entrepreneurial self-efficacy and entrepreneurial potential.

### 4.2.4 Structural Equation Modeling

Casual relationships are examined by using structural equation modeling. SEM is used to understand the significant relationships between the constructs of entrepreneurial intention as presented in hypothesis in Chapter 2. All the relationships presented in hypothesis are tested and later the model fit has been done.

## 4.3 Pilot Study

Baker, 1992 [136] defines pilot study "as a feasibility analysis which includes small scale versions or trial runs, domain preparation for the major study". A pilot study can also be the pre-testing or 'trying out' of a particular research instrument. In this research, pilot study has been performed using both online and offline modes as mentioned before in this chapter.

For this study, hypothesis has been formulated through research questions as presented in chapter 3. After formulating the hypothesis, women entrepreneurs with their registered enterprises under the MSMED Act has been selected as target population. Furthermore, for this study sampling study has collected the data through sampling frames i.e. Meetup group, Laghu Udyog Bharati, DIC (District Information Center), MSME offices and AWAKE. Present study has planned to use cluster sampling as per the geographic cluster presented in Chapter 2 followed by random sampling for the study. As mentioned earlier in Chapter 2 the states through high, medium, low and very low cluster have been selected and then women entrepreneurs have been selected through the leads given by visiting the MSME regional offices and meet `up groups. As mentioned in literature [137], the ideal size for conducting pilot study is having a minimum 50 samples. For this study the pilot testing has been performed on a group of women entrepreneurs from various regions after following the previous steps. While collecting data a total of 103 sample survey has been collected in the present study. In order to test the reliability and validity of the instrument it is planned to use Cronbach's alpha and Pearson's correlation test to examine the significant relationships among constructs.

As mentioned in Chapter 3, few modifications on the questionnaire have been done as per the feedback given during the pilot study for this research. After all the modifications in survey have been done, the researcher has gone through Delphi technique by contacting the experts in the

fields of entrepreneurship by taking their suggestions and finally the instrument has become ready for final data collection. The field data process has been explained later in this chapter.

Before distributing the primary survey, a pilot test has been conducted by distributing the questionnaire to a sample of women entrepreneurs in different clusters as presented in chapter3 (high, medium, low, very low cluster states). To understand the entrepreneurial intention among women entrepreneurs' data has been collected from 103 respondents distributed across India. This is followed by validity and reliability checks and descriptive analysis.

## 4.3.1 Demographic Profile

This section describes the demographic profile of the respondents of the pilot study.

### 4.3.1.1 Age

From the table below it can be observed that the majority of respondents are from the age group of 31-40 years, contributing to 79.61%, followed by the 21-30 years contributing to 11.65%, and age group above 40 were 8.74% of the total respondents.

**Table 4.1: Age Group of the Respondents**

| Age | Respondents | |
|---|---|---|
| | Frequency | % |
| 21-30 | 12 | 11.65 |
| 31-40 | 82 | 79.61 |
| Above 40 | 9 | 8.74 |
| **Total** | **103** | **100** |

### 4.3.1.2 Education

From Table 4.2 it can be observed that 75.73% of respondents are graduate, this is followed by post-graduation qualification and high schooling.

**Table 4.2: Educational Level of the Respondents**

| Education Level | Respondents | |
|---|---|---|
| | Frequency | % |
| High School | 10 | 9.71 |
| Graduate/Bachelors | 78 | 75.73 |
| Post Graduate/Masters | 15 | 14.56 |
| **Total** | **103** | **100** |

#### 4.3.1.3 Prior Exposure and Experience to Entrepreneurship

From Table 4.3 it can be observed that 46.60% (48 respondents) of the respondents had prior exposure to entrepreneurship. Among these respondents, 77.08% (37 respondents) had a positive experience and the remaining had a negative experience as depicted in Table 4.4.

**Table 4.3: Prior Exposure to Entrepreneurship**

| Prior Exposure to Entrepreneurship | Respondents | |
|---|---|---|
| | Frequency | % |
| Yes | 48 | 46.60 |
| No | 85 | 53.40 |
| **Total** | **103** | **100** |

**Table 4.4: Nature of Experience on Prior Exposure to Entrepreneurship**

| Experience | Respondents | |
|---|---|---|
| | Frequency | % |
| Positive | 37 | 77.08 |
| Negative | 11 | 22.92 |
| **Total** | **48** | **100** |

#### 4.3.1.4 Type of Enterprise

From Table 4.5 it can be observed that 74.76% of respondents are from micro sector and the lowest responses are from medium scale sector with 2.91% responses.

**Table 4.5: Respondents by Type of Enterprise**

| Type of Enterprise | Respondents | |
|---|---|---|
| | Frequency | % |
| Micro | 77 | 74.76 |
| Small | 23 | 22.33 |
| Medium | 3 | 2.91 |
| **Total** | **103** | **100** |

#### 4.3.1.5 Nature of Enterprise

From Table 4.6 it can be observed that 91.40% of respondents are from manufacturing sector and the remaining are from service industry.

**Table 4.6: Respondents by Nature of Enterprise**

| Nature of Enterprise | Respondents | |
|---|---|---|
| | Frequency | % |
| Manufacturing | 85 | 91.40 |
| Service | 18 | 8.60 |
| **Total** | **103** | **100** |

#### 4.3.1.6. Cluster and State-wise Distribution

From the table below it can be observed that responses are received from 4 Indian states distributed across four clusters. Highest number of responses have been received from Telangana (40.78%) and the lowest number of responses are from Uttar Pradesh (10.68%).

**Table 4.7: Cluster and State-wise Distribution of Respondents**

| Cluster | State | Respondents | |
|---|---|---|---|
| | | Frequency | % |
| High | Karnataka | 34 | 33.01 |
| Medium | Telangana | 42 | 40.78 |
| Low | Uttar Pradesh | 11 | 10.68 |
| Very Low | Chhattisgarh | 16 | 15.53 |
| **Total** | | **103** | **100** |

### 4.3.2 Descriptive Analysis

The data analysis to address the research objective and test the hypotheses involves the use of descriptive statistics, condition indices, and Pearson correlations. Descriptive statistics used in this study are averages, frequency distributions, standard deviations, and correlations of the response values. In addition, Cronbach's alpha and Pearson correlation coefficients are used to check the reliability and validity of the scale.

As presented in Table 4.8, the values for central tendency are found to be ranging between 2.466 to 3.876 for the mean, 2.410 to 3.500 for median. The value for measuring the spread are found to be in the range of 1.478 to 1.598. The value for dispersion are found to be in the range of 0.215 to -1.023 for skewness and -0.126 to 1.161 for kurtosis. The ranges obtained states that the data is symmetrical, normally distributed, bell shaped, centred and uni modal.

**Table 4.8: Descriptive Analysis**

| Constructs | Mean | Median | Standard Deviation | Skewness | Kurtosis |
|---|---|---|---|---|---|
| Personal Characteristics | 2.466 | 2.410 | 1.478 | .215 | -.126 |
| Motivation | 3.881 | 3.800 | 1.449 | -.420 | -.928 |
| Subjective Norms | 1.245 | 1.214 | 1.596 | -.041 | -.347 |
| Entrepreneurial self-efficacy | 3.878 | 3.441 | 1.483 | -1.023 | -.515 |
| Entrepreneurial Ecosystem | 3.511 | 3.500 | 1.994 | -.139 | -1.396 |
| Learned Optimism | 2.512 | 2.504 | 1.469 | -.270 | 1.161 |
| Cognitive flexibility | 3.244 | 3.214 | 1.272 | -.135 | -.726 |
| Entrepreneurial Intensity | 3.254 | 3.224 | 0.918 | .076 | -1.340 |
| Role Identity | 2.502 | 2.524 | 1.576 | .060 | -.817 |
| Grit | 3.487 | 3.467 | 1.5983 | .042 | 2.611 |
| Entrepreneurial Intention | 3.876 | 2.816 | 1.275 | -.030 | -1.076 |

### 4.3.3 Reliability Analysis

To evaluate the survey instrument, an internal consistency check has been performed using Cronbach's alpha test. The analysis is presented in Table 4.9.

The employed indicators in the instrument have resulted in high reliability with the threshold level of Cronbach alpha greater than or equal to 0.60 on average. As mentioned in Table 4.9, the composite reliability shows outputs that range from 0.597 to 0.871 which is nearly equivalent and larger than the threshold level 0.6.

The inter-item correlation matrix represents a mean value of 0.025 to 0.531 which signifies that all the items are positively correlated and measures a single uni-dimensional latent construct. The employed indicators for all the mentioned constructs i.e. personal characteristics, Motivational factors, subjective norms, entrepreneurial ecosystem, entrepreneurial self-efficacy, perceived desirability, perceived feasibility, entrepreneurial potential and entrepreneurial intention are found to be reliable and hence justifying the adequacy of the sample.

**Table 4.9: Reliability Analysis**

| Constructs | No. of Items | Item Scale Mean | Inter-Item Covariance | Inter-Item Correlation | Cronbach's Alpha |
|---|---|---|---|---|---|
| Personal Characteristics | 10 | 4.184 | 0.55 | 0.531 | 0.693 |
| Motivational Factors | 17 | 3.274 | 0.181 | 0.122 | 0.703 |
| Subjective Norms | 3 | 3.118 | 0.167 | 0.224 | 0.801 |
| Entrepreneurial Self efficacy | 10 | 2.484 | 0.183 | 0.432 | 0.772 |
| Entrepreneurial Ecosystem | 9 | 2.446 | 0.192 | 0.156 | 0.708 |
| Learned Optimism | 6 | 2.767 | 0.114 | 0.178 | 0.597 |
| Cognitive Flexibility | 11 | 3.699 | 0.003 | 0.039 | 0.688 |
| Entrepreneurial Intensity | 4 | 3.08 | 0.118 | 0.271 | 0.752 |
| Action Control Scale | 23 | 3.663 | 0.165 | 0.051 | 0.633 |
| Role Identity | 4 | 2.874 | 0.432 | 0.173 | 0.871 |
| Entrepreneurial Intention | 2 | 4.184 | 0.55 | 0.131 | 0.694 |

### 4.3.4 Validity Test

For the instrument used in this study, following types of validity has been checked. In order to understand the association of variables, pearson product correlation analysis was carried out and the results are presented in Table 4.10. Convergent construct validity and discriminant validity has been tested in this study for testing the relationship between the various constructs for entrepreneurial intention. Previous research states that in order to have good construct validity one must have a strong relationship with convergent construct validity and no relationship for discriminant construct validity [137].

#### 4.3.4.1 Extroversion

An individual who is more enthusiastic (has high extroversion) will tend to be more hardworking and has more sense of responsibility (moderate to high relationship between extroversion and conscientiousness i.e. 0.325 significant at level 0.01) and has less degree of emotional stability (weak relationship between and extroversion and neuroticism i.e. -0.440 at significant level 0.01), will be less creative and imaginative (weak relationship between extroversion and openness i.e. -0.284 at significant level 0.01) and has high motivation (strong relationship between extroversion and motivational factors i.e. 0.410 at significant level 0.01) will possess more awareness about entrepreneurial ecosystem (weak relationship between extroversion and entrepreneurial ecosystem i.e. 0.234 at significant level at 0.05) will have more flexibility (more on entrepreneurial self-efficacy as extroversion shares moderate to strong relationship with entrepreneurial self efficacy i.e. 0.343 at significant level 0.01) and more entrepreneurial intensity i.e. more focus and commitment towards venture creation (extroversion shares a strong relationship with entrepreneurial intensity i.e. 0.501 at significant level 0.01). The above relationships further states that such person will tend to have more intention towards venture creation (extroversion shares a strong relationship with intention i.e. 0.591 at significant level 0.01). It further states that the sub constructs extroversion shares a convergent relationship with conscientiousness, neuroticism and openness and shares a discriminant relationship with subjective norms and entrepreneurial Potential.

## Table 4.10: Validity Analysis, Pearson's Correlation

| | EXT_T | AG_T | CON_T | NEU_T | OPN_T | SN_T | MOV_T | EECO_T | ESELF_T | OPTM_T | CF_T | EI_T | GR_T | RI_T | INT_T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EXT_T** | 1 | -.179 | **.325**$^{**}$ | **-.440**$^{**}$ | **.284**$^{**}$ | .196$^{*}$ | **.410**$^{**}$ | **.234**$^{*}$ | **.343**$^{**}$ | .142 | **.426**$^{**}$ | **.501**$^{**}$ | -.046 | .171 | **.591**$^{**}$ |
| **AG_T** | | 1 | -.150 | .107 | **.281**$^{**}$ | -.078 | -.189 | -.058 | .035 | -.039 | -.086 | **-.243**$^{*}$ | **-.216**$^{*}$ | .150 | **.264**$^{**}$ |
| **CON_T** | | | 1 | -.173 | -.086 | .044 | **.341**$^{**}$ | -.010 | .133 | .032 | .157 | .033 | .071 | .133 | .107 |
| **NEU_T** | | | | 1 | .008 | .004 | **.337**$^{**}$ | **.199**$^{*}$ | **.394**$^{**}$ | .103 | **.524**$^{**}$ | **.402**$^{**}$ | -.171 | .404 | **.306**$^{**}$ |
| **OPN_T** | | | | | 1 | .069 | -.021 | **-.249**$^{*}$ | **.202**$^{*}$ | .061 | .033 | .019 | **.236**$^{*}$ | .019 | **.194**$^{*}$ |
| **SN_T** | | | | | | 1 | .130 | **.256**$^{**}$ | -.101 | .186 | .079 | **.312**$^{**}$ | **.301**$^{**}$ | .282 | -.170 |
| **MOV_T** | | | | | | | 1 | .014 | .168 | -.079 | **.708**$^{**}$ | **.358**$^{**}$ | .021 | .107 | **.246**$^{*}$ |
| **EECO_T** | | | | | | | | 1 | .522$^{**}$ | .139 | .308$^{**}$ | .018 | .461$^{**}$ | .114 | .451$^{**}$ |
| **ESEL_T** | | | | | | | | | 1 | -.013 | .416$^{**}$ | .287$^{**}$ | .237* | .022 | .344$^{**}$ |
| **OPT_T** | | | | | | | | | | 1 | -.155 | .053 | .220* | .192 | -.025 |
| **CF_T** | | | | | | | | | | | | .570$^{**}$ | .216* | **.691**$^{**}$ | .457$^{**}$ |
| **EI_T** | | | | | | | | | | | | 1 | .090 | .040 | **.375**$^{**}$ |
| **GR_T** | | | | | | | | | | | | | 1 | .176 | **.430**$^{**}$ |
| **RI_T** | | | | | | | | | | | | | | 1 | **.530**$^{**}$ |
| **INT_T** | | | | | | | | | | | | | | | 1 |

#### 4.3.4.2 Agreeableness

An individual person who possess more sympathy tend to be creative and imaginative (as agreeableness shares a moderate relationship with openness i.e. 0.281 at significant level 0.01), will be less focused and committed towards venture creation (as agreeableness shares a weak relationship with entrepreneurial intensity i.e. -0.243 at significant level 0.05), less action oriented (as agreeableness shares a weak relationship with action control scale i.e. 0.216 at significant level 0.05) and hence, have less intention towards starting a venture (as agreeableness shares a weak relationship with intention i.e. 0.264 at significant level 0.01). Further it is observed that the sub constructs agreeableness shares a convergent relationship with openness and discriminate relationship with subjective norms, entrepreneurial ecosystem and entrepreneurial self-efficacy.

#### 4.3.4.3 Conscientiousness

An individual who has high sense of responsibility (high conscientiousness) tend to have more motivation (as conscientiousness shares a moderate relationship with motivational factors i.e. 0.341 at significant level 0.01), and hence, have no intention to start a venture. Further it is observed that conscientiousness shares a discriminant validity with perceived desirability, entrepreneurial potential and entrepreneurial self efficacy.

#### 4.3.4.4 Neuroticism

An individual who has scored high on neuroticism tends to have less motivation to start a venture (i.e. Neuroticism shares a weak relationship with motivational factors i.e. -0.337 at significant level 0.01), and has less awareness about entrepreneurial ecosystem (neuroticism shares a weak relationship with entrepreneurial ecosystem i.e. 0.199 at significant level 0.05) and has less belief in their capabilities (i.e. less entrepreneurial self-efficacy as neuroticism shares a moderate relationship with entrepreneurial self-efficacy i.e. -0.394 at significant level 0.01), high control over situations i.e. more flexible or possess high cognitive flexibility (as neuroticism shares a strong relationship with cognitive flexibility i.e. 0.524 at significant level 0.01), has less focus and commitment towards venture creation (as neuroticism shares a moderate relationship with

entrepreneurial intensity i.e. -0.402 at significant level 0.01) will have intention to start a venture (neuroticism shares a moderate relationship with intention i.e. 0.306 at significant level 0.01). Further it is observed that neuroticism shares a discriminant relationship with learned optimism.

#### 4.3.4.5 Openness

An individual who is creative and imaginative (i.e. more openness), has less awareness about entrepreneurial ecosystem (as openness shares a weak relationship with entrepreneurial ecosystem i.e. -0.249 at significant level 0.05), has self-belief in its capability (openness shares a low to moderate relationship with entrepreneurial self-efficacy i.e. 0.202 at significant level 0.05), has less action orientation i.e. less flexible over situations towards venture creation (openness shares a weak relationship with Action Control Scale), will have intention to create a venture (as openness shares a weak relationship with intention i.e. 0.94 at significant level 0.01). Further it is observed that openness shares a discriminant validity with entrepreneurial potential and motivational factors.

#### 4.3.4.6 Subjective Norms

An individual who is supported by family and friends, tend to have more awareness about the entrepreneurial ecosystem (as subjective norms share a moderate relationship with entrepreneurial ecosystem i.e. 0.256 at significant level 0.01), has less entrepreneurial intensity (as subjective norms shares a moderate relationship with entrepreneurial intensity i.e. -0.312 at significant level 0.01), has less flexibility towards situation i.e. less action oriented (as subjective norms share a moderate relationship with action control scale i.e. -0.301 at significant level 0.01) will lead to no intention for venture creation. Further it is observed that subjective norms share a discriminant validity with motivational factors and entrepreneurial self-efficacy.

#### 4.3.4.7 Motivational Factors

An individual with high motivation has high perceived feasibility, has high cognitive flexibility i.e. has high adaptability in thinking (as motivational factor shares a strong relationship with cognitive flexibility i.e. 0.708 at significant level 0.01), has high focus and commitment towards

venture creation (high entrepreneurial intensity) (as motivational factor shares a moderate to high relationship with entrepreneurial intensity i.e. 0.358 at significant level 0.01) will tend to have intention toward venture creation (motivational factors share a moderate relationship with intention i.e. 0.246 at significant level 0.05). Further it is observed that motivational factor shares a discriminant validity with personal characteristics.

#### 4.3.4.8 Entrepreneurial Ecosystem

An individual with high awareness about entrepreneurial ecosystem, has entrepreneurial self-efficacy (as entrepreneurial ecosystem shares a high / strong relationship with entrepreneurial self-efficacy i.e. 0.522 at significant level 0.01), has high adaptability in thinking or high cognitive flexibility (as entrepreneurial ecosystem shares a moderate to high relationship with cognitive flexibility i.e. 0.308 at significant level 0.01), has high action orientation (as entrepreneurial ecosystem shares a strong relationship with action control scale i.e. 0.461 at significant level 0.01) tend to have high intention towards venture creation (as entrepreneurial ecosystem shares a strong relationship with entrepreneurial intention i.e. 0.451 at significant level 0.01). Further it is observed that entrepreneurial ecosystem shares a discriminant validity with motivational factors and personal characteristics.

#### 4.3.4.9 Entrepreneurial Self Efficacy

An individual with high belief on his/her capability (high entrepreneurial self-efficacy) has flexibility in thinking (as entrepreneurial self-efficacy shares a moderate relationship with cognitive flexibility i.e. 0.287 at significant level 0.01), has action orientation (entrepreneurial self-efficacy shares a weak to moderate relationship with Action control scale i.e. 0.237 at significant level at 0.05) will lead to intention(as entrepreneurial self-efficacy shares a moderate relationship with intention i.e. 0.344 at significant level 0.01). Further it is observed that entrepreneurial self-efficacy shares a convergent validity with perceived feasibility while shares a discriminant validity with personal characteristics, learned optimism and entrepreneurial ecosystem.

#### 4.3.4.10 Learned Optimism

An individual with high optimism is more action oriented (as optimism shares a moderate to high relationship with action control scale i.e. 0.220 at significant level 0.01). Further it is observed that optimism shares a convergent relationship with action control scale and discriminant relationship with other constructs.

#### 4.3.4.11 Cognitive Flexibility

An individual who has high cognitive flexibility will have high entrepreneurial intensity (as cognitive flexibility shares a strong relationship with entrepreneurial intensity i.e. 0.570 at significant level 0.01), has action orientation (as cognitive flexibility shares a low to moderate relationship with entrepreneurial intensity i.e. 0.216 at significant level 0.05) will lead to high intention to start a venture (as cognitive flexibility shares a strong relationship with intention i.e. 0.457 at significant level 0.01). Further it is observed that the more is entrepreneurial potential the more is the intention. Cognitive flexibility shares a convergent validity with entrepreneurial intensity and action control scale and discriminant validity with other constructs.

#### 4.3.4.12 Entrepreneurial Intensity

An individual with high entrepreneurial intensity tends to have high entrepreneurial intention (as entrepreneurial intensity shares a moderate to strong relationship with intention i.e. 0.375 at significant level 0.01). Further it is observed that more entrepreneurial potential leads to more entrepreneurial intention.

#### 4.3.4.13 Grit

An individual with high perseverance and passion tend to have more intention to start a venture (as grit shares a strong relationship with intention i.e. 0.430 at significant level 0.01). Further it is observed that more entrepreneurial potential leads to more entrepreneurial intention.

#### 4.3.4.14 Role Identity

Role identify refers to how a person sees himself as an entrepreneur. If an individual perceives a positive role identity, s/he tend to have more intention to start a venture (as role identity shares a strong relationship with intention i.e. 0.530 at significant level 0.01). Further it is observed that more entrepreneurial potential leads to more entrepreneurial intention.

The above analysis justifies that the instrument used for collecting data is valid and can be used further for field study. The resulted values explain that variables are positively correlated and measure the same construct i.e. entrepreneurial potential. The discriminant relationship has been observed in case of perceived feasibility and intention, optimism, cognitive flexibility and perceived desirability which explains the fact that these variables are discriminant Hence, it explains that the instrument used for the study is valid. It also confirms that for any behaviour to happen among women entrepreneurs, the antecedents like personal characteristics, motivational factors, subjective norms, entrepreneurial ecosystem, entrepreneurial self-efficacy, perceived desirability, perceived feasibility and entrepreneurial potential plays a significant role. These findings are in line with the previous literature on how all these antecedents lead to entrepreneurial intentions through entrepreneurial potential. The outcomes of validity analysis are presented in Table 4.10. In this study, research study estimated the relationships proposed in the model using Pearson correlation test.

## 4.4 Findings from Hypothesis Testing

It has been observed that the hypothesis reported in Chapter 3 from H1 to H11 is found to be accepted. Pearson's correlation matrix explains the significant relationships among constructs. The independent variables i.e. personal characteristics, motivational factors, subjective norms, entrepreneurial ecosystem, entrepreneurial self-efficacy and mediators like entrepreneurial potential i.e. learned optimism, cognitive flexibility, entrepreneurial intensity, role identity and grit are found to have a significant relationship with the dependent variable i.e. entrepreneurial intention.

Further it is observed that the entrepreneurial potential plays a vital role for any entrepreneurial intention to happen among women entrepreneurs. Increase in perceived desirability

and perceived feasibility will lead to increase in entrepreneurial potential which in turn leads to entrepreneurial intention among women entrepreneurs. The results of hypothesis testing are found to be in line with theories from literature.

The mentioned hypothesis in Chapter 3 needs to be re tested for field study followed by confirmatory factor analysis through structural equation modeling which facilitates to understand the structural relationship and path analysis among various constructs of entrepreneurial intention among women entrepreneurs in Indian MSMEs.

## 4.5 Modifications Made in the Instrument

The pilot instrument consisted of six sections viz. Demographic profile of respondent, Perceived Feasibility, perceived desirability, entrepreneurial potential and open ended question on the issues and challenges faced by women entrepreneurs.

During the pilot testing phase, women entrepreneurs from MSMEs were asked to complete a self–administered questionnaire in English and were also requested to provide comments relating to the content, wordings and content of questions. Experts working in the area of women entrepreneurship were asked to review the questionnaire in terms of its content, wording and appropriateness of the questions. Based on the inputs received, few modifications have been made in the questionnaire. The first modification is in the wordings of few statements in order to make them easily comprehendible for the respondents. The second modification is to include descriptions on few terms/words like "autonomy", "feasible" and "desirability" in the questionnaire which provides clarity for the respondents understanding. The third modification is the elimination of few items from the original instruments viz. motivational factor and personality trait scales in order to make instrument short. These items are not relevant to the objectives of the present study.

## 4.6 Field Study Analysis

The final data analysis involves hypotheses testing by using descriptive statistics, condition indices, Pearson correlations, the variance inflation factor (VIF), Cronbach's alpha, goodness of fit, and path analysis with structural equation modeling (SEM). The Statistical Package for the

Social Sciences (SPSS) and Analysis of Moment Structures (AMOS) program have been used in the data analysis. The descriptive statistics calculated in this study include averages, frequency distributions, standard deviations, kurtosis and test for normality. A check for reliability and validity has been performed to reassure the adequacy of data. In addition, Pearson correlation coefficients between the research variables, as well as the variance inflation factor and the condition number of each variable, were calculated to help detect multicollinearity. Preliminary analysis of the field study includes understanding the sample characteristics of respondents. For this study, characteristics like age group, experience, type of business, state-wise clusters have been studied. Table 4.11 summarizes the statistical techniques used in this study.

**Table 4.11: Summary of Statistical Techniques Used for Final Data Analysis**

| Techniques | Objective of Use | Hypothesis |
|---|---|---|
| Descriptive Statistics (Mean, Median, Mode, Skewness and Kurtosis) | To explain and summarize the distributional aspect of data | NA |
| Cronbach's Alpha | To evaluate the reliability of main instrument. | NA |
| Pearson's Correlation | To evaluate the validity of main instrument | NA |
| VIF (Variance inflation factor) | To check multicollinearity | NA |
| Structural Equation Modeling (SEM) | To determine the relationship between the constructs | Presented in chapter 3. |
| Model Fit Indices (Goodness of Fit, Incremental and Parsimony indices | To determine whether the hypothesized and alternative model best fits the underlying theory. | Presented in Chapter 3. |

## 4.6.1 Response Rate of the Final Survey

For the field study, a self-administrated questionnaire has been distributed online and in-person mode to nearly 866 respondents from high, medium, low and very low cluster states. A total of 489 filled in questionnaires have been received, out of which 471 are filled completely by respondents. Details of responses received are provided in Table 4.12.

From the Table 4.12 it can be observed that the cluster wise response rate has been found highest in high cluster contributing to 68.84%. Out of 489 returned response, 18 have been found to be partially filled, have been found to be unusable, hence they are eliminated for the final data analysis. After eliminating partially filled responses, 471 have been kept for data analysis which constitute an overall response rate of 55.54%.

**Table 4.12: Response Rate of the Final Survey**

| Cluster | No. of Questionnaires Sent | Filled in Questionnaire Received | | Filled in Questionnaire Considered for Further Analysis | |
|---|---|---|---|---|---|
| | | Frequency | % | Frequency | % |
| High | 215 | 148 | 68.84 | 146 | 68.54 |
| Medium | 219 | 116 | 52.97 | 112 | 52.09 |
| Low | 214 | 136 | 63.55 | 132 | 62.86 |
| Very Low | 218 | 89 | 40.83 | 81 | 38.57 |
| **Total** | 866 | **489** | **56.47** | **471** | **55.54** |

## 4.6.2 Demographic Profile of the Respondents

This section describes the demographic characteristics of the overall sample of the 471 respondents whose responses have been used in the final data analysis. Demographic characteristics are presented in terms of age group, educational level and prior exposure to entrepreneurship (prior experience).

### 4.6.2.1 Age

From the Table 4.13 below it can be observed that the majority of respondents are from the age group of 31-40 years, contributing to 60.72%, followed by the above 40 years contributing to 28.02%, and age group below 30 are 11.25% of the total respondents.

**Table 4.13: Age of the Respondents**

| Age | Responses | |
|---|---|---|
| | Frequency | % |
| Below 30 | 53 | 11.25 |
| 31-40 | 286 | 60.72 |
| Above 40 | 132 | 28.03 |
| **Total** | **471** | **100** |

#### 4.6.2.2 Education

From Table 4.14 it can be observed that 72.82% of respondents are graduate, this is followed by high schooling and post-graduation qualification.

**Table 4.14: Educational Level of the Respondents**

| Education Level | Responses | |
|---|---|---|
| | Frequency | % |
| High School | 61 | 12.95 |
| Graduate/Bachelors | 343 | 72.82 |
| Post Graduate/Masters | 67 | 14.23 |
| **Total** | **471** | **100** |

#### 4.6.2.3 Prior Exposure to Entrepreneurship

From Table 4.15 it can be observed that 66.24% of the respondents did not have prior exposure to entrepreneurship. Among 85 (18.05%) respondents who had prior exposure to entrepreneurship 56.47% of them had a positive experience and the remaining had a negative experience as depicted in Table 4.16.

**Table 4.15: Respondents Prior Exposure to Entrepreneurship**

| Prior Exposure to Entrepreneurship | Responses | |
|---|---|---|
| | Frequency | % |
| Yes | 85 | 18.05 |
| No | 312 | 66.24 |
| Non-response | 74 | 15.71 |
| **Total** | **471** | **100** |

**Table 4.16: Respondents Nature of Experience on Prior Exposure to Entrepreneurship**

| Experience | Responses Frequency | % |
|---|---|---|
| Positive | 48 | 56.47 |
| Negative | 37 | 43.53 |
| **Total** | **85** | **100** |

#### 4.6.2.4 Type of Enterprise

From the below table it can be observed that 67.30% of respondents are from micro sector and the lowest responses are from medium scale sector with 4.88% responses.

**Table 4.17: Respondents by Type of Enterprise**

| Type of Enterprise | Responses Frequency | % |
|---|---|---|
| Micro | 317 | 67.30 |
| Small | 131 | 27.81 |
| Medium | 23 | 4.88 |
| **Total** | **471** | **100** |

#### 4.6.2.5 Nature of Enterprise

From the below table it can be observed that 64.12% of respondents are from manufacturing and the rest are from services.

**Table 4.18: Respondents by Nature of Enterprise**

| Nature of Enterprise | Responses Frequency | % |
|---|---|---|
| Manufacturing | 302 | 64.12 |
| Services | 169 | 35.88 |
| **Total** | **471** | **100** |

#### 4.6.2.6 Cluster and State-wise Distribution

Table 4.19 presents the information responses received as per cluster. From this table it can be observed that responses are received from 15 Indian States distributed across four clusters. Highest number of responses are received from Kerala (13.16%) and the lowest number of responses are from Rajasthan and Uttrakhand (2.12% respectively).

**Table 4.19: Cluster and State-wise Distribution of Respondents**

| Cluster | Type of Enterprise | Respondents | |
|---|---|---|---|
| | | Frequency | % |
| High | Karnataka | 61 | 12.95 |
| | Kerala | 62 | 13.16 |
| | Tamil Nadu | 23 | 4.88 |
| Medium | Andhra Pradesh | 28 | 5.94 |
| | Telangana | 57 | 12.10 |
| | Madhya Pradesh | 27 | 5.73 |
| Low | Rajasthan | 10 | 2.12 |
| | Maharashtra | 43 | 9.13 |
| | Punjab | 11 | 2.34 |
| | Uttar Pradesh | 58 | 12.31 |
| | Gujarat | 10 | 2.12 |
| Very Low | Chhattisgarh | 21 | 4.46 |
| | Haryana | 18 | 3.82 |
| | Uttrakhand | 10 | 2.12 |
| | Delhi | 32 | 6.79 |
| **Total** | | **471** | **100** |

#### 4.6.2.7 Action vs State Orientation (Moderator)

Action orientation is the capacity to regulate emotions, thoughts, and behaviors to fulfil the intentions that individuals form. State orientation refers to the inability to regulate these emotions, thoughts, and behaviors [122]. In this study, respondents have been divided into action and state orientation and further data analysis is done on the same.

**Table 4.20: Respondents by Orientation Type**

| Orientation Type | Responses | |
|---|---|---|
| | Frequency | % |
| Action | 453 | 96.18 |
| State | 18 | 3.82 |
| **Total** | **471** | **100** |

#### 4.6.2.8 Issues & Challenges

An open ended question has been asked to women regarding the issues and challenges faced by them. Present study has categorized the problems into 8 sub themes while analyzing the information given by the women. The same has been presented in Table 4.21.

**Table 4.21: Issues & Challenges faced by Women Entrepreneur**

| S. No | Types of Issues & Challenges | Nature of Issues & Challenges |
|---|---|---|
| 1. | Financial Problems | Limited Working Capital, Lack of Collateral Security, Delayed payments of bills to creditors, Negative attitude of banks towards women, Poor knowledge of financial management, Ignorance about banking procedures and formalities |
| 2. | Personal problem | Lack of leisure time, Lack of risk bearing capacity, Avoidance of Economic Risk, Lack of Self Confidence, Absence of need of achievement, Lack of initiative, Balancing work and Family |
| 3. | Social Problems | Dual role in home and business, Lack of Society's confidence on women's ability, male dominance, lack of social contacts, lack of appreciation in the family/society |
| 4. | Operation problems | Lack of continuous supply of raw materials, Variations in raw materials prices, Delay in procurement of raw materials, Poor Knowledge of Materials Management, Time consuming procedures of getting raw materials, Non availability of raw materials |
| 5. | Marketing problems | Cut throat competition, Delayed collection of bills, Inadequate advertising and publicity, Lack of sufficient stock of products, Poor Knowledge of Marketing Management, Lack of travelling capacity |
| 6. | HR Problems | Non availability of Skilled employees, Skilled employees leave their job after getting experience, Poor knowledge of business management , Lack of decision making skill, Lack of communication skill, Lack of motivation to employees |
| 7. | Technological Problems | Lack of Technological Skills, Inadequate technological support for machinery utilization |
| 8. | Ecosystem Problems | Corruption in Sanction of subsidy/incentive/loan, Non-cooperative attitude of govt. employees ,Poor knowledge of government support schemes |

## 4.6.3 Data analysis

Exploratory data analysis and Structural Equation Modeling is carried out for the filed data. The steps are detailed below: -

### 4.6.3.1 Screening, Data Cleaning and Check for Unengaged Responses

For the personality trait scale all reverse/negative coded items are recoded into positive direction (i.e., a score of 1 becomes 7, a score of 2 was recoded as 6, and so on).

The responses received are examined for data accuracy and missing values. Partially filled questionnaires are less than 10% of the total responses received and hence, these partially filled questionnaires are not considered for data analysis. This is in line with suggestions made by the experts and researchers that cut-off scores at 5% [134,138-140] can be excluded for further analysis. To check the attentiveness of the respondent while filling the questionnaire, a check question "I have never told a lie, if true mark strongly agree" was included in the questionnaire.

This was followed by computation of descriptive statistics to check the normality of the item distributions and further followed by reliability and validity tests.

### 4.6.3.2 Check for Outliers

In the final data analysis, a check for outliers has been carried out by observing the scatter plots and histogram for the output 'entrepreneurial intention'. As presented in figure 4.2 and 4.3 it can be observed that sample population follows the normal distribution (observed in Histogram) as regression line shows most of the data points follow the fitted line for the model (observed in Q-Q Plot). By looking at the values for skewness and kurtosis as presented in later part of this chapter, check for normality has also been performed by Shapiro-wilk test.

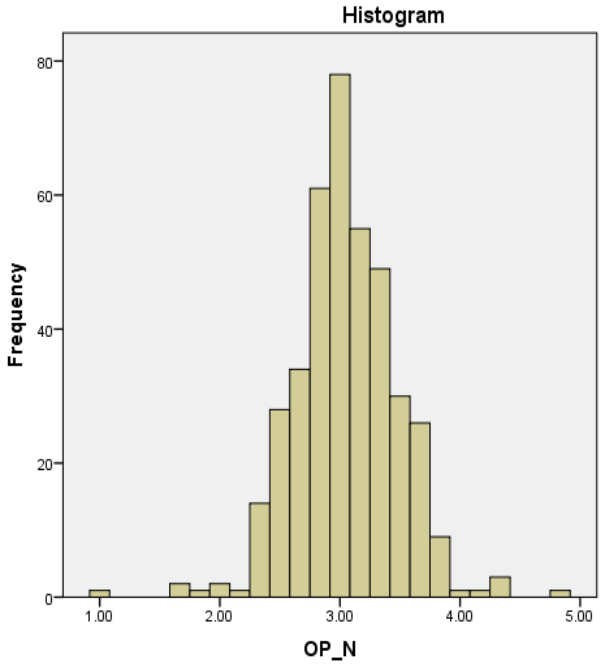



**Figure 4.2: Histogram for Output**

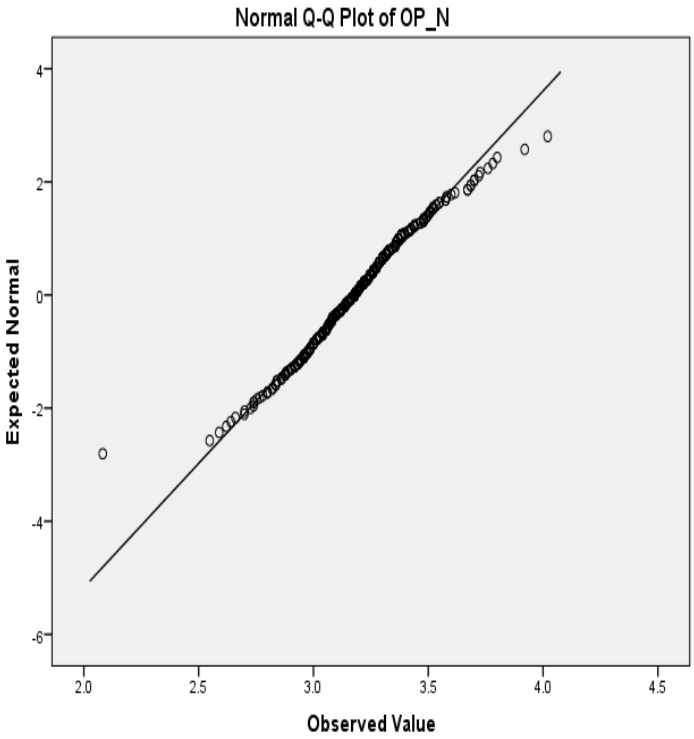



**Figure 4.3: QQ Plot for Output**

#### 4.6.3.3 Check for Multicollinearity and Homoscedasticity

A check for multicollinearity and homoscedasticity has been performed using VIF (Variance Inflation Factor), tolerance tests and scatterplots. It has been proposed by statisticians that VIF's surpassing ten or Tolerance scores below .10 imply extreme multicollinearity. This study involves understanding the constructs of entrepreneurial intention. No multicollinearity has been detected in data and hence the data meets the criteria of collinearity as presented in Table 4.22. The observed values for VIF ranges between 1.246 to 2.256 and for tolerance it ranges between .645 and .926.

**Table 4.22: Check for Multicollinearity**

| Coefficients[a] | | | |
|---|---|---|---|
| | **Model** | **Collinearity Statistics** | |
| | | **Tolerance** | **VIF** |
| 1 | PT_Total | .645 | 1.246 |
| | SN_Total | .714 | 1.621 |
| | EECO_Total | .671 | 1.446 |
| | ESE_Total | .811 | 2.109 |
| | MOV_total | .788 | 1.898 |
| | LO_total | .926 | 1.079 |
| | CF_total | .796 | 2.256 |
| | EI_total | .777 | 1.287 |
| | RI_total | .828 | 2.207 |
| | GR_total | .748 | 1.338 |
| a Dependent Variable: IN_total | | | |

Property of homoscedasticity has been measured through scatter plot presented in figure 17, it can be observed that variance around the output regression line is the same for all values of the independent variables.

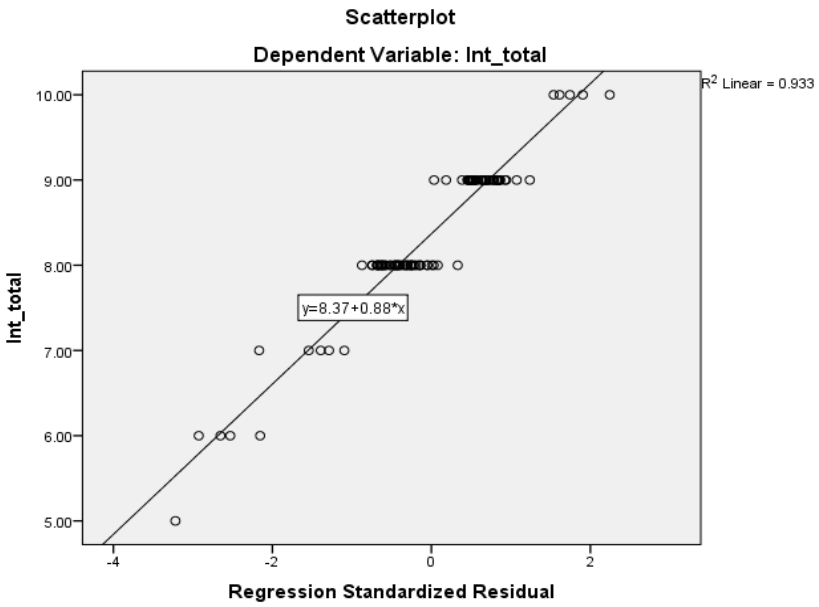



**Figure 4.4: Scatter Plot for Checking Homoscedasticity**

### 4.6.3.4 Descriptive Analysis and Shapiro-wilk Normality test

Descriptive analysis presented in Table 4.23 and 4.24 provides the distributional aspect of data i.e. central value, symmetry of data and variability within the data.

**Table 4.23: Descriptive Analysis**

| Constructs | Mean | Median | Standard Deviation | Skewness | Kurtosis |
|---|---|---|---|---|---|
| Personal Characteristics | 3.466 | 3.000 | 1.478 | -0.871 | -1.126 |
| Motivation | 3.881 | 3.886 | 1.449 | 0.420 | -0.028 |
| Subjective Norms | 3.245 | 3.000 | 1.596 | 0.463 | -1.347 |
| Entrepreneurial self-efficacy | 3.165 | 3.00 | 1.272 | 0.023 | -.515 |
| Entrepreneurial Ecosystem | 2.368 | 3.046 | 0.558 | -1.149 | -0.241 |
| Learned Optimism | 3.512 | 9.354 | 1.422 | -0.370 | -0.161 |
| Cognitive flexibility | 2.244 | 2.524 | 1.272 | -0.135 | -0.726 |
| Entrepreneurial Intensity | 3.254 | 3.715 | 1.977 | 0.246 | -0.820 |
| Role Identity | 3.502 | 3.818 | 1.661 | 0.092 | 1.472 |
| Grit | 3.487 | 3.00 | 0.885 | -1.061 | 0.611 |
| Entrepreneurial Intention | 1.876 | 1.326 | 1.224 | -0.050 | -1.014 |

**Table 4.24: Shapiro-wilk Test**

| Kolmogorov-Smirnovc | | | Shapiro-wilk | | |
|---|---|---|---|---|---|
| Statistic | df | Sig. | Statistic | Df | Sig. |
| .184 | 34 | .046 | .947 | 34 | .069 |

The central tendency values are ranging between 4.7184 to 84.242 for the mean, 5.000 to 83.000 for median. The values for measuring the spread are found to be in the range of 1.149 to 12.198. The values for dispersion are found to be in the range of -1.023 to 0.941 for skewness and 0.102 to 1.942 for kurtosis. The ranges obtained states that the data is symmetrical, normally distributed, bell shaped, centred and uni-modal. The normality of data has been tested using Shapiro-wilk test (Table 4.23). The resulted value was found to be 0.069 at df = 34 presented in Table 4.23, representing that data is normally distributed.

#### 4.6.3.5 Reliability Analysis

The employed indicators in the instrument have resulted in high reliability with the threshold level of Cronbach alpha greater than or equal to 0.60 on average.

As mentioned in Table 4.25 the composite reliability shows outputs that range from 0.597 to 0.871 which is nearly equivalent and larger than the threshold level 0.6. The employed indicators for all the mentioned constructs i.e. Personal Characteristics, Motivational Factors, Subjective Norms, Entrepreneurial Ecosystem, Entrepreneurial Self-efficacy, Entrepreneurial Potential and Entrepreneurial Intention are found to be reliable and hence justifying the adequacy of the sample.

**Table 4.25: Field study - Reliability Analysis (Cronbach's alpha)**

| Constructs | Item Scale Mean | Inter-Item Covariance | Inter-Item Correlation | Cronbach's Alpha |
|---|---|---|---|---|
| Personal Characteristics | 4.184 | 0.55 | 0.531 | 0.693 |
| Motivational Factors | 3.274 | 0.181 | 0.122 | 0.703 |
| Subjective Norms | 3.118 | 0.167 | 0.224 | 0.801 |
| Entrepreneurial Self Efficacy | 3.414 | 0.186 | 0.217 | 0.794 |
| Entrepreneurial Ecosystem | 2.446 | 0.192 | 0.156 | 0.708 |
| Learned Optimism | 2.767 | 0.114 | 0.178 | 0.597 |
| Cognitive Flexibility | 3.699 | 0.003 | 0.039 | 0.688 |
| Entrepreneurial Intensity | 3.08 | 0.118 | 0.271 | 0.752 |
| Grit | 3.663 | 0.165 | 0.051 | 0.633 |
| Role Identity | 2.874 | 0.432 | 0.173 | 0.871 |
| Entrepreneurial Intention | 4.184 | 0.55 | 0.131 | 0.694 |

#### 4.6.3.6 Validity Analysis

An attempt has been made to ensure content clarity by checking wordings, statements and placing of questions in the instrument though the opinions of experts in this field. To understand the association of variables, Pearson product correlation analysis has been carried out and the results are presented in Table 4.26. From this table it has been found that entrepreneurial intensity shows a convergent relationship with cognitive flexibility i.e. 0.394 at 0.01 significant levels. Similar relationships are observed for grit with learned optimism and cognitive flexibility i.e. 0.508, 0.651; role identity with entrepreneurial intensity and cognitive flexibility i.e. 0.202, 0.216 at significant level of 0.05 and 0.01. The discriminant relationship has been observed in case of perceived feasibility and intention, learned optimism, cognitive flexibility and perceived desirability which explains the fact that these variables are discriminant. Literature review suggests that successful entrepreneurs tend score low on neuroticism [119]. In this research study it has been found that women entrepreneurs have scored high in neuroticism. The study also suggests that women entrepreneurs with high perceived desirability i.e. high on openness, extroversion, conscientiousness, agreeableness, motivational factors, support from family members and high on perceived feasibility i.e. support from entrepreneurial ecosystem feel more capable on their skills and tend to develop more optimistic view, adaptability for unexpected situation, faith in themselves, perseverance and passion for long term goals, tend to have more entrepreneurial intention. Hence, it explains that the instrument used for the study is valid. The above findings are in line with the literature on how all these antecedents lead to entrepreneurial intentions through entrepreneurial potential [141-146].

**Table 4.26: Correlation Matrix**

**Correlation Matrix**

| | PT | MOV | SN | EECO | ESE | OPT | CF | EI | GR | RI | IN |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PT | 1 | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ |
| MOV | .150 | 1 | _ | _ | _ | _ | _ | _ | _ | _ | _ |
| SN | .133 | .181 | 1 | _ | _ | _ | _ | _ | _ | _ | _ |
| EECO | .404 | .015 | .083 | 1 | _ | _ | _ | _ | _ | _ | _ |
| ESE | .019 | .173 | .021 | .559` | 1 | _ | _ | _ | _ | _ | _ |
| LO | .282 | .007 | .645 | .009 | .084 | 1 | _ | _ | _ | _ | _ |
| CF | .107 | .281* | .189 | .431 | .004 | .019 | 1 | _ | _ | _ | _ |
| EI | .114 | .021 | .002 | .162 | .855 | .087 | .394** | 1 | _ | _ | _ |
| GR | .022 | .172 | .196* | .137 | .044 | .508* | .651** | .186 | 1 | _ | _ |
| RI | .155 | .053 | .002 | .190 | .412 | .451* | .117 | .216** | .202* | 1 | _ |
| IN | .691** | .570** | .430* | .321** | .297* | .053 | .155 | .286* | .199* | .211* | 1 |

** Correlation is significant at the 0.01 level (2-tailed),*Correlation is significant at the 0.05 level (2-tailed)

#### 4.6.3.7 Exploratory Factor Analysis

As presented in literature by Worthington and Whittaker, 2006 [147] "it is critical to set a minimum sample size before starting scale development research". The study observed that the participant per-item ratios suggested by researchers vary from 3:1, 6:1, 10:1, 15:1, and 20:1. Worthington and Whittaker found that the absolute sample sizes endorsed by researchers have ranged from 84 to 411. Based on the ratio principle cited in the literature, in this study more than 20 respondents are found against one item of each construct.

##### 4.6.3.7.1 Pre rotation item and Factor Analyses

Based on assumptions of principal of maximum likelihood and oblique rotations (promax) initial reliability and inter correlations are arrived at. check for item instrument on internally consistency has been done through Cronbach alpha (α) coefficient. Correlation analysis; an analysis of the inter-item correlations among constructs is computed using Pearson's correlation. Items with consistently low (< .20) or high (> .80) inter-item correlations are deleted [123].

##### 4.6.3.7.2 KMO and Bartlett Tests

To verify assumptions prior to rotation, the researcher has computed the Bartlett's Test. A significant result (Sig. < 0.05) indicates matrix is not an identity matrix; i.e. the variables do relate to one another and the correlation matrix is factorable, to run exploratory factor analysis; Mvududu & Sink, 2013 [150]. While running the data set it has been observed that value for KMO is 0.810 indicating the adequacy of sample. As per statisticians, value of KMO should range between .60 and .90 [148]. The Bartlett's Test value is found to be 6368.600 explaining the certain redundancy between the various constructs that needs to be summarized with less number of factors. The result obtained from the analysis is presented in Table 4.27.

**Table 4.27: KMO and Bartlett's Test**

| | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .810 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 6368.600 |
| | Df | 946 |
| | Sig. | .000 |

#### 4.6.3.7.3 Extraction Methods

Based on principal of maximum likelihood extraction method, confirmatory factor analysis has been used to estimate parameters for the hypothesized model. The items have been examined for high and low factor loadings. The minimum acceptable factor loading has been set at .5 and above as suggested [148,149].

#### 4.6.3.7.4 Factor Rotation

To determine the number of factors to rotate, the criteria used are, the amount of the explained variance for each derived factor (over 10%), factor eigenvalues greater than 1, Kaiser, 1960 [150], and result of the screen test is presented in figure 4.5 and Table 4.28.

Exploratory factor analysis revealed that 63.910 % of total variance has been explained by eleven constructs namely personality traits, motivational factors, subjective norms, entrepreneurial ecosystem, entrepreneurial self-efficacy, grit, role identity, cognitive flexibility, entrepreneurial intensity, learned optimism and entrepreneurial intention. These are the antecedents for measuring entrepreneurial intention among women entrepreneurs.

Kaiser criterion [150] states that the identified factors with Eigen values greater than 1 on scree plot need to be extracted for confirmatory factor analysis. In this study, 10 factors have eigen values of greater than 1 which include personal characteristics, subjective norms, motivational factors, entrepreneurial self-efficacy, entrepreneurial ecosystem, learned optimism, cognitive flexibility, role identity and grit. Cattell's scree test criteria [133] states that to identify factors one needs to bend the elbow and the factors which are above elbow in the scree plot graph are the ones which need to be extracted. The study also meets the requirements as stated under Cattell's scree test criteria.

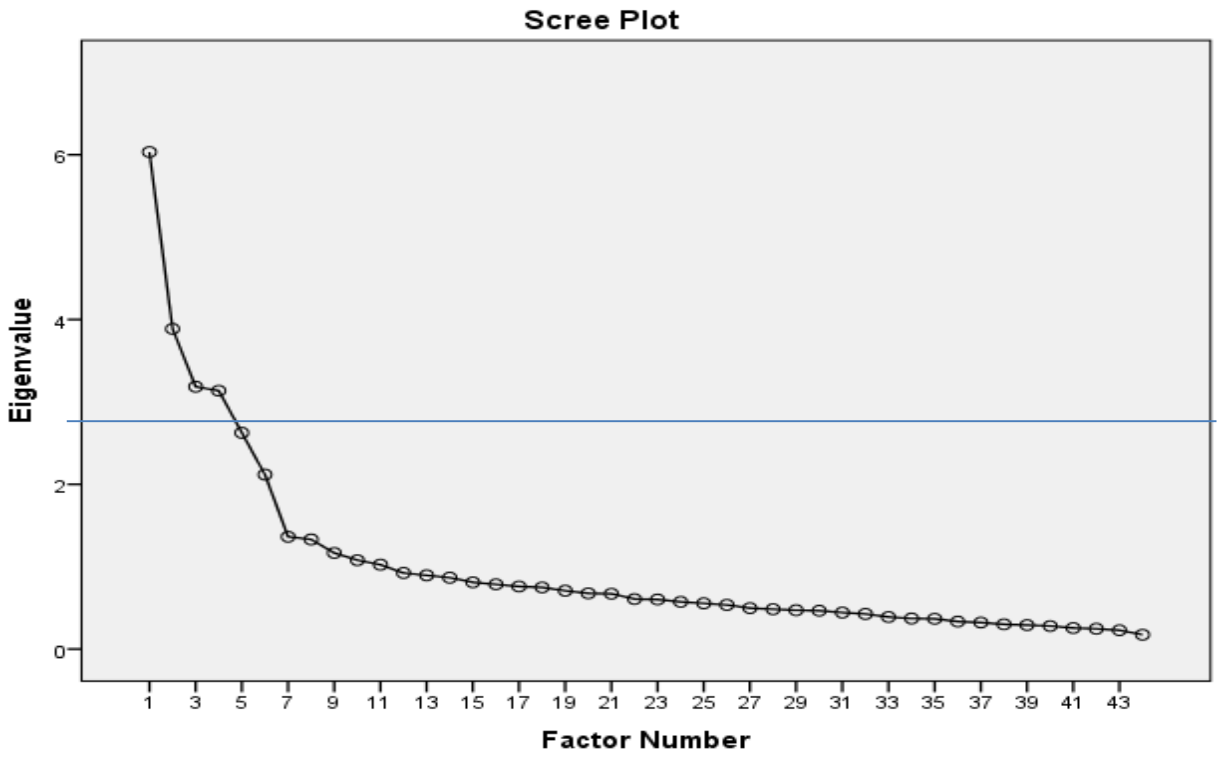



**Figure 4.5: Scree Plot**

#### 4.6.7.3.5 Communalities and Pattern Matrix

Post-rotation initial factors have been extracted from the matrix, common or shared variance of each variable has been partitioned from its unique variance and error variance to identify the underlying factor structure [148] and to determine the simple structure. The communalities and explained variance for each item have been examined. Items with loadings more than 0.4 are retained for variables. Items that have cross loadings (i.e., items that load substantially on two or more factors) have been deleted if the loadings were weak (< .40). Analysis without these items have been carried out to establish a simple structure by redunding the large number of items contributing to constructs of entrepreneurial intention. Before EFA, the original instrument was a 91-item scale (Refer Appendix B), explaining the various constructs of Entrepreneurial Intention. The values are presented through pattern matrix in Table 4.28.

**Table 4.28: Total Variance explained by EFA**

| Total Variance Explained | | | | | | |
|---|---|---|---|---|---|---|
| Factor | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | |
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 19.070 | 19.070 | 14.171 | 9.070 | 14.171 | 14.171 |
| 2 | 11.982 | 31.052 | 21.956 | 4.982 | 9.784 | 23.955 |
| 3 | 9.214 | 40.266 | 28.666 | 4.294 | 9.710 | 33.665 |
| 4 | 9.146 | 49.412 | 34.582 | 3.786 | 8.916 | 42.581 |
| 5 | 9.131 | 58.543 | 39.560 | 3.186 | 7.978 | 50.559 |
| 6 | 4.746 | 63.289 | 43.914 | 2.786 | 4.354 | 54.913 |
| 7 | 3.204 | 66.496 | 46.844 | 1.876 | 2.931 | 57.884 |
| 8 | 2.116 | 68.612 | 49.369 | 1.616 | 2.525 | 60.369 |
| 9 | 1.179 | 69.791 | 51.680 | 1.479 | 1.312 | 61.681 |
| 10 | 1.157 | 70.948 | 53.801 | 1.357 | 1.120 | 62.801 |
| 11 | 1.124 | 72.072 | 56.321 | 1.224 | 1.109 | 63.910 |
| Extraction Method: Maximum Likelihood. | | | | | | |

## 4.7 Factor Loadings for Constructs

Factor loadings, cross-loadings, and communalities have been re-examined for each solution to identify and delete problematic items. In the iterative factoring process by Promax rotation, 46 items have been deleted due to communalities falling below .40 and cross-loadings. A ten factor solution with 48 items is presented construct wise in further tables in the chapter. The 10 factor wise summarization of items after promax rotation with maximum likelihood extraction technique is explained below: -

### 4.7.1 Personal Characteristics

Factor 1 has been labelled as Personal Characteristics (PT: ten items; accounting for 14.71% of the total variance). The items on this scale consist of 10-item Big five inventory (BFI) adapted from Rammstedt [106]. It includes Neuroticism, Extroversion, Conscientiousness and Agreeableness.

The scale reflects the personality trait of the respondent and this study highlights respondents with high level of neuroticism, agreeableness, conscientiousness and extroversion who will have more desirability towards entrepreneurial intention. A five items solution has been found after computing EFA with the loadings in between .668 and .773 as presented in Table 4.29 below

**Table 4.29: Personal Characteristics Loadings in EFA**

| **Items (Personality Traits)**<br>**I see myself as someone who** | **Factor Loadings** |
|---|---|
| Is reserved | .668 |
| Does a thorough job | .689 |
| Tends to fight faults with others | .716 |
| Has an active imagination | .729 |
| Is relaxed, handles stress well | .773 |

### 4.7.2 Subjective Norms

Factor 2 has been labelled as Subjective Norms (SN: three items; accounting for 23.955% of the total variance). The instrument consists of 3-item scale adopted from Kolvereid, 1996 [69] and uses five point Likert scale, 1 being strongly disagree to 5 being strongly agree. The instrument reflects the role of significant people influencing an individual's decision to choose entrepreneurship as a career option. An individual who is motivated by fellow people tends to be more attracted towards entrepreneurship [70]. A two items solution has been found after computing EFA with the loadings in between .564 and .790 as presented in Table 4.30.

**Table 4.30: Subjective Norms Loadings in EFA**

| **Items (Subjective Norms)**<br>**Indicate how much you agree or disagree with each of the following statements** | **Factor Loadings** |
|---|---|
| My family supported my decision | .564 |
| My friends supported my decision | .790 |

### 4.7.3 Motivation

Factor 3 has been labelled as Motivational factors (MO: ten items; accounting for 33.665% of the total variance). This scale consists of 17 items scale adapted from various studies [152-155]. The scale also includes necessity and opportunity driven factors which act as a desirable source towards formation of entrepreneurial intention among women entrepreneurs. A seven items solution has been found after computing EFA with the loadings in between .541 and .825. It is presented in Table 4.31 given below

**Table 4.31: Motivation Loadings in EFA**

| Items (Motivation)<br>I started this enterprise, because | Factor Loadings |
|---|---|
| Salary in my previous employment was not enough to meet my needs | .541 |
| To create/provide employment opportunities | .607 |
| To gain greater recognition in the society | .709 |
| To make more money | .760 |
| To continue my family tradition of being in business | .779 |
| To be my own boss | .787 |
| I was inspired by the success of entrepreneurs/other role models | .825 |

## 4.7.4 Entrepreneurial Ecosystem

Factor 4 has been labelled as support from entrepreneurial ecosystem (EE: nine items; accounting for 42.581% of the total variance). The individuals who have support from entrepreneurial ecosystem are highly motivated and found to have more intention towards entrepreneurship Edward J. Malecki, 2017 [89]. In order to understand the role of government policies and programmes on the entrepreneurial intention, a scale was adapted from GEM study, Sunil Shukla et al [91], GEM Report, 2016-17. This scale consists of 9 items. A four items solution has been found after computing EFA with the loadings in between .564 and .790. It is presented in Table 4.32. given below.

**Table 4.32: Entrepreneurial Ecosystem Loadings in EFA**

| Items (Entrepreneurial Ecosystem)<br>Indicate how much you agree or disagree with each of the following statements | Factor Loadings |
|---|---|
| Governmental policies favors the new firms. | .564 |
| The support for new and growing firms is a high priority for policy at the state & central government level | .616 |
| New firms can get most of the required permits and licenses in about a week. | .750 |
| There are an adequate number of government programmes for new and growing businesses | .790 |

### 4.7.5 Entrepreneurial Self-efficacy

Factor 5 has been labelled as entrepreneurial self-efficacy (ES: nine items accounting for 50.559% of the total variance). Individuals who are high on Entrepreneurial Self-efficacy tend to be more confident in performing any activity and thus possess high intentions towards entrepreneurship. Moberg 10 item entrepreneurial self-efficacy scale (ESE) has been used [110]. A six items have been found after computing EFA with the loadings in between .579 and .748 presented in Table 4.33 as below: -

**Table 4.33: Entrepreneurial Self-efficacy Loadings in EFA**

| Items (Entrepreneurial Self-efficacy)<br>How much confidence do you have in your ability to....? | Factor Loadings |
|---|---|
| Come up with new ideas | .579 |
| Manage time in projects | .581 |
| Persist in the face of setbacks | .624 |
| Estimate a budget for a new project | .683 |
| Tolerate unexpected change | .706 |
| Identify opportunities for new ways to conduct activities | .748 |

### 4.7.6 Learned Optimism

Factor 6 has been labelled as support from entrepreneurial optimism (O1-O6: six items accounting for 54.913% of the total variance). A 9 item Life Orientation Test-Revised (LOT–R) and Seligmen scale has been used for measuring Optimism [156]. Individual who is optimistic tend to be more attracted to choose entrepreneurship as a career option [156]. A four items solution has been found after computing EFA with the loadings in between .515 and .887. It is presented in Table 4.34 as below

**Table 4.34: Learned Optimism Loadings in EFA**

| Items (Learned Optimism)<br>Please vividly imagine yourself in the following situations. If the situation happened to your own business, how do you feel most likely in that situation? Indicate how much you agree or disagree with each of the following statements | Factor Loadings |
|---|---|
| A. After years of growth, sales of your business have decreased significantly and the sales decline caused by something about you or by something about other people or circumstances. Answer the following? | |
| In uncertain times like this, I usually expect the best | .515 |
| Even if the sales decline in future, I will be always optimistic about my future. | .705 |
| B. Your company's internal cash flow is much worse than expected and the cash flow shortfall caused by something about you or by something about other people or circumstances. Answer the following? | |
| Even if there is a cash shortfall, I will be always optimistic about my future. | .845 |
| Overall, I expect more good things to happen to me than bad | .887 |

## 4.7.7 Cognitive Flexibility

Factor 7 has been labelled as Cognitive flexibility (CF: twelve items accounting for 57.884% of the total variance). A 12 item scale developed by Martin and Rubin, 1995 [112] has been used in this study. Individual who is high on cognitive flexibility tends to have high Entrepreneurial Potential and hence tends to have intention towards entrepreneurship. A seven items solution has been found after computing EFA with the loadings in between .515 and .887 presented in Table 4.35.

**Table 4.35: Cognitive Flexibility Loadings in EFA**

| Items (Cognitive flexibility)<br>Indicate how much you agree or disagree with each of the following statements | Factor Loadings |
|---|---|
| I can communicate an idea in many ways. | .439 |
| I can find workable solutions to seemingly unsolvable problems. | .550 |
| I seldom have choices when deciding how to behave. | .599 |
| I have difficulty using my knowledge on a given topic in real life situations. | .617 |
| I am willing to listen and consider alternative for handling a problem. | .619 |
| I have difficulty using my knowledge on a given topic in real life situations. | .631 |
| In any given situation, I am able to act appropriately | .674 |

### 4.7.8 Entrepreneurial Intensity

Factor 8 has been labelled as Entrepreneurial intensity (EI: twelve items accounting for 60.369% of the total variance). Individuals who are high on Entrepreneurial Intensity tend to have high Entrepreneurial Potential and hence have intention towards entrepreneurship. A 4-item scale has been adopted from Panel study of entrepreneurial dynamics [114]. It has been stated that individual who are high on cognitive flexibility tend to have high Entrepreneurial Potential and hence tend to have intention towards entrepreneurship. A four items solution has been found after computing EFA with the loadings in between .661 and .815 presented in Table 4.36.

**Table 4.36: Entrepreneurial Intensity Loadings in EFA**

| Items (Entrepreneurial Intensity)<br>Indicate how much you agree or disagree with each of the following statements | Factor Loadings |
|---|---|
| I prefer to have my own business than earning a higher salary | .661 |
| My personal philosophy is to do "whatever it takes" to establish my own business. | .756 |
| I am willing to put maximum effort to establish my business. | .805 |
| Spending time with my family is more important than establishing the enterprise | .815 |

### 4.7.9 Grit

Factor 9 has been labelled as Grit (GR: twelve items accounting for 61.681% of the total variance). A 10-item Duckworth GRIT scale has been used to measure Grit [117]. The individuals who are high on Entrepreneurial Intensity tend to have high Entrepreneurial Potential and hence tend to have intention towards entrepreneurship. A five items solution has been found after computing EFA with the loadings in between .465 and .790 presented in Table 4.37.

**Table 4.37: Grit Loadings in EFA**

| Items (Grit)<br>Please indicate the answer that best represents you | Factor Loadings |
|---|---|
| New ideas and projects sometimes distract me from previous ones | .465 |
| Setbacks don't discourage me, I don't give up easily | .564 |
| I often set a goal but later choose to pursue a different one. | .575 |
| I have achieved a goal that took years of work. | .722 |
| I have been obsessed with certain idea or project for a short time but later lost interest | .790 |

## 4.7.10 Role Identity

Factor 10 has been labelled as Role identity (RI: two items accounting for 62.801% of the total variance) adopted from the scale developed by Krueger, 2017 [116]. Individuals who are high on role identity tend to have high Entrepreneurial Potential and hence tend to have greater intention towards entrepreneurship. A two item solution has been found after computing EFA with the loadings as .441 and .554 presented in Table 4.38 given below.

**Table 4.38: Role Identity Loadings in EFA**

| Items (Role Identity)<br>Indicate how much you agree or disagree with each of the following statements | Factor Loadings |
|---|---|
| I am exactly the kind of person who would be a successful entrepreneur. | .441 |
| I believe I am capable of becoming an successful entrepreneur | .554 |

## 4.7.11 Entrepreneurial Intention

Factor 11 has been labelled as the dependent factor i.e. Entrepreneurial intention ("IN"), three items accounting for 63.910 % of the total variance adopted from the scale developed by Krueger, 2017 [116]. A 5 -item scale has been adopted from Liñán and Chen, 2009 [121]. A two items solution has been found after computing EFA with the loadings as .614 and .732 presented in Table 4.39 given below: -

**Table 4.39: Entrepreneurial intention Loadings in EFA**

| Items (Entrepreneurial Intention) Indicate how much you agree or disagree with each of the following statements | Factor Loadings |
|---|---|
| I prefer to be an entrepreneur rather than to be an employee in a company / an organization | .614 |
| I will make every effort to start and run my own firm | .732 |

# 4.8 Pattern Matrix Obtained through EFA

A consolidated pattern matrix along with the factor loadings has been presented in Table 4.40 stating the extent to which an item correlates with all other items. As presented total of 11 factors have been found with Extraction method used as Maximum likelihood and rotation as Promax. Strong factor loadings have been observed in entrepreneurial intensity (Factor 8). It explains a strong correlation between the items, this is followed by optimism (Factor 6), Entrepreneurial self-efficacy (Factor 5), Motivation (Factor 3), Personality Traits (Factor 1), Subjective norms (Factor 2), Entrepreneurial ecosystem (Factor 4), Grit (Factor 9), Role identity (Factor 10) and Entrepreneurial Intention (Factor 11).

## 4.8.1 Discriminant, Convergent and Face Validity

To understand the correlation between various factors, a validity check has been performed. Through exploratory factor analysis the existence of convergent validity is observed, as presented in pattern matrix, the factor loadings between the various constructs shows a value >.3 for 471 responses analysed on constructs of perceived desirability and feasibility, explaining that the variables within a single factor are highly correlated.

The discriminant validity has been observed through obtained cross loadings for the constructs of perceived desirability, feasibility and entrepreneurial potential. It has been found that the items of constructs of desirability, feasibility and entrepreneurial potential are loaded significantly only on one factor**.**

The face validity has been understood through pattern matrix as all the items of various constructs of entrepreneurial intention are loaded by individual factors. The total of 11 factors have been obtained during EFA for this study.

**Table 4.40: Pattern Matrix**

Pattern Matrix[a]

| | Factor | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| M6 | | | .825 | | | | | | | | |
| M9 | | | .787 | | | | | | | | |
| M1 | | | .779 | | | | | | | | |
| M8 | | | .737 | | | | | | | | |
| M3 | | | .709 | | | | | | | | |
| M10 | | | .607 | | | | | | | | |
| SN1 | | .564 | | | | | | | | | |
| M5 | | | .541 | | | | | | | | |
| CF7 | | | | | | | .674 | | | | |
| CF5 | | | | | | | .631 | | | | |
| CF2 | | | | | | | .619 | | | | |
| CF9 | | | | | | | .617 | | | | |
| CF1 | | | | | | | .599 | | | | |
| CF6 | | | | | | | .439 | | | | |
| CF7 | | | | | | | .550 | | | | |
| ES5 | | | | | .748 | | | | | | |
| ES11 | | | | | .706 | | | | | | |
| ES6 | | | | | .683 | | | | | | |
| ES7 | | | | | .624 | | | | | | |
| ES10 | | | | | .581 | | | | | | |
| ES2 | | | | | .579 | | | | | | |
| O2 | | | | | | .887 | | | | | |
| O3 | | | | | | .805 | | | | | |
| O5 | | | | | | .663 | | | | | |
| O6 | | | | | | .515 | | | | | |
| EE1 | | | | .790 | | | | | | | |
| EE6 | | | | .750 | | | | | | | |
| EE3 | | | | .564 | | | | | | | |
| EE5 | | | | .616 | | | | | | | |
| PT4 | .716 | | | | | | | | | | |
| PT3 | .689 | | | | | | | | | | |
| PT5 | .668 | | | | | | | | | | |
| GR6 | | | | | | | | | .575 | | |
| GR7 | | | | | | | | | .722 | | |
| GR5 | | | | | | | | | .790 | | |
| SN2 | | .750 | | | | | | | | | |
| GR1 | | | | | | | | | .564 | | |
| GR7 | | | | | | | | | .465 | | |
| EI1 | | | | | | | | .815 | | | |
| EI4 | | | | | | | | .805 | | | |
| EI3 | | | | | | | | .756 | | | |
| EI2 | | | | | | | | .661 | .514 | | |
| R3 | | | | | | | | | .441 | | |
| R1 | | | | | | | | | | .679 | |
| I1 | | | | | | | | | | | .614 |
| PT1 | .673 | | | | | | | | | | |
| I2 | | | | | | | | | | | .732 |

Extraction Method: Maximum Likelihood.
Rotation Method: Promax with Kaiser Normalization.
a. Rotation converged in 6 iterations.

## 4.9 Structural Equation Modeling (SEM) Analysis

The steps explained below are followed to understand the structural relationship between the constructs.

### 4.9.1 Measurement Model and Model Fit Indices

To study the interrelationships in the hypothesized models, SEM analysis has been carried out on a dataset of 471 filled in questionnaire. SEM enables complex analysis through a series of regression equations and clearly represents the causal relationships using path diagrams; Hair, 2010 [157]. The fit index consists of several statistics, including chi-square, the non-centrality parameter (NCP), the goodness-of-fit index (GFI), the standardized root mean square residual (RMSR), and the root mean square error of approximation (RMSEA). The overall fit of the measurement model in this study has been assessed by three types of measures: absolute goodness-of-fit measures, incremental fit measures, and parsimonious fit measures. The summary of these measures are presented in Table 4.41.

The proposed model tests the relationship between perceived desirability, perceived feasibility, entrepreneurial potential and entrepreneurial intention presented by “H”. The proposed model shows acceptable fit to the data with values as $\chi 2/df = 3.132$; RMSEA = 0.021; SRMR = 0.031; CFI = 0.837; AGFI = 0.909, PCFI = 0.243 within the standard ranges.

**Table 4.41: Model Fit Indices**

| Model Fit Indices | Measures | Definition | Standard Values | Values Obtained |
|---|---|---|---|---|
| Absolute Fit Indices Absolute Fit Indices | Chi sqr Value | Explains and assess the magnitude of discrepancy between sample and fitted variance | Shows insignificant result at p value <0.05(Badness of Fit) | Not a good fit for large sample. |
| | Wheaton's Test (Chi sqr/df) | Explains the minimum impact of sample size | Recommended range 2-5 | Within the standard ranges |
| | Root Mean Square Approximation (RMSEA) | Explains how well the model, with unknown but optimally chosen parameter estimates would fit the population covariance matrix | 0.05-0.10 (fair fit) .06-.07 (Moderately fit) <.05- Poor fit | Fair Fit |
| | GFI (Goodness of fit) and AGFI (Adjusted Goodness of Fit) | Explains how closely the model come from replicating the observed covariance matrix.(GFI) while AGFI looks for the effect of addition of more parameters in model | GFI- >.95 AGFI- >.80 | Within the standard ranges |
| | Root Mean Square Residuals (RMSEA) and SRMR | Explains the difference between the residuals of sample covariance matrix and hypothesized covariance model. | RMR SRMR- <.09 | Within the standard ranges |
| Incremental Fit Indices (Comparative and Relative fit indices) | NFI (Normative fit indices) | Asses the models by comparing chi square value to chi square of null model. | NFI- >=.90 (Good fit) | Within the standard ranges |
| | CFI (Comparative fit indices) | Compares Sample covariance matrix with null model. | CFI- >=.95 | Within the standard ranges |
| Parsimony Indices | PGFI (Parsimony goodness of fit) And PNFI(Parsimony Normative Fit) PCLOSE (p of close fit) | Estimation process depends on the ample data. Results in a less rigorous theoretical model that paradoxically produces a better fit indices | PCLOSE->.05 | Within the standard ranges |

**Table 4.42: Measurement Model (SEM Analysis)**

| Model Fit | | Absolute Measures | | | Incremental Fit Measure | | Parsimony Fit Measures | | RMSEA |
|---|---|---|---|---|---|---|---|---|---|
| $\chi 2$ | $\chi 2$/df | RMR | GFI | AGFI | CFI | TLI | PCFI | PRation | |
| 50.111 | 3.132 | 0.021 | 0.978 | .909 | 0.837 | 0.439 | 0.243 | 0.948 | 0.0573 |

## 4.9.2 Alternative Models

The results obtained from alternative models are presented in Table 4.43. Alternative model 1 tests the relationship between the constructs of entrepreneurial potential model viz. entrepreneurial potential with entrepreneurial intention for hypothesis H1 to H1d as presented in Chapter 3.The model showed acceptable fit to the data with values as $\chi 2$/df =2. 412; RMSEA = 0.029; SRMR = 0.061; NNFI = 0.673; CFI = 0.884; AGFI = 0.821.

Alternative model 2 tests the hypothesis H2 to H6d as presented in Chapter 3 has been used to test the relationship between personal characteristics and entrepreneurial potential, motivation and entrepreneurial potential, subjective norms and entrepreneurial potential, entrepreneurial self-efficacy and entrepreneurial potential and entrepreneurial ecosystem.

This model has also showed acceptable fit to the data with values as $\chi 2$/df = 4.914; RMSEA = 0.065; SRMR = 0.081; NNFI = 0.852; CFI = 0.847; AGFI = 0.832[158].

Alternative Model 3 tests the hypothesis H7 to H11d as presented in Chapter 3 has been used to test the relationship between personal characteristics and entrepreneurial potential (learned optimism, entrepreneurial intensity, cognitive flexibility, role identity and grit) resulting in entrepreneurial intention. Model 3 showed acceptable fit to the data with values as $\chi 2$/ df = 3.651; RMSEA = 0.047; SRMR = 0.067; NNFI = 0.753; CFI = 0.796; AGFI = 0.784 [158].

Alternative Model 4 tests the hypothesis H12 to H13d as presented in Chapter 3 to test the moderation effect of prior exposure to entrepreneurship, Orientation state on entrepreneurial potential (learned optimism, entrepreneurial intensity, cognitive flexibility, role identity and grit) resulting in entrepreneurial intention. Model 4 showed acceptable fit to the data with values as $\chi 2$/ df = 4.117; RMSEA = 0.033; SRMR = 0.052; NNFI = 0.674; CFI = 0.812; AGFI = 0.779[158].

**Table 4.43: Goodness of Fit Measures Indexes (SEM Analysis)**

| HYPOTHESIZED MODEL | $\chi 2$/df | RMSEA | SRMR | NNFI | CFI | AGFI |
|---|---|---|---|---|---|---|
| Alt. Model 1 | 2.412 | 0.029 | 0.061 | 0.673 | 0.884 | 0.821 |
| Alt. Model 2 | 4.914 | 0.081 | 0.081 | 0.852 | 0.847 | 0.832 |
| Alt. Model 3 | 3.651 | 0.047 | 0.067 | 0.753 | 0.796 | 0.784 |
| Alt. Model 4 | 4.117 | 0.033 | 0.052 | 0.674 | 0.812 | 0.779 |

### 4.9.3 Structural Model: Hypothesis Testing

As presented in the proposed model in Chapter 2, it has been found that entrepreneurial intention is influenced by personal characteristics, motivation, subjective norms, entrepreneurial self-efficacy, entrepreneurial ecosystem, learned optimism, cognitive flexibility, action vs. state orientation, role identity, entrepreneurial intensity and grit. To test the hypothesized model presented, this study adopts simpler model of sequential procedure to understand the entrepreneurial intention.

The hypotheses developed in this study have been tested by utilizing structural equations modeling (SEM). The effect of exogenous constructs i.e. independent variables: personal characteristics, motivation, subjective norms, entrepreneurial ecosystem, entrepreneurial self-efficacy, learned optimism, cognitive flexibility, entrepreneurial intensity, role identity and grit on endogenous construct; entrepreneurial intention as well as relationships among exogenous constructs, can be tested in SEM simultaneously. In the present study, the ten exogenous variables are the components of entrepreneurial intention. The various hypotheses explaining the significant relation between constructs of entrepreneurial intentions has been presented in Chapter 3. The overall research hypothesis, labeled H, encompasses each of the other hypotheses; that is, all the other hypotheses are subsumed under H.

#### 4.9.3.1 Overall Hypothesis H (Proposed Model)

Causal relationships are found among the entrepreneurial intention constructs, including personal characteristics, motivation, subjective norms, entrepreneurial ecosystem, entrepreneurial self-efficacy, optimism, cognitive flexibility, entrepreneurial intensity, role identity and grit. The hypothesized framework has been presented in Chapter 3.

#### 4.9.3.2 Alternative Model 1: Hypothesis Testing

The hypothesis from **H1-H1d** presented below explains the causal relationship between entrepreneurial potential i.e. optimism, cognitive flexibility, entrepreneurial intensity, role identity and grit on endogenous construct with entrepreneurial intention. It has been hypothesized that all the sub constructs of entrepreneurial potential, individually will positively affect each of the entrepreneurial intention. The hypothesized positive effect of entrepreneurial potential on entrepreneurial intention is based on the entrepreneurial potential model by Krueger & Dr Brazeal, 1994 [56].

There are no studies that examine these relationships in the context of Women entrepreneurs in Indian MSMEs. The results of the present study partially support the hypothesized relationships in case of women entrepreneurs in India. The finding of a positive effect of entrepreneurial potential on entrepreneurial intention implies that women entrepreneurs in Indian MSMEs are driven to develop an entrepreneurial intention when they possess entrepreneurial potential. Women entrepreneurs with high optimism, cognitive flexibility, entrepreneurial intensity, role identity and grit tend to possess more entrepreneurial intention to start an enterprise.

The study also observes that women with optimistic view, firm determination and commitment, perseverance and passion, faith on becoming a successful entrepreneur tend to shape more entrepreneurial intention. The correlation values state the presence of positive significant relationship between the constructs of entrepreneurial potential and entrepreneurial intention with values ranging between .224 to .474 at significant level 0.05 and 0.01 explaining the low to moderate relationship among the constructs. The relationships are presented in figure below. In addition, the results states that in order to have more entrepreneurial intention it is important for women to possess entrepreneurial potential.

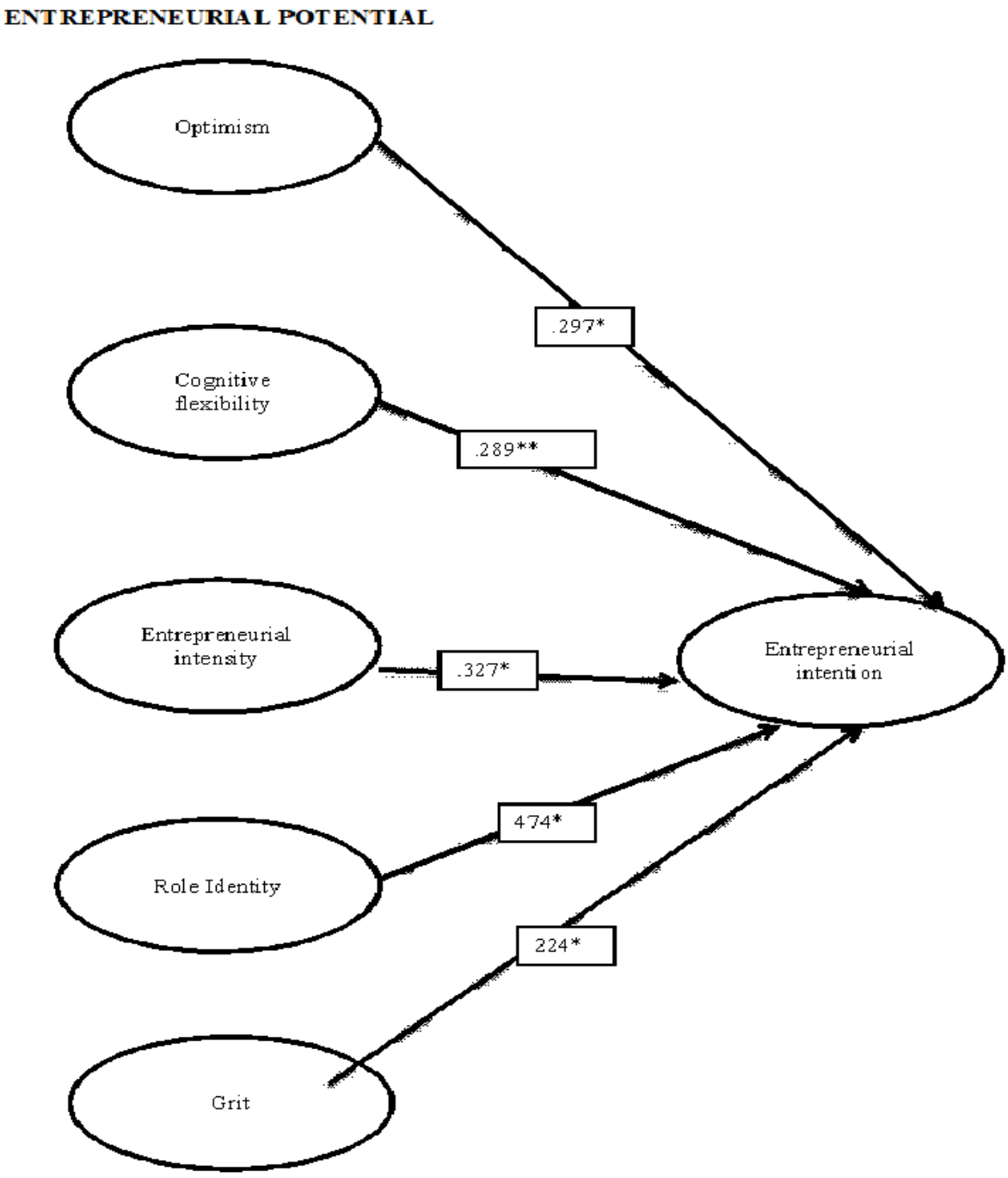



**Figure 4.6: Alternative Model 1**

*Note*. The numbers in the figure are the coefficients of entrepreneurial potential (shown on the left) that were estimated by regression. Hypothesis supported is presented by **. $p < .01$, two-tailed., *. $p < .05$, two-tailed.

**Table 4.44: Hypothesis Formation (Alt Model 1)**

| | Hypothesis | Significance | Acceptance/Rejection |
|---|---|---|---|
| **H1** | There is a significant relationship between Learned optimism and entrepreneurial intention | .297,p<.05 | Accepted |
| **H1a** | There is a significant relationship between entrepreneurial intensity and entrepreneurial intention | .327,p<.05 | Accepted |
| **H1b** | There is a significant relationship between cognitive flexibility and entrepreneurial intention | .289,p<.01 | Accepted |
| **H1c** | There is a significant relationship between role identity and entrepreneurial intention | .474,p<.05 | Accepted |
| **H1d** | There is a significant relationship between Grit and entrepreneurial intention | .224,p<.05 | Accepted |

#### 4.9.3.3 Alternative Model 2

This model tests the hypotheses H2 to H6d, testing the relationship between personal characteristics and entrepreneurial potential, motivation and entrepreneurial potential, subjective norms and entrepreneurial potential, entrepreneurial self-efficacy and entrepreneurial potential and entrepreneurial ecosystem.

It has been hypothesized that all the sub constructs of perceived desirability and perceived feasibility, individually will positively affect each sub construct of the entrepreneurial potential. The hypothesized positive effect of perceived desirability and perceived feasibility on entrepreneurial potential towards entrepreneurial intention is based on entrepreneurial potential model by Krueger & Dr Brazeal, 1994 [56] and extended social cognitive career theory.

The finding of a positive effect of perceived desirability and perceived feasibility on entrepreneurial intention implies that women entrepreneurs in Indian MSMEs are increasingly driven to develop an entrepreneurial intention only when the perceived desirability and feasibility together leads to entrepreneurial potential. Women entrepreneurs with high perceived desirability i.e. high on neuroticism, openness, extroversion, conscientiousness, agreeableness, motivational

factors, support from family members and high on perceived feasibility i.e. support from entrepreneurial ecosystem and feeling more capable on their skills tend to develop more optimistic view, adaptability for unexpected situation, faith in themselves for becoming successful entrepreneur and perseverance and passion for long term goals, leads to shaping of entrepreneurial intention. Through analysis it has been observed that, entrepreneurial potential plays an important role on shaping the entrepreneurial intention. It is also observed that women with high motivation, self-efficacy, supported by either necessity or opportunity driven factors, availing support from family and entrepreneurial eco system are more attracted towards choosing entrepreneurship as a career.

The correlation values state the presence of positive significant relationship between the constructs of perceived desirability and perceived feasibility and entrepreneurial potential. It has been found that personal characteristics share a low to medium relationship with entrepreneurial potential with values ranging from 0.221 to 0.712 at significant level 0.05 and 0.01. Motivation shares a moderate to strong relationship with entrepreneurial potential with values ranging from 0.241 to 0.661 at significant level 0.05 and 0.01. The relationships are presented in figure below. In addition, the results state that in order to have more entrepreneurial intention it is important for women to possess more willingness to act along with desirability and feasibility. The hypothesis acceptance and rejection has been presented in Table 4.45 below: -

**Table 4.45: Hypothesis Formation - Alternate Model 2**

| | Hypothesis | Significance | Acceptance/Rejection |
|---|---|---|---|
| **H2** | There is a significant relationship between Personal characteristics and Learned optimism. | .221,p<.01 | Accepted |
| **H2a** | There is a significant relationship between Personal characteristics and entrepreneurial intensity. | .331,p<.05 | Accepted |
| **H2b** | There is a significant relationship between personal characteristics and cognitive flexibility. | .583,p<.05 | Accepted |
| **H2c** | There is a significant relationship between Personal characteristics and role identity. | .474,p<.05 | Accepted |
| **H2d** | There is a significant relationship between personal characteristics and Grit. | .224,p<.05 | Accepted |

**Table 4.45: Hypothesis Formation - Alternate Model 2 (Contd.)**

| | Hypothesis | Significance | Acceptance/Rejection |
|---|---|---|---|
| **H3** | There is a significant relationship between motivation and learned optimism. | .297,p<.05 | Accepted |
| **H3a** | There is a significant relationship between motivation and entrepreneurial intensity. | .327,p<.05 | Accepted |
| **H3b** | There is a significant relationship between motivation and cognitive flexibility. | .289,p<.01 | Accepted |
| **H3c** | There is a significant relationship between motivation and role identity. | .474,p<.05 | Accepted |
| **H3d** | There is a significant relationship between motivation and grit. | .224,p<.05 | Accepted |
| **H4** | There is a significant relationship between Subjective norms and Learned optimism. | .645,p<.05 | Accepted |
| **H4a** | There is a significant relationship between subjective norms and entrepreneurial intensity. | .289,p<.01 | Accepted |
| **H4b** | There is a significant relationship between subjective norms and cognitive flexibility. | .244,p<.05 | Accepted |
| **H4c** | There is a significant relationship between subjective norms and role identity. | .281,p<.05 | Accepted |
| **H4d** | There is a significant relationship between subjective norms and Grit. | .287,p<.05 | Accepted |
| **H5** | There is a significant relationship between entrepreneurial ecosystem (support from government) and learned optimism. | .317,p<.05 | Accepted |
| **H5a** | There is a significant relationship between entrepreneurial ecosystem (support from government) and entrepreneurial intensity. | .431,p<.01 | Accepted |
| **H5b** | There is a significant relationship between entrepreneurial ecosystem (support from government) and cognitive flexibility. | .562,p<.05 | Accepted |
| **H5c** | There is a significant relationship between entrepreneurial ecosystem(support from government) and role identity. | .281,p<.05 | Accepted |
| **H5d** | There is a significant relationship between entrepreneurial ecosystem(support from government) and grit. | .290,p<.01 | Accepted |

**Table 4.45: Hypothesis Formation - Alternate Model 2 (Contd.)**

| | Hypothesis | Significance | Acceptance/Rejection |
|---|---|---|---|
| **H6** | There is a significant relationship between entrepreneurial self-efficacy and Learned optimism. | .547,p<.01 | Accepted |
| **H6a** | There is a significant relationship between entrepreneurial self-efficacy and cognitive flexibility. | .312,p<.05 | Accepted |
| **H6b** | There is a significant relationship between entrepreneurial intensity and entrepreneurial intention. | .413,p<.05 | Accepted |
| **H6c** | There is a significant relationship between entrepreneurial self-efficacy and role identity. | .273,p<.01 | Accepted |
| **H6d** | There is a significant relationship between entrepreneurial self-efficacy and Grit. | .452,p<.01 | Accepted |

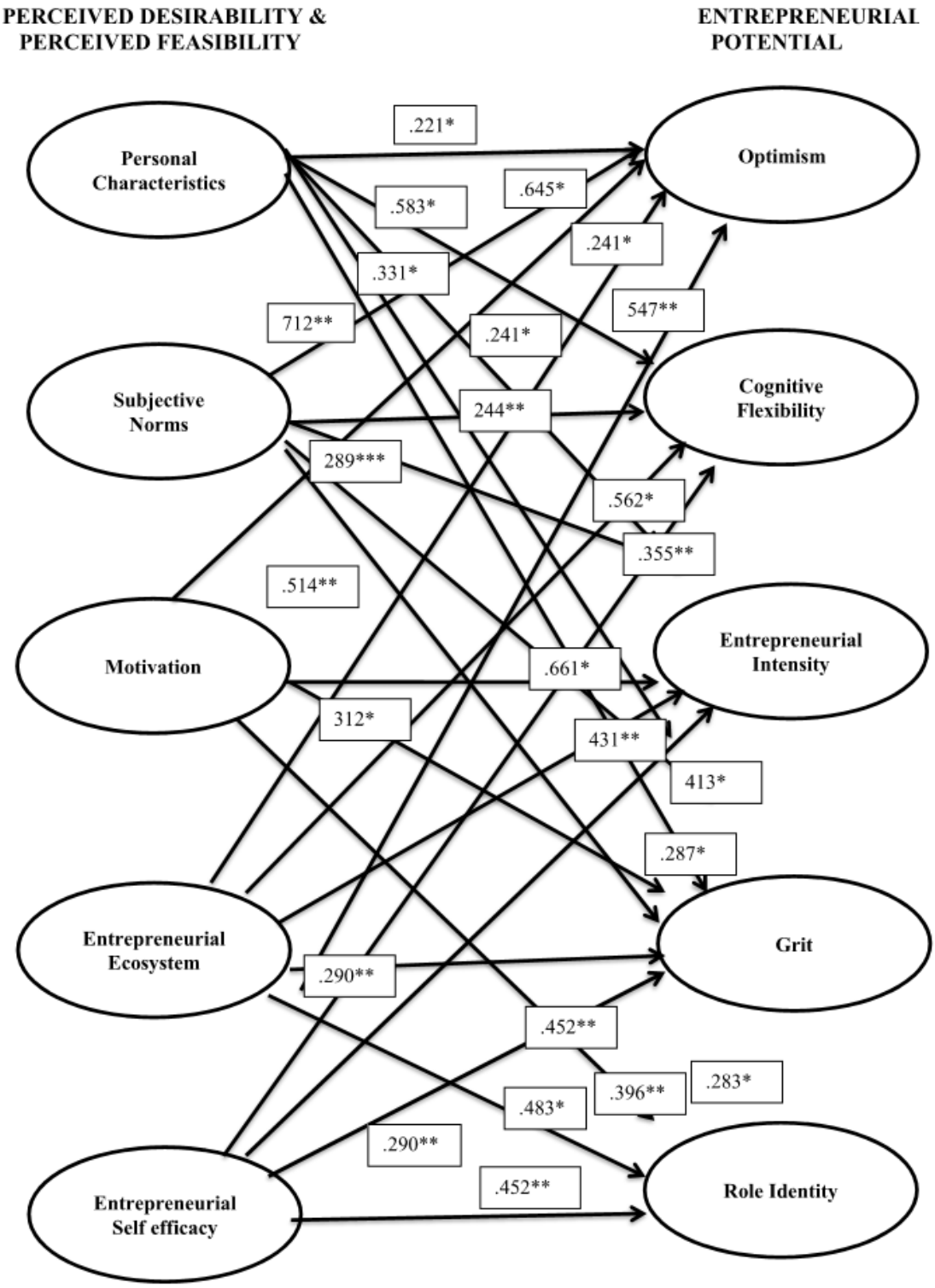



**Figure 4.7: Alternative Model 2**

*Note.* The numbers in the figure are the coefficients of perceived desirability and feasibility (shown in left) and entrepreneurial potential (shown on the right) that is estimated by regression. Hypothesis supported are presented by **p < .01, two-tailed., *. p < .05, two-tailed.

#### 4.9.3.4 Alternative Model 3 (Test for Mediation)

Alternative Model 3 tests the hypothesis H7 to H11d and has been used to test the relationship between personal characteristics, motivation, subjective norms, entrepreneurial ecosystem, entrepreneurial self-efficacy with entrepreneurial potential (learned optimism, entrepreneurial intensity, cognitive flexibility, role identity and grit) towards entrepreneurial intention.

It has been hypothesized that all the entrepreneurial potential mediates the positive effect between perceived desirability and perceived feasibility towards entrepreneurial intention. The hypothesized positive effect of perceived desirability and perceived feasibility on entrepreneurial potential towards entrepreneurial intention is based on entrepreneurial potential model by Krueger & Dr. Brazeal, 1994 [56] and extended social cognitive career theory [118]. The hypothesized model has been presented in figure 2 earlier in this chapter.

The findings of a positive effect of perceived desirability and perceived feasibility on entrepreneurial potential towards entrepreneurial intention implies that women entrepreneurs in Indian MSMEs are increasingly driven to develop an entrepreneurial intention only when the entrepreneurial potential mediates between perceived desirability and feasibility. Women entrepreneurs with more perceived desirability and perceived feasibility tend to develop more optimistic view, adaptability for unexpected situation, faith in themselves for becoming successful entrepreneur and perseverance and passion for long term goals, which in turn leads to shaping of entrepreneurial intention. Through analysis, it has been observed that it is the potential that mediates between perceived desirability and feasibility and plays a major role in shaping the entrepreneurial intention among women entrepreneurs.

The analysis also states that women with more intrinsic and extrinsic motivation through necessity and opportunity driven factors, availing support from ecosystem tend to feel more desirable and feasible which in turn leads to more entrepreneurial potential towards choosing entrepreneurship as a career.

The correlation values state the presence of positive significant relationship between the constructs of perceived desirability and perceived feasibility on entrepreneurial potential towards entrepreneurial intention. It has been found that personal characteristics share a low to medium relationship with entrepreneurial potential with values ranging from 0.221 to 0.712 at significant level 0.05 and 0.01. Motivation shares a moderate to strong relationship with entrepreneurial

potential with values ranging from 0.241 to 0.661 at significant level 0.05 and 0.01. The relationships are presented in figure below. In addition, the results also state that in order to have more entrepreneurial intention it is important for women to possess more willingness to act along with desirability and feasibility.

#### 4.9.3.5 Test for Mediation Using Bootstrapping

To understand the antecedents of entrepreneurial intention and to describe the chain of causation in order, an analysis using mediation effect of perceived desirability and feasibility on entrepreneurial potential towards entrepreneurial intention among women entrepreneurs has been carried out.

To understand the effect of mediators on entrepreneurial intention, we need a sampling distribution to estimate standard errors, and create the confidence intervals. In this study bootstrapping on default of 5000 samples has been computed in order to get more accuracy for computing confidence intervals for mediation effect when the mediation effect is non zero.

As presented in Table 4.46, mediation effect has been checked using bootstrapping. Correlation values at significant level 0.01 and 0.05 have been observed. Several non-significant relationships have been observed for significant values >.05 and .01. As presented in Table 4.46, cognitive flexibility doesn't have any significant effect by personality trait on entrepreneurial intention i.e. .331 on .061. The analysis further states that not necessarily women with high neuroticism, extroversion, Conscientiousness and openness must have an effect on her adaptability in unexpected situation for an intention to happen. Another non-significant relationship has been observed in mediation effect of role identity by motivation on entrepreneurial intention i.e. .378 on .072. It states that not necessary a women having a motivation will be affected by her ability to believe in becoming a successful entrepreneur for any intention to happen. It has been observed women with an optimistic view will be affected by the support from her family members in order to have an intention i.e. vice a versa it states that women having a support from her family and friends might have a strong intention to pursue entrepreneurship.

**Table 4.46: Mediation Relationships (Alternate Model 3)**

| Relationship/ Hypothesis(H7-H11d) | Direct with Mediator | Effects | Accept/Reject |
|---|---|---|---|
| PT =>LO=> IN | .268(.01) | Significant, mediation | Accepted |
| PT =>CF=> IN | .331(.061) | Not significant, no mediation | Accepted |
| PT=> EI=> IN | .221(.05) | Significant, mediation | Accepted |
| PT=> RI=> IN | .368(.05) | Significant, mediation | Accepted |
| PT=> GR=> IN | .271(.01) | Significant, mediation | Accepted |
| MOV=> LO=> IN | .451(.05) | Significant, mediation | Accepted |
| MOV =>CF=> IN | .214(.01) | Significant, mediation | Accepted |
| MOV=> EI=> IN | .421(.01) | Significant, mediation | Accepted |
| MOV=> RI=> IN | .378(.072) | Not significant, no mediation | Reject |
| MOV=> GR=> IN | .448(.05) | Significant, mediation | Accepted |
| SN =>LO=> IN | .268(.06) | Not Significant, no mediation | Reject |
| SN =>CF=> IN | .417(.05) | significant, mediation | Accepted |
| SN =>EI=> IN | .534(.05) | Significant, mediation | Accepted |
| SN =>RI=> IN | .374(.01) | Significant, mediation | Accepted |
| SN=> GR =>IN | .213(.081) | Not Significant, no mediation | Accepted |
| EECO=> LO=> IN | .467(.05) | Significant, mediation | Accepted |
| EECO =>CF=> IN | .234(.086) | Not Significant, no mediation | Reject |
| EECO=>EI=> IN | .521(.01) | Significant, mediation | Accepted |
| EECO=> RI=> IN | .478(.05) | significant, mediation | Accepted |
| EECO=>GR=> IN | .548(.05) | Significant, mediation | Accepted |
| ESE=> LO=> IN | .567(.05) | Significant, mediation | Accepted |
| ESE=> CF=> IN | .434(.05) | Significant, mediation | Accepted |
| ESE=> EI=> IN | .621(.01) | Significant, mediation | Accepted |
| ESE=> RI=> IN | .378(.05) | significant, mediation | Accepted |
| ESE=> GR=> IN | .268(.05) | Significant, mediation | Accepted |

The non-significant value obtained is .268 on .06 explaining no mediation effect by optimism by subjective norms on entrepreneurial intention. Cognitive flexibility again shares no

mediation effect by support from entrepreneurial ecosystem on entrepreneurial intention at .234 on non-significant level at .086 stating that it is not necessary for a woman to have an adaptability towards unexpected situation for intention to happen along with the support from entrepreneurial ecosystem. Support from entrepreneurial ecosystem is enough for her to feel that she is capable of becoming a successful entrepreneur. Grit has also shown no mediation effect by subjective norms on entrepreneurial intention with a value of .231 on .081 stating that it is not necessary that a women getting a support from society will have more perseverance and passion towards long term goal in order for intention to take place. It might be possible that support from society is enough for women to have an intention.

The presented table (Mediation Table) shows significant relationship among multiple constructs via causation effect with significant values ranging between .214 to .534 due to mediation effect on entrepreneurial potential by perceived desirability and feasibility on entrepreneurial intention. Constructs like Role identity, Grit, Cognitive flexibility, Entrepreneurial intensity and Optimism has shown a mediation effect with most of the constructs of perceived desirability and perceived feasibility on entrepreneurial intention. This further explains that women having desirability and feasibility need to have a willingness to act for any entrepreneurial intention to happen. Together with her ability to believe in her capability and her desire and willingness, a woman will be more motivated to pursue entrepreneurship as a career. Similar results have been observed during field data analysis as most of the women entrepreneur represented more willingness to act which have led them to shape their entrepreneurial intention. Alternative model 3 has explained all these relationships and has shown most of the hypotheses are accepted.

#### 4.9.3.6 Test For Moderators & Alternative Model 4

Alternative model 4 tests the hypothesis H12-H12d, H13-H13d for the moderation effect of Orientation state and prior exposure to entrepreneurship on entrepreneurial potential towards entrepreneurial intention. Prior exposure of entrepreneurship has been treated as moderator with effect as positive or negative given a value of 1 and 0 while Orientation state has assigned a value of 1 and 0 explaining the orientation state of women entrepreneur as Action and State. The hypothesis further states that the relationship between the constructs of entrepreneurial potential

i.e. optimism, cognitive flexibility, role identity, grit and entrepreneurial intensity is moderated by the effect of prior exposure to entrepreneurship and orientation state on entrepreneurial intention.

As presented in Table 4.47, Moderator 1 i.e. presence or absence of prior exposure to entrepreneurship explains that the relationship between entrepreneurial potential and intention does depend on the presence or absence of past experience as an entrepreneur, be it positive or negative. The obtained values from analysis explain that willingness to act exist only when the individual has positive exposure to entrepreneurship in past. Several significant relationships have been observed while checking the moderation effect at significant level 0.05 and 0.01. Constructs like cognitive flexibility, optimism, role identity, entrepreneurial intensity and grit shows the existence of positive significant relationship in case of women with prior and positive exposure to entrepreneurship with entrepreneurial intention with values ranging between .274 and .443 at significant level .01 and .05. This further states that willingness to act towards starting an enterprise is more in case of women having prior and positive experience in entrepreneurship. This study explains this fact, as majority of women entrepreneurs are having positive and prior exposure to entrepreneurship which played an important role for shaping their entrepreneurial intention even in the times of unexpected situations. While on the other hand by looking into the results obtained with the individuals having no prior exposure to entrepreneurship leads to lesser willingness to act towards starting an enterprise. Optimism, role identity and grit shares an existence of negative yet significant relationship with entrepreneurial intention with values ranging between .218 to .484 at significant level .01 and .05 explaining that absence of prior exposure to entrepreneurship leads to weak entrepreneurial intention.

Women willingness to act will be negatively affected when there is an absence of prior exposure to entrepreneurship. Constructs like cognitive flexibility, grit and entrepreneurial intensity shows a positive significant relationship at significant level .01 and .05 stating that prior exposure to entrepreneurship moderates the relationship between entrepreneurial potential and intention.

As presented in Table 4.48, Moderator 2 i.e. Action and state orientation explains the existence of relationship between the constructs of entrepreneurial potential and intention. The obtained values from analysis explain that willingness to act exist when the individual has the ability or inability to regulate their emotions and thoughts. Several significant relationship have

been observed while checking the moderation effect with values ranging .237 to.521 at significant level 0.05 and 0.01. Constructs like cognitive flexibility, optimism, role identity, entrepreneurial intensity and grit shows the existence of positive significant relationship in case of women with action oriented state with entrepreneurial intention with values ranging between .237 and .518 at significant level .01 and .05. This further states that willingness to act towards starting an enterprise will be more in case of women having the ability to regulate their emotions and thoughts. This study explains this fact as majority of women entrepreneurs are action oriented. It also states that the presence or absence of action or state orientation plays an important role for shaping the entrepreneurial intention among women entrepreneurs. While on the other hand by looking into the results obtained with the individuals having state orientation leads to lesser willingness to act towards starting an enterprise. Optimism, role identity, cognitive flexibility and grit shares a existence of negative yet significant relationship with entrepreneurial intention with values ranging between .2 12 to .518 at significant level .01 and .05 explaining that state orientation leads to weak entrepreneurial intention.

Woman willingness to act will be negatively affected when she doesn't have the ability to regulate her thoughts and emotions. Entrepreneurial intensity shows a positive significant relationship at significant level .01 and .05 stating that Orientation state moderates the relationship between entrepreneurial potential and intention. The computed results are presented in table below.

**Table 4.47: Moderator Effect 1 - Prior Exposure to Entrepreneurship (Alt Model 3)**

| MOD1(PEE) (YES)(H12-H12d) | C.R Values | Significance | PEE(NO) C.R Values | Significance |
|---|---|---|---|---|
| LO=>PEE=> IN | .317(.01) | Sig | -.287(.05) | Sig |
| CF =>PEE=> IN | .447(.05) | Sig | .312(.01) | Sig |
| EI=> PEE =>IN | .434(.05) | Sig | .218(.05) | Sig |
| RI =>PEE=> IN | .274(.01) | Sig | -.277(.05) | Sig |
| GR =>PEE=> IN | .443(.05) | Sig | -.484(.05) | Sig |

**Table 4.48: Moderator Effect 2 (Orientation)**

| MOD1(ON) (Action) (H13-H13d) | C.R Values | Significance | ON(State) C.R Values | Significance |
|---|---|---|---|---|
| LO =>ON=> IN | .237(.01) | Sig | -.518(.05) | Sig |
| CF=> ON=>IN | .477(.05) | Sig | -.212(.01) | Sig |
| EI=>ON =>IN | .521(.05) | Sig | .418(.05) | Sig |
| RI =>ON=> IN | .443(.01) | Sig | -.377(.05) | Sig |
| GR=>ON=> IN | .411(.05) | Sig | -.384(.05) | Sig |

All the hypotheses from H12 to H13d are accepted explaining the moderation effect of prior exposure of entrepreneurship and orientation state in between entrepreneurial potential and intention.

## 4.9.4 Overall Model Fit (SEM Analysis)

The overall model is summarized in three parts, the descriptive measures through mean and standard deviation, Correlation values checked by "p" significance level at 0.01 and 0.05 computed through SEM analysis and, an overall fit model explaining correlations among various constructs of entrepreneurial intention.

### 4.9.4.1 Descriptive Measures

Descriptive measure for hypothesized model in SEM analysis is understood through mean and standard deviation values. The obtained value of means for constructs of Personal characteristics, Subjective norms, Motivation, Entrepreneurial ecosystem, Optimism, Cognitive flexibility, Role identity, Entrepreneurial intensity, Grit and Intention are ranging between 5.81 and 8.69, explains that the summary statistic obtained represents the central values in a distribution fall. In order to understand the dispersion of data sets from various constructs of entrepreneurial intention, standard deviation values are computed. Through analysis, it has been observed that the values of standard deviation for Personal characteristics, Subjective norms, Motivation, Entrepreneurial ecosystem, Optimism, Cognitive flexibility, Role identity, Entrepreneurial intensity, Grit and Intention are ranging between .55 to 2.56 indicating that the data points are spread out over a wider range of values present at the mean.

**Table 4.49: Descriptive (Mean and Standard Deviation) Obtained Through SEM**

| Constructs | Means | Standard deviation |
|---|---|---|
| **PT** | 8.69 | 0.55 |
| **SN** | 6.20 | 1.14 |
| **MOV** | 5.81 | 0.66 |
| **EECO** | 7.16 | 2.56 |
| **ESE** | 8.46 | 0.63 |
| **LO** | 6.68 | 2.54 |
| **CF** | 7.32 | 2.30 |
| **EIN** | 8.24 | 1.87 |
| **RI** | 5.25 | 0.71 |
| **GR** | 7.36 | 0.88 |
| **IN** | 8.66 | 0.61 |

### 4.9.4.2 Correlations

Correlation among various constructs of entrepreneurial intention have been studied through SEM analysis. Table 4.50 explains the significant convergent and divergent relationship among the various constructs. It has been observed through results that Personality traits, motivation, subjective norms, entrepreneurial ecosystem and entrepreneurial self-efficacy share a discriminant relationship with each other with a value ranging between .233 to .661 while the entrepreneurial potential constructs like optimism, cognitive flexibility, entrepreneurial intensity, role identity and grit shares a convergent relationship with each other for values ranging between .202 to .661 at significant level 0.05 and 0.01. Also, it has been observed that all the constructs share a significant relationship with entrepreneurial intention with values ranging between .223 to.510 at significant levels 0.01 and 0.05.

**Table 4.50: Correlation of Constructs**

| | PT | MOV | SN | EECO | ESE | LO | EIN | CF | RI | GR | IN |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **PT** | 1 | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ |
| **MOV** | .661 | 1 | _ | _ | _ | _ | _ | _ | _ | _ | _ |
| **SN** | .233 | .241 | 1 | _ | _ | _ | _ | _ | _ | _ | _ |
| **EECO** | .404 | .357 | .437 | 1 | _ | _ | _ | _ | _ | _ | _ |
| **ESE** | .319 | .273 | .212 | .559 | 1 | _ | _ | _ | _ | _ | _ |
| **LO** | .221** | .241* | .645* | .317* | .547** | 1 | _ | _ | _ | _ | _ |
| **EIN** | .331* | .661* | .289** | .431** | .413* | .294* | 1 | _ | _ | _ | _ |
| **CF** | .583* | .514** | .244* | .562* | .355** | .237* | .394** | 1 | _ | _ | _ |
| **RI** | .283* | .483* | .396** | .281* | .273* | .508* | .651** | .186 | 1 | _ | _ |
| **GR** | .712** | .312* | .287* | .290** | .452** | .451* | .117 | .216** | .202* | 1 | _ |
| **IN** | .223** | .510** | .430** | .321* | .445** | .297* | .289** | .327* | .474* | .224* | 1 |

** Correlation is significant at the 0.01 level (2-tailed), *Correlation is significant at the 0.05 level (2-tailed)

#### 4.9.4.3 Overall Model

An overall model used for this study has been presented in figure 4.8. The model explains the antecedents of entrepreneurial intention among women entrepreneurs in Indian MSMEs. The model has been tested in four phases as explained earlier from alternative models 1, 2, 3 and 4. The significant relationship among the various constructs of entrepreneurial intention has been studied through these models. The constructs of perceived desirability are defined by personal characteristics, motivation and subjective norms explaining the personal attractiveness towards entrepreneurship. Perceived feasibility is defined by entrepreneurial self-efficacy and support from entrepreneurial ecosystem explaining the capability an individual feel toward entrepreneurship. The overall model also explains the mediation effect of entrepreneurial potential towards entrepreneurial intention. The moderation affect has been studied using two control variables i.e. Prior exposure to entrepreneurship and orientation state of an individual.

The overall model explains the presence of significant relationships existing between the various constructs of entrepreneurial intention. The obtained value has been found to be in a range of .213 to .712 at significant level 0.01 and 0.05. The R square value has been computed using SEM analysis for 471 filled questionnaires. The R square value for mediation i.e. constructs of entrepreneurial potential optimism, entrepreneurial intensity, grit, role identity and cognitive flexibility have been found to be .28, .31, .37, .41, .46 explaining the 28, 31, 37, 41 and 46 percentage of constructs. The value for overall structural model is found to be 0.59 i.e. 59% of the constructs are explained by the model.

The overall structural model states that for entrepreneurial intention to take place, perceived desirability and feasibility leads to willingness to act towards starting an enterprise. Through analysis of this study, it is stated that women entrepreneurs with more desirability and feasibility possess more willingness to act, more adaptable to unexpected situation, have more perseverance and passion towards long term goal, have more focus and commitment which leads to more entrepreneurial intention. The results obtained are in the lines of literature explaining the predominant and mediating role of entrepreneurial potential. The hypothesized model explains the antecedents of entrepreneurial intention adopted from extended social cognitive career theory and entrepreneurial potential model.

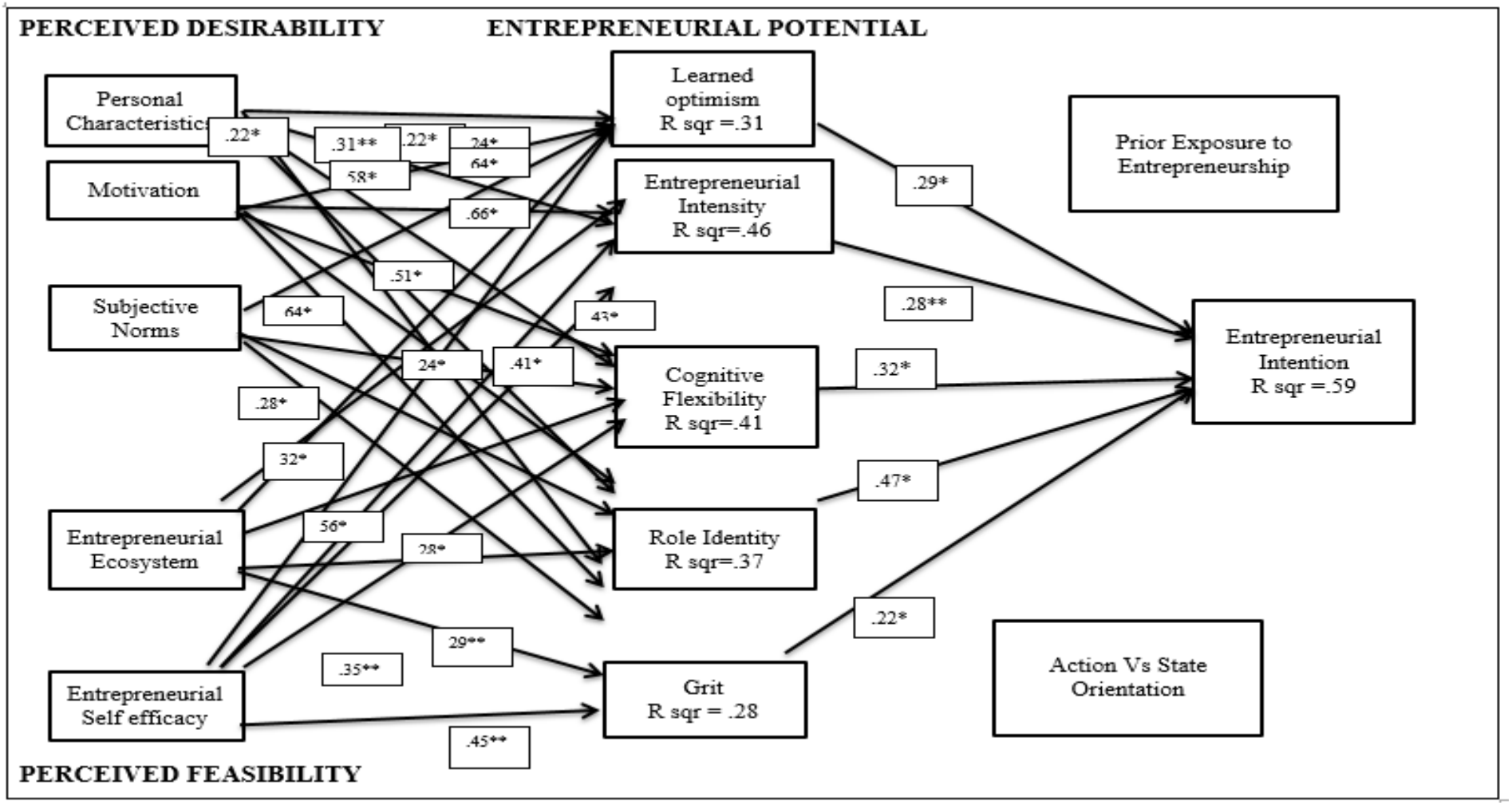



**Figure 4.8: Overall Model for the Study**

***Source: Adapted from Extended Social Cognitive Career Theory (Lent et al,1994,2000) and Entrepreneurial Potential Model, Krueger and Dr Brazeal, 1994 [56]***

### 4.9.5 Hypothesis Summary

The results of statistical analysis have partially supported the hypothesis. Causal relationship has been found between some of the entrepreneurial intention constructs, including perceived desirability, perceived feasibility and entrepreneurial potential. The constructs personal characteristics, subjective norms and motivation, entrepreneurial self-efficacy, entrepreneurial ecosystem have been found to cause the constructs of entrepreneurial potential i.e. optimism, cognitive flexibility, entrepreneurial intensity, role identity and grit have been found to cause some components of entrepreneurial intention.

### 4.9.6 Summary

This chapter has discussed in length the results of the statistical analysis performed on the data obtained from the respondents. Data-related issues including data collection, sample characteristics, and validity and reliability have also been discussed. Analysis of goodness-of-fit has been conducted to test the fit of the model to the sample data. Pearson correlations between the variables have been calculated to test the validity and reliability of each indicator and construct. The SEM analysis has been conducted to test the hypotheses. Most of the hypotheses (H1-H13d) have been found to be accepted explaining the significance of relationship between the constructs of entrepreneurial potential and entrepreneurial intention at significant level 0.05 and 0.01.

# CHAPTER 5

# INSTITUTIONAL FRAMEWORK

## 5.1 Introduction

Entrepreneurship policy has been defined as policy measure taken to stimulate entrepreneurship, that is aimed at the pre-start, start-up and post-start-up phases of the entrepreneurial process. These measures are designed to address the areas of motivation, opportunity and skills, with the primary objective of encouraging more people in population to consider entrepreneurship as an option, to move into nascent stage of taking steps to get started and to proceed into the infancy and early stages of business [98]. There are various schemes which are offered by central and state government in order to promote entrepreneurship in India [159].

## 5.2 Government Schemes for Promoting Entrepreneurship

In total 167 governmental schemes have been studied (Refer Appendix C). Out of which 121 are Central Govt. Schemes, and 46 are State Govt. Schemes. Out of 167 Govt. schemes, it has been found that there are 34 schemes which are designed exclusively for women, the rest 133 schemes are applicable to both male and female entrepreneurs.

## 5.3 Mapping of Government Schemes

There is a comprehensive listing of schemes by central and state government. However, these schemes are not organized in any manner. To facilitate the understanding of these schemes for the entrepreneurs, they are mapped to the functional domains of the business. The functional domains are finance, marketing, operations and human resources.
Furthermore, for each domain, sub-domains were identified. Sub-domains are coded; the details are presented in Table 5.1.

Each government scheme has been mapped and appropriate code is assigned (refer Table 5.2). This is followed by grouping of schemes for each functional domains of business, the results are presented in Table 5.3.

**Table 5.1: Functional Domains and Sub-domains**

| Domains | Sub Domains | Code |
|---|---|---|
| Finance | **Seed Grant**-It is defined as early investment, meant to support the business until it can generate cash of its own (see cash flow), or until it is ready for further investments.<br>**Equity**-It is defined as a stock or any other security representing an ownership interest<br>**Deb**t-It includes long term (loans) and short term debts (working capital) | F1=Seed Grant<br>F2=Equity<br>F3=Debt |
| Marketing | **Product Development**-The creation of products with new or different characteristics that offer new or additional benefits to the customer<br>**Pricing**-It is the value that is put to a product or service.<br>**Promotion**-refers to raising customer awareness of a product or brand, generating sales, and creating brand loyalty.<br>**Sales**-It includes the selling of product | M1=Product Development<br>M2=Pricing<br>M3=Promotion<br>M4=Sales |
| Operations | **Inputs**-It includes labor, capital, land, building and information<br>**Technology**-It includes the transfer or up gradation of technology.<br>**Inventory**- It refers to the goods and materials that a business holds for the ultimate purpose of resale (or repair).<br>**Product Processes**- It includes planning, forecasting, and production of a product.<br>**Quality**-It includes the continuous process of reducing or eliminating errors in manufacturing, streamlining supply chain management, improving the customer experience, and ensuring that employees are up-to-speed with their training.<br>**Productivity**-It refers to as the measure of how efficiently a process runs and how effectively it uses resources. | O1=Inputs<br>O2=Technology<br>O3=Inventory<br>O4=Product Processes<br>O5=Quality<br>O6=Productivity |
| Human Resource | **Training & Development**-It includes the workshops, seminars and various programmes run by govt. to promote entrepreneurship.<br>**Health & Safety**-It includes the various health & safety schemes (like accident, insurance, disability) offered by Govt. for promoting entrepreneurship in India.<br>**Incentives & Bonuses**-It includes the wage enhancement, awards, incentives & bonus plans offered by Govt. for promoting Entrepreneurship in India. | H1=T&D<br>H2=Health & Safety<br>H3=Incentives & Bonuses |

**Table 5.2: Mapping of Government Schemes**

| S. No. | Government Schemes | Code |
|---|---|---|
| 1 | Prime Minister Employment Generation Programme (PMEGP) | AR1 |
| 2 | Scheme of Fund for Regeneration of Traditional Industries(SFURTI) | AR2 |
| 3 | A Scheme for Promotion of Innovation, Rural Industry & Entrepreneurship(ASPIRE). | AR3 |
| 4 | Janshree Bima Yojana for khadi artisans(JBY) | AR4 |
| 5 | Market Development Assistance(MDA) | AR5 |
| 6 | Scheme for providing financial assistance for R & D activities of Coir Board under Central Sector Plan Scheme of Science & Technology (S&T) of the Coir Board | AR6 |
| 7 | Coir Udyami Yojana(CUY) | AR7 |
| 8 | Coir Vikas Yojna(CVY) | AR8 |
| 9 | Enterprise Development Schemes | AS1 |
| 10 | Agriculture Marketing Schemes | AS2 |
| 11 | Industrial Policy and Promotion Schemes | C12 |
| 12 | Certified Filing Centres (CFCs) Operated by Professionally Qualified Persons/Bodies to facilitate e-filing of Documents | CA1 |
| 13 | EES Filing scheme & Information | CA2 |
| 14 | Fast Track Exit Mode | CA3 |
| 15 | Petro Chemical Schemes | CF1 |
| 16 | Nutrient Based Subsidy (NBS) | CF2 |
| 17 | DOP Schemes(Dept of Pharmaceutical) | CF3 |
| 18 | Export Credit Guarantee Corporation of India Limited Schemes | CI1 |
| 19 | Common Effluent Treatment Plants (CETPs | CI3 |
| 20 | SPICES Board Schemes | CI4 |
| 21 | Fellowship of Outstanding Persons in the Field of Culture | CL1 |
| 22 | Building Grants, Including Studio Theatres. | CL2 |
| 23 | Scheme for 'Providing Financial Assistance on Bar-Code' an NMCP Scheme | DC1 |
| 24 | Scheme for 'Promotion of ICT in Indian Manufacturing Sector (ICT)'- an NMCP Scheme | DC10 |
| 25 | 'Micro & Small Enterprises Cluster Development Programme (MSE-CDP)' | DC11 |
| 26 | Credit Linked Capital Subsidy for Technology Upgradation (CLCS- TU) | DC12 |
| 27 | 'Credit Guarantee Fund for Micro and SmalI Enterprises' | DC13 |
| 28 | 'Market Development Assistance (MDA) to MSMEs' | DC14 |
| 29 | Strengthening of Training Infrastructure of existing and new Entrepreneurship Development Institutions' | DC15 |
| 30 | 'Micro Finance Programme' | DC16 |
| 31 | Scheme for 'National Awards' | DC17 |
| 32 | Supporting 5 selected universities / colleges to run 1200 entrepreneurship clubs per annum' | DC18 |
| 33 | Trade Related Entrepreneurship Assistance and Development (TREAD) Scheme to Women | DC19 |

**Table 5.2: Mapping of Government Schemes (Contd.)**

| S. No. | Government Schemes | Code |
|---|---|---|
| 34 | Scheme for 'Support for entrepreneurial and managerial development of SMEs through incubators'- an NMCP Scheme | DC2 |
| 35 | Entrepreneurship Skill Development Programmes (ESDP) | DC20 |
| 36 | Vendor Development Programme for Ancillarisation' | DC21 |
| 37 | Scheme for ' Enabling manufacturing sector to be competitive through Quality Management Standards and Quality technology tools'- an NMCP Scheme | DC3 |
| 38 | 'Building Awareness on Intellectual Property Rights' (IPR) for the Micro, Small & Medium Enterprises- an NMCP Scheme | DC4 |
| 39 | 'Lean Manufacturing Competitiveness of Micro Small and Medium Enterprises (LMCS)'- an NMCP Scheme | DC5 |
| 40 | Setting up Mini Tool Room & Training Centres under PPP Mode'- an NMCP Scheme | DC6 |
| 41 | 'Building Design expertise of MSME's Manufacturing sector (Design clinic scheme)'- an NMCP Scheme | DC7 |
| 42 | Marketing Assistance and Technology Up-gradation of MSME's'- an NMCP Scheme | DC8 |
| 43 | Scheme for 'Technology and Quality Upgradation (TEQUP) Support to MSME's'- an NMCP Scheme | DC9 |
| 44 | Coal Loading and Transportation | DS1 |
| 45 | Management of CNG station | DS2 |
| 46 | Allotment of Mother Dairy Milk booths and Safal shops | DS3 |
| 47 | Gopaljee Dairy Milk booths/Milk shops/Retail outlets | DS4 |
| 48 | Common Effluent Treatment Plants (CETPs) | ES1 |
| 49 | Grants-in-Aid for Voluntary Agencies | ES2 |
| 50 | Waste Minimization & Clean Technology | ES3 |
| 51 | Antyodaya Anna Yojana (AAY) | FP1 |
| 52 | Private Entrepreneurs Guarantee (PEG) | FP2 |
| 53 | Pradhan Mantri Mudra Yojana | FS1 |
| 54 | Credit Linked Capital Subsidy (CLCS) | FS2 |
| 55 | Swarojgar Credit Card | FS3 |
| 56 | NABARD Warehousing scheme | FS4 |
| 57 | Centre for Innovation Incubation and Entrepreneurship (CIIE) Scheme | GS1 |
| 58 | Gujarat Venture Finance Limited (GVFL) | GS2 |
| 59 | National Scheme of Apprenticeship Training | HD1 |
| 60 | Technology Development Mission | HD2 |
| 61 | Development of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy (AYUSH) Clusters | HF1 |
| 62 | Extra Mural Research | HF2 |
| 63 | Promotion of AYUSH Intervention in Public Health Initiatives | HF3 |
| 64 | Promotion of Information, Education, and Communication (IEC) | HF4 |
| 65 | Capital Goods Scheme | HI1 |
| 66 | Excise duty concession to PWDs | HI2 |
| 67 | Custom Duty Concession | HI3 |
| 68 | R&D Funding | IT1 |
| 69 | Technology Incubation and Development of Entrepreneurs (TIDE) | IT2 |

**Table 5.2: Mapping of Government Schemes (Contd.)**

| S. No. | Government Schemes | Code |
|---|---|---|
| 70 | Special Economic Zone Scheme | IT3 |
| 71 | Electronics Hardware Technology Park (EHTP) | IT4 |
| 72 | Duty Exemption & Remission | IT5 |
| 73 | Udyogini Scheme(Women) | KS1 |
| 74 | Namma Magalu Namma Shakthi for girls insurance facility, Karnataka | KS10 |
| 75 | KSFC Subsidy Scheme | KS2 |
| 76 | Karnataka Mahila Abhivrudhi Yojane (KMAY)(For Women Equality) | KS3 |
| 77 | Kittur Rani Channamma award, cash prize to individuals and institutions (Women) | KS4 |
| 78 | Santhwana Scheme for Women Victims of dowry, rape, sexual harassment, domestic violence, Karnataka(Women) | KS5 |
| 79 | Scheme of Assistance to Women for taking up job oriented courses fees, scholarships | KS6 |
| 80 | Skill Development Programme for destitute, orphan, deserted women/children skill development and vocational training, Karnataka | KS7 |
| 81 | Stree Shakthi Programme in Karnataka to provide Fund and training and Marketing (Women) | KS8 |
| 82 | Bhagyalaxmi Scheme for Girls of below poverty line(BPL), Karnataka (Women) | KS9 |
| 83 | KSIDC(kerala State Industrial Development ) Scheme for Women | KW1 |
| 84 | KSED(Kerala State Entrepreneurship Development) | KW2 |
| 85 | ESS(Entrepreneurial Support Scheme) | KW3 |
| 86 | Scheme for Payment of Grant under Women's Industries Programme | KW4 |
| 87 | Scheme for providing Margin Money Loan to SSI Units | KW5 |
| 88 | Scheme for providing State Investment Subsidy | KW6 |
| 89 | Reimbursement of One Time Guarantee Fee and Annual Service Fee | KW7 |
| 90 | Women Industry Scheme | KW8 |
| 91 | Self-Employment for Youth | KW9 |
| 92 | Apprenticeship Training | LE1 |
| 93 | Craftsmen Training (ITIs) | LE2 |
| 94 | Skill Development in 34 Districts Affected by Left Wing Extremism | LE3 |
| 95 | Skill Development Initiative (SDI) | LE4 |
| 96 | Upgradation of ITIs through 1396 PPP | LE5 |
| 97 | Nai Roshni - For leadership development of minority Women | MA1 |
| 98 | Nalanda Project for Minorities | MA2 |
| 99 | Seekho aur Kamao - For skill development of Minorities | MA3 |
| 100 | Research/Studies, Monitoring and Evaluation of Development | MA4 |
| 101 | SIDBI Schemes | MF1 |
| 102 | NABARD Schemes | MF2 |
| 103 | Scheme of Mining' for the mining of Construction Material (Minor Minerals) | MS1 |
| 104 | Seed Money Scheme (SMS)(Maharashtra) | MS1 |

**Table 5.2: Mapping of Government Schemes (Contd.)**

| S. No. | Government Schemes | Code |
|---|---|---|
| 105 | Maharashtra Centre of Entrepreneurship Development | MS2 |
| 106 | Distt. Industries Center Loan Scheme | MS3 |
| 107 | National Equity Fund Scheme | MS4 |
| 108 | Self-Employment and Talent Utilisation (SETU) | NA1 |
| 109 | Capacity Building and Technical Assistance (CB&TA) | NE1 |
| 110 | North Eastern Development Finance Corporation Ltd. (NEDFi) | NE2 |
| 111 | North-Eastern Region Urban Development Programme | NE3 |
| 112 | North-East Rural Livelihoods Project (NERLP) | NE4 |
| 113 | Advertising and Publicity | NE5 |
| 114 | Rajiv Awas Yojana (RAY) | PA1 |
| 115 | Rajiv Rinn Yojana (RRY) | PA2 |
| 116 | Corpus Fund Scheme (CFS) | PN1 |
| 117 | Delhi Kerosene Free Scheme(DKFS) | PN2 |
| 118 | Aajeevika Skills Development Programme | RD1 |
| 119 | Indira Aawas Yojna | RD2 |
| 120 | Prime Minister's Rural Development Fellows (PMRDF) | RD3 |
| 121 | Provision of Urban Amenities to Rural Areas(PURA) | RD4 |
| 122 | MGNREGA Programme | RD5 |
| 123 | Development/Upgradation of WM and MHP | RE1 |
| 124 | Development of Solar Parks and Ultra Mega Solar Power Projects | RE2 |
| 125 | RDD&D and Manufacture of New and Renewable Energy | RE3 |
| 126 | Wind Resource Assessment in uncovered/new areas under NCEF | RE4 |
| 127 | Yuva Udyamita Protsahan Yojana | RS1 |
| 128 | Rajasthan Financial Corporation (RFC) | RS2 |
| 129 | Rajasthan: Loan Scheme For Young/First Generation Entrepreneurs | RS3 |
| 130 | Rajasthan Udyog Laghu Loan | RS4 |
| 131 | Assistance toWE in Rajasthan | RS5 |
| 132 | DST Rajasthan | RS6 |
| 133 | Financial Assistance for Administering Road Safety Programmes | RT1 |
| 134 | National Highway Accident Relief Services Scheme (NHARSS) | RT2 |
| 135 | Providing Financial Assistance on International Cooperation | SD1 |
| 136 | Performance and Credit Rating Scheme for Micro and Small Enterprises | SD2 |
| 137 | Assistance to Training Institutions Scheme(ATI) | SD3 |
| 138 | Marketing Assistance Scheme | SD4 |
| 139 | Udaan Training Programme for Unemployed Youth of J&K | SE1 |
| 140 | National Skill Certification & Monetary Reward (STAR scheme) | SE2 |
| 141 | Pradhan Mantri Kaushal Vikas Yojana | SE3 |
| 142 | Venture Capital Fund for Scheduled Castes | SJ1 |
| 143 | International S&T Cooperation (ISTC) | ST1 |
| 144 | State Science & Technology Programme (SSTP) | ST2 |

**Table 5.2: Mapping of Government Schemes (Contd.)**

| S. No. | Government Schemes | Code |
|---|---|---|
| 145 | Science and Technology for Weaker Sections (STAWS) | ST3 |
| 146 | Tribal Sub-Plan | ST4 |
| 147 | Science and Technology for Women | ST5 |
| 148 | National Science & Technology Entrepreneurship Development Board (NSTEDB) | ST6 |
| 149 | Critical Technology Programme | ST7 |
| 150 | DBT Schemes | ST8 |
| 151 | National Scheduled Tribes Finance & Development Corporation Schemes | TS1 |
| 152 | NEEDS(New Entrepreneur cum EDS) | TS1 |
| 153 | EDS(Entrepreneur Development Scheme) | TS2 |
| 154 | MSME Funding Scheme | TS3 |
| 155 | General Term Loan Scheme | TS4 |
| 156 | WCTL for Manufacturing Sector Scheme | TS5 |
| 157 | Small Window Scheme | TS6 |
| 158 | Scheme for Purchase of New/ Used Windmill | TS7 |
| 159 | Bill Financing Schemes | TS8 |
| 160 | Pooled Finance Development Fund | UD1 |
| 161 | NUIS | UD2 |
| 162 | Entrepreneurship Development' Programme For Women Owned Businesses(UP) | US1 |
| 163 | Gender Budgeting | WE1 |
| 164 | Support to Training and Employment Programme for Women (STEP) | WE2 |
| 165 | Financial Assistance for Promotion of Youth Activities and Training(FAPYAT) | YA1 |
| 166 | National Programme for Youth and Adolescent Development (NPYAD) | YA2 |
| 167 | National Youth Corps (NYC) | YA3 |

**Table 5.3: Grouping of Government Schemes by Functional Domains**

| Functional Domains | Government Schemes |
|---|---|
| Finance | SD3, AR7, DC12, DC13, DC16, DC19, HI1, HI2, FS2, FS3, FS1, FS4, PN1, PN2, PN3, RT1, RT2, MA4, ES2, NE2, KS8, RS2, RS3, RS4, RS5, GS2, MS4, MS3, MS1, KS2, TS8, TS7, TS3, MA5, MA7, TS4, KW6, KW7,KW4, W5, UD1, KW3, MA8, KW1, TS1, PA2, PA1, MF1, MF2, CL2, IT1, CI1, CF2, SJ1, FP2, ST4, ST8, WE1, HF2, PN2, TS6, KW8, KW1, WE1. |
| Marketing | SD1, AR2, AR3, AR5, AR8, DC1, DC3, DC7, DC8, DC9, DC10, DC11, DC14, DC21, NE5, MA1, CF3, CF1, AS2, DS2, DS4. |
| Operation | CI4, IT2, IT4, CA2, CA3, UD2, MA3, FS3, NE2, HI4, HI2, HI3, HI4, DC10, DC9, DC8, DC3, DC2, AR9, AR8, AR3, AR2, MS1, RS6, TS7, TS5, ST7, CA1, IT5, IT2, CI4, DS1, DS2, DS3, DS4. |

**Table 5.3: Grouping of Government Schemes by Functional Domains (Contd.)**

| Functional Domains | Government Schemes |
|---|---|
| Human Resource | IT3, ST1, ST2, ST3, ST5, ST7, ST8, WE2, KW2, KW9, TS1, RT1, RT2, MA13, MA12, MA11, MA9, MA7, HS2, HS3, HS4, HS5, FS2, FS1, MA4, MA3, MA2, MA1, NE4, NE3, NE1, HI3, HI1, YA3, YA1, LE5, LE4, LE3, LE2, LE1, SE3, SE2, SE1, DC21, DC20, DC19, DC18, DC15, DC11, DC10, DC9, DC8, DC6, DC4, DC3, DC2, AR8, AR3, AR2, SD4, SD3, SD1, HD1, HD2, HF1, HF3, HF4, KS8, RS1, KS9, GS1, MS2, US1, KS10, KS7, KS6, KS5, KS4, KS3, KS1, KW9, KW2, WE2, WE1, ST5, ST2, ST3, ST1, RD5, RD3, RD4, RD1, CL1, IT3, AS1, NA1, RT1. |

From Table 5.4 it can be observed that 63 schemes are in finance, 9 schemes are in marketing, 26 schemes are in operations management, and 56 schemes are related to human resource management. 13 schemes are overlapping with more than one functional domains viz. 6 schemes are in the area of Marketing, Operations & HR; 3 schemes are in Marketing & Operations; 3 schemes are in Marketing & HR, and 1 scheme is in the area of Finance & HR.

**Table 5.4: No. of Government Schemes by Sub-domains**

| Functional Domain | Schemes by Sub-domains | No. of Schemes |
|---|---|---|
| Finance | F1=17, F2=9, F3=30, F2 & F3=7 | 63 |
| Marketing | M1+M2+M3=7, M4=2 | 9 |
| Operation | O1=3, O2=10, O3=5, O4=2, O2+O5=4, O6=2 | 26 |
| Human Resource | H1=25, H2=10,H3= 10, H2&H3=6, H1&H2=5 | 56 |
| Marketing, Operation & HR | M1,O1&H1 (1), M3,O4&H1 (1), M1,O5&H1 (1),M1,O1&H1 (1), M1,O2&H1 (1), M1,O2&H1 (1) | 6 |
| Marketing & Operations | M3&O4 (1), M3&O1 (1), M4&O4 (1) | 3 |
| Marketing & HR | M1&H1(1), M3&H1 (1), M1&H1 (1) | 3 |
| Finance & HR | M1&H1 (1) | 1 |
| **Net Total** | | **167** |

## 5.4 Summary

This study comprehensively lists down the Central and State Level Governmental Schemes for promoting women entrepreneurship in Indian Micro, Small and Medium Enterprises. Also, this study maps the governmental schemes & management domains in terms of their functionality.

# CHAPTER 6

# SUMMARY, CONCLUSIONS, IMPLICATIONS, LIMITATIONS, AND SUGGESTIONS FOR FUTURE RESEARCH

## 6.1 Summary and Conclusions

This study is an investigation of the determinants of entrepreneurial intention among women entrepreneurs in Indian Micro, Small and Medium enterprises. Also, this study clarifies the role of entrepreneurial potential for shaping the entrepreneurial intention among women entrepreneurs.

This study has used two extensive theories of entrepreneurial intention viz. Entrepreneurial Potential Model and Extended Social Cognitive Career Theory. Krueger & Dr Brazeal in 1994 have highlighted role of entrepreneurial potential in forming the intention which in turn leads to behavior. They have also mentioned that there is need of more potential entrepreneurs; there is need to identify and establish policies that increase their perceived feasibility and perceived desirability. Hence, to understand the intention of a person, there is a need to study their entrepreneurial potential.

There is not much source available to measure entrepreneurial potential while extended social cognitive theory seeks to trace the web of connections between people and their careers, while accounting for both cognitive and interpersonal influences, as well as self-imposed and externally-imposed career behavior influences [118]. SCCT incorporates three core constructs (viz., self-efficacy, outcome expectations, and intentions) to explain human behavior and intention. Extended Social cognitive career theory takes into account the importance of contextual factors (i.e. personality traits, subjective norms etc.) for shaping the entrepreneurial intention. No prior research has examined the determinants of entrepreneurial intention among women entrepreneurs in Indian micro, small and medium enterprises which explains the role of entrepreneurial intention among them.

The objectives of the research have been to (a) study the characteristics of women entrepreneurs in Micro, Small and Medium Enterprises (MSMEs), (b) explore the motivational factors that contribute to entrepreneurial activities, (c) investigate the issues faced by the women entrepreneurs in MSMEs, (d) identify the institutional framework that promote women entrepreneurship in MSMEs, (e) determine the interrelationships among the constructs of entrepreneurial intention, (f) to design and develop an analytic framework for promoting Women Entrepreneurship in MSMEs. On the basis of theoretical and empirical literature, a conceptual framework explaining the determinants of entrepreneurial intention has been developed to guide the research. The framework links perceived desirability and perceived feasibility with entrepreneurial potential which further leads to

entrepreneurial intention. Hypotheses have been formulated concerning the relationships between these variables in the context of women entrepreneurs in Indian MSMEs, and a questionnaire has been developed to measure the constructs of entrepreneurial intention.

Before conducting a field study, a pilot study has been carried out to check the reliability and validity of the entrepreneurial intention instrument. For pilot study, through online and offline mode data has been collected using survey method from 103 respondents. 35.02% of the respondents were from Karnataka, Andhra Pradesh & Telangana contributing to 40.77%, Uttar Pradesh contributing 10.67% and Chhattisgarh contributing to 15.53% of the respondents. 80.58% of the respondents were from micro sector and in manufacturing, followed by small enterprises contributing to 15.55%, medium enterprises contributing to 3.88%. It is observed that majority (79.61%) of the respondents are in the age group of 30-40 years, followed by the age group 21-30 years (11.65%), and above 40 years contributing to (8.73%). 75.72% of the respondents are graduates, followed by post graduate (14.56%) and undergraduate (9.70%). Around 54% of the respondents don't have prior exposure to entrepreneurship. Further to this, the number of women which felt a positive experience on their previous exposure to entrepreneurship were found to be 37 out of 48 i.e. 77.08% and women with negative experience are found to be less i.e. 11 out of 48 contributing to i.e. 22.91%.

The data collected through pilot study has been analyzed in the research and the ranges obtained during descriptive, Cronbach's alpha and Pearson has explained that the data is symmetrical, normally distributed, bell shaped, centered and unimodal and stated that instrument shows strong reliability and validity. After pilot study few questions have been modified to increase the understanding of respondents and some key words like self-efficacy, desirability have also been explained.

The study adopts an exploratory and descriptive research design capitalizing on primary and secondary data through exhaustive literature, government sources (MSME), District Information Center, Laghu Udyog Bharati and meet up groups etc.

For field study, questionnaire has been sent to 866 women entrepreneurs through online and offline modes. Online mode included mailing the questionnaire to women entrepreneurs on their email id and making a frequent reminder calls for getting the survey filled. Offline mode included visiting to MSME offices in various states, District Information Centers, Laghu Udyog Bharti and getting information on government exhibitions for women entrepreneurs, associating with meet up groups and state associations like AWAKE in Karnataka etc. The data has been collected from the women entrepreneurs

whose enterprises are registered under the MSME, Act, Government of India. The researcher has used the enterprises list given online on the sites of MSME in different states. Using cluster and systematic sampling, and survey questionnaire method data has been collected from geographical clusters as defined under IFC Report, 2012 viz. high, medium, low, and very low women owned enterprises. A total of 471 completed questionnaires have been received in the research, accounting for a 55.41% response rate.

The data gathered have been used to test the hypotheses through structural equations modeling (SEM) using the AMOS program. The analysis involved testing the effects of the exogenous variables on the endogenous variables and of endogenous variables on each other, as well as relationships among the exogenous variables. The exogenous variables include constructs of perceived desirability and feasibility i.e. personal characteristics, motivation, subjective norms, entrepreneurial ecosystem, and entrepreneurial self-efficacy while the mediate endogenous constructs include entrepreneurial potential constructs i.e. role identity, cognitive flexibility, entrepreneurial intensity, grit and optimism. To measure the various constructs of entrepreneurial intention, well established scales have been used in the study. It has been observed that not all the results supported all the hypotheses while it has been found that these hypotheses revealed casualty between some variables in the model.

From the field study, it has been observed that 30.99% of respondents are from high cluster state, 23.78% respondents are from low cluster states, 28.04% respondents are from low cluster states, and 17.19% respondents are from low cluster states. Majority (60.72%) of the respondents are from the age group of 30-40 years, followed by the above 40 years (28.03%), and 21-30 years (11.25%). 72.54% of the respondents are graduates, followed by post graduate (14.35%) and undergraduate (13.09%). 78.58% of the respondents don't have prior exposure to entrepreneurship. Further to this, the number of women who felt a positive experience on their previous exposure to entrepreneurship have been found to be 48 out of 85 i.e. 56.47% and women with negative experience are found to be less i.e. 37 out of 48 contributing to i.e. 43.52%.

The data collected through field study have been analyzed and employed indicators in the instrument have resulted in high reliability with the threshold level of Cronbach alpha greater than or equal to 0.60 on average. The discriminant relationship has been observed too in case of perceived feasibility and intention, learned optimism, cognitive flexibility and perceived desirability which explains the fact that these variables are discriminant. Hence, it explains that the instrument used for the present research study is valid. These findings

are in line with the previous literature on how all these antecedents lead to entrepreneurial intentions through entrepreneurial potential.

As per exploratory factor analysis it has been observed that 63.910 % of total variance has been explained by eleven constructs named as personality traits, motivational factors, subjective norms, entrepreneurial ecosystem, entrepreneurial self-efficacy, grit, role identity, cognitive flexibility, entrepreneurial intensity, learned optimism and entrepreneurial intention. Factor 1 has been labelled as Personal Characteristics (PT: ten items; accounting for 14.71% of the total variance). Factor 2 has been labeled as Subjective Norms (SN: three items; accounting for 23.955% of the total variance). Factor 3 has been labelled as Motivational factors (MO: ten items; accounting for 33.665% of the total variance). Factor 4 has been labelled as support from entrepreneurial ecosystem (EE: nine items; accounting for 42.581% of the total variance). Factor 5 has been labelled as support from entrepreneurial self-efficacy (ES: nine items; accounting for 50.559% of the total variance). Factor 6 has been labelled as support from entrepreneurial Optimism (O1-O6: six items; accounting for 54.913% of the total variance). Factor 7 has been labelled as Cognitive flexibility (CF: twelve items; accounting for 57.884% of the total variance). Factor 8 has been labelled as Entrepreneurial intensity (EI: twelve items; accounting for 60.369% of the total variance). Factor 9 has been labelled as Grit (GR: twelve items; accounting for 61.681% of the total variance). Factor 10 has been labelled as Role identity (RI: two items; accounting for 62.801% of the total variance) adopted from the scale given by Krueger [116]. Factor 11 has been labeled as the dependent factor i.e. Entrepreneurial intention ("I": three items; accounting for 63.910 % of the total variance) adopted from the scale given by Krueger. Strong factor loadings have been observed in entrepreneurial intensity i.e. Factor 8 explains the strong correlation between the items followed by optimism i.e. Factor 6, Entrepreneurial Self efficacy i.e. Factor 5, Motivation i.e. Factor 3, Personality Traits i.e. Factor 1, Subjective norms i.e. Factor 2, Entrepreneurial ecosystem i.e. Factor 4, Grit i.e. Factor 9, role identity i.e. Factor 10 and Intention as factor 11. To further study the interrelationships in the hypothesized models, SEM analysis has been performed on a data set of 471 women entrepreneurs with AMOS 20 statistical package. Thirteen hypotheses from H1 to H13d have been proposed stating the relationship between the various constructs of entrepreneurial intention including the mediation effect of entrepreneurial potential between perceived desirability, perceived feasibility and entrepreneurial intention. Moderation effect has also been understood through the effect of prior exposure to entrepreneurship and state orientation.

The proposed model tests the relationship between perceived desirability, perceived feasibility, entrepreneurial potential and entrepreneurial intention presented by "H". The proposed model shows acceptable fit to the data with values as $\chi 2/df$ =3.132; RMSEA = 0.021; SRMR = 0.031; CFI = 0.837; AGFI = 0.909, PCFI = 0.243 within the standard ranges. Alternative first model tests the relationship between the constructs of entrepreneurial potential model viz. entrepreneurial potential with entrepreneurial intention for hypotheses H1 to H1d as presented in Chapter 3. The model shows acceptable fit to the data with values as $\chi 2/df$ =2. 412; RMSEA = 0.029; SRMR = 0.061; NNFI = 0.673; CFI = 0.884; AGFI = 0.821. Alternative model 2 tests the hypothesis H2 to H6d as presented in Chapter 3, it has been used to test the relationship between personal characteristics and entrepreneurial potential, motivation and entrepreneurial potential, subjective norms and entrepreneurial potential, entrepreneurial self-efficacy and entrepreneurial potential and entrepreneurial ecosystem (support from government policies and programmes).

This model also shows acceptable fit to the data with values as $\chi 2/df$ = 4.914; RMSEA = 0.065; SRMR = 0.081; NNFI = 0.852; CFI = 0.847; AGFI = 0.832. Alternative Model 3 tests the hypothesis H7 to H11d as presented in Chapter 3, has been used to test the relationship between personal characteristics and entrepreneurial potential (learned optimism, entrepreneurial intensity, cognitive flexibility, role identity and grit) resulting in entrepreneurial intention. Model 3 shows acceptable fit to the data with values as $\chi 2/$ df = 3.651; RMSEA = 0.047; SRMR = 0.067; NNFI = 0.753; CFI = 0.796; AGFI = 0.784 (Fornell, C., & Larcker, D. F, 1981). Alternative Model 4 tests the hypotheses H12 to H13d as presented in Chapter 3 to test the moderation effect of prior exposure to entrepreneurship, Orientation state on entrepreneurial potential (learned optimism, entrepreneurial intensity, cognitive flexibility, role identity and grit) resulting in entrepreneurial intention. Model 3 shows acceptable fit to the data with values as $\chi 2/$ df = 4.117; RMSEA = 0.033; SRMR = 0.052; NNFI = 0.674; CFI = 0.812; AGFI = 0.779 [158] Significant relationships are observed in terms of interrelationship between the various constructs of entrepreneurial intention from hypotheses H1 to H11d.

For mediation, several non-significant relationships have been observed from hypothesis H1 at significant values >.05 and .01. Cognitive flexibility doesn't have any significant effect by personality trait on entrepreneurial intention i.e. .331 on .061.This further states that, it is not necessary that a women with high neuroticism, extroversion, conscientiousness and openness must have an effect on her adaptability in unexpected situation for an intention to happen. Another non-significant relationship has been observed

in mediation effect of role identity by motivation on entrepreneurial intention i.e. .378 on .072. Alternative Model 4 tests the hypotheses H12-H12d, H13-H13d for the moderation effect of orientation state and prior exposure to entrepreneurship on entrepreneurial potential towards entrepreneurial intention. Constructs like cognitive flexibility, optimism, role identity, entrepreneurial intensity and grit shows the existence of positive significant relationship in case of women with prior and positive exposure to entrepreneurship, with entrepreneurial intention, and with values ranging between .274 and .443 at significant level .01 and .05. Action and state orientation explains the existence of relationship between the constructs of entrepreneurial potential and intention. The obtained values from analysis explain that willingness to act exists when the individual has the ability or inability to regulate her emotions and thoughts. Several significant relationships have been observed while checking the moderation effect with values ranging .237 to.521 at significant level 0.05 and 0.01. Constructs like cognitive flexibility, optimism, role identity, entrepreneurial intensity and grit shows the existence of positive significant relationship in case of women with action oriented state, with entrepreneurial intention, with values ranging between .237 and .518 at significant level .01 and .05.

The findings of this study contribute to a better understanding the constructs of entrepreneurial intention among women entrepreneurs in Indian MSMEs. The constructs of perceived desirability are defined by personal characteristics, motivation and subjective norms explaining the personal attractiveness towards entrepreneurship. Perceived feasibility is defined by constructs as entrepreneurial self-efficacy and support from entrepreneurial ecosystem explain the capability an individual feels toward entrepreneurship. The overall model also explains the mediation effect of entrepreneurial potential towards entrepreneurial intention. The moderation affect has been studied using two control variables i.e. prior exposure to entrepreneurship and orientation state of an individual.

The overall model explains the presence of significant relationships existing between the various constructs of entrepreneurial intention. The obtained value has been found to be in a range of .213 to .712 at significant level 0.01 and 0.05. The R square value has been computed using SEM analysis for 471 women respondents . The R square value for mediation i.e. constructs of entrepreneurial potential optimism, entrepreneurial intensity, grit, role identity and cognitive flexibility has been found to be .28,.31,.37,.41,.46 explaining the 28,31,37,41 and 46 percentage of constructs respectively. The value for overall structural model is found to be 0.59 i.e. 59% of the constructs are explained by the model.

The overall structural model states that for entrepreneurial intention to take place

perceived desirability and feasibility leads to willingness to act towards starting an enterprise. Through the analysis for this study it has been observed that women entrepreneurs with more desirability and feasibility possess more willingness to act, are more adaptable to unexpected situation, have more perseverance and passion towards long term goal, have more focus and commitment which leads to more entrepreneurial intention. The results obtained are in the lines of the literature reviewed explaining the predominant and mediating role of entrepreneurial potential. Causal relationship have been found between some of the entrepreneurial intention constructs, including perceived desirability, perceived feasibility and entrepreneurial potential.

The results of the present study suggest that it is the perceived desirability and feasibility that leads to willingness to act among women entrepreneurs which in turn leads to forming their entrepreneurial intention. The present study is the first to examine relationships between entrepreneurial potential constructs in a women entrepreneurs in Indian MSMEs context. An open question is the extent to which a proposed entrepreneurial intention framework would work well in the context of women entrepreneurs in Indian MSMEs. However, in order to respond to the problem of how we can promote more participation of women into entrepreneurship needs the support of not only family and friends but also it needs the support of entrepreneurial ecosystem and that too plays a major role.

The present study has concluded various issues and challenges faced by women entrepreneurs in Indian MSMEs and also listed the various policies and programmes by central and state government for promoting women entrepreneurship in India. The major issues faced by women entrepreneurs in Indian MSMEs also include issue of finance, lack of awareness on programmes and polices offered by government.

## 6.2 Theoretical contribution

This research study contributes to the women entrepreneurship literature by identifying the antecedents which influence the entrepreneurial intention among women. This study also offers a comprehensive view on the factors which influence the entrepreneurial intention among women entrepreneurs in India. It is considered that present study in turn can contribute to the theoretical advancement of value for creation of literature by illustrating how each antecedent strengthens the process of entrepreneurial intention among women entrepreneurs in India.

The recent Extended SCCT model study has suggested an inclusive framework of factors affecting entrepreneurial intention and has also highlighted that there is not much attempt made in research using this theory as background for predicting intention in the context of women entrepreneurship. The present study has attempted to fill this gap by formulating the conceptual model for measuring Entrepreneurial intention among women entrepreneurs by integrating and adapting the constructs of Extended SCCT model and EPM which in turn has provided new insights to the women entrepreneurial literature.

This model illustrates that the antecedents; personal characteristics, motivation, subjective norms, entrepreneurial ecosystem, and entrepreneurial self-efficacy influence the perceived desirability, perceived feasibility and entrepreneurial potential which in turn lead to the entrepreneurial intention. Present research study highlights the role of entrepreneurial potential in influencing the entrepreneurial intention. This study has attempted to open up a new approach for doing research in this field with these new insights.

The conceptual model developed in the research also presents an important theoretical contribution. The results obtained from reliability and validity tests have not only provided the establishment of relationship among the various constructs but also suggested that the model provides a promising potential to measure entrepreneurial intention. These findings are in line with the previous literature on how personal characteristics, motivational factors, subjective norms, entrepreneurial ecosystem, and entrepreneurial self-efficacy lead to perceived desirability and feasibility and in turn influence the entrepreneurial intention through entrepreneurial potential.

### 6.2.1 Practical Implications

This research study provides with a definitive approach through proposing an analytical framework that illustrates the path for understanding the influence of antecedents on entrepreneurial intention among women entrepreneurs.

One of the most claimed issue as mentioned by women is that “they find it difficult to take up a decision on; which scheme needs to be used for what purpose and they find reading MSME booklet a tedious process”. This study has made an attempt to list down the 167 governmental schemes and has mapped them with the various management domains. This document can act as a ready reference if enriched with the relevant schemes specific to the states. Present document will definitely help to increase the awareness about governmental schemes among women.

In practice, this framework provides a broad view of factors that could contribute to the success of women entrepreneurs. The study will contribute to new knowledge of the conditions of women entrepreneurship from different perspectives by developing and validating an Analytic Model for promoting the Women Entrepreneurship in MSMEs.

Present study has also highlighted that the government support acts as an enabler for influencing the entrepreneurial intention among women. Although the government of India has taken several initiatives for promoting women entrepreneurship, it hasn't been much successful in reaching the targeted population.

This research study has helped in easy understanding of the present situation of women entrepreneurs in India via a nationwide lens and it will clearly contribute to the major need of encouraging more women to take entrepreneurship as their career in future. The study observes that India needs a systematic and methodological approach with active participation by government in order to enhance entrepreneurial intention among women.

This research study has been able to list down the personal characteristics of women entrepreneurs which provides a clear understanding on the characteristics which need to be imbibed in women. This list will definitely be of further help to the government and universities to design programs and courses keeping in mind the vision of inculcating such characteristics in women. Furthermore, from the government perspective the model presented in the research study will help in designing Training & Development programmes for promoting Women Entrepreneurship. It will also help the policy makers, educational institutions & incubation centers to look into the issues which concern promoting Women Entrepreneurship with a systematic approach.

The research study has been able to highlight major barriers among women entrepreneurs which include stereotyping and male dominance. To promote women entrepreneurship, it is suggested that education system at university level should emphasize more on (i) encouraging female students to take entrepreneurship as their majors, (ii) creating an entrepreneurial culture, (iii) breaking the stereotypes barrier and encourage women entrepreneurship. In order to shape entrepreneurial intention at university level, the faculties should acknowledge the entrepreneurial contribution made by women in the economic growth of country. Providing live examples of female role model will act as an enabler that can motivate more women to choose entrepreneurship as a career. Furthermore, the entrepreneurs with similar background to the students, will act as a stronger source of motivation among female students. The universities should imbibe the culture of women entrepreneurship by conducting timely seminars, workshops, mentoring schemes and

competitions. Therefore, present research study not only contributes into the lines of theory but also adds a practical implication for promoting future women entrepreneurs.

## 6.3 Limitations and Suggestions for Future Research

The limitations of the present study are discussed here. One of the limitation is that this study is limited to enterprises registered under MSME Act. and doesn't cover nascent and unregistered women owned enterprises. In addition to this, present research study is industry specific and limited to Indian micro, small and medium enterprises and doesn't cover nascent and unregistered women owned enterprises. Hence, the results may not reflect other women owned enterprises which are unregistered and are from very large industry in India besides MSMEs.

Thus, it is recommended that present analytical model may be studied / developed further in depth by industry vertical and serial entrepreneurs.

Another limitation of this study is the absence of longitudinal characteristics, which made it impossible to analyze the effects of time lags on the determinants of entrepreneurial intention among women entrepreneurs, adapting to environmental and economic changes. A longitudinal study might capture ongoing transformations that could influence the relationships among various constructs of entrepreneurial intention. Incorporating longitudinal characteristics in future research may produce more significant findings which may be further useful in promotion of women entrepreneurship. Thus, it is recommended to expand this model by including emerging factors like emotional intelligence, changing political and economic conditions etc. for further understanding of entrepreneurial intention among women.

In spite of its limitations, this study provides important insights and contributes to the understanding of entrepreneurial potential process. The present study has been able to provide important relationships among the constructs in the process, and the effects of specific constructs. The study has been able to provide insights on women entrepreneurship witrh satisfaction and performance. The findings of this study will be of benefit in planning and implementing the policies and programmes by practitioners in Indian MSMEs for promoting more women entrepreneurs in India.

## REFERENCES


[1] Chandan Kumar Sahoo, Sitaram Das (2012), "Women Entrepreneurship and Connective Leadership: Achieving Success", *European Journal of Business & Management,* Vol 10 No.4, pp.115-122

[2] Donna J. Kelley, Candida G. Brush, Patricia G. Greene, Yana Litovsky (2012), "*Global Entrepreneurship Monitor 2012 Women's Report",* 2012.

[3] Isti Raafaldini Mirzanti1, Togar M. Simatupang, Dwi Larso (2014), "A Conceptual Framework of Entrepreneurship Policy", Full Paper Proceeding GTAR, Vol.10 No.1, pp. 321-332

[4] Carter S and Cannon T (1988), "Female Entrepreneurs: A Study of Female Business Owners, Their Motivations, Experiences and Strategies for Success". *Department of Employment Research Paper*, Vol. 65 No.2, pp. 1-57

[5] Hisrish, R.D. & Brush, C (1984)., "The woman entrepreneur: Management skills and business problems. "*Journal of Small Business Management*, Vol. 22 No.3, pp. 30-37

[6] Zapalska, A (1997), "A profile of woman entrepreneurs and enterprises in Poland", *Journal of Small Business Management,* Vol. 35 No.2, pp. 76-82

[7] Bird, B. & Brush, C (2002), "A gendered perspective on organizational creation" *Entrepreneurship Theory and Practice*, Vol. 26 No.3, pp. 41-65

[8] Jacques Ascher (2012), "Female Entrepreneurship – An Appropriate Response to Gender Discrimination", *Journal of Entrepreneurship, Management and Innovation (JEMI),* Vol. 8 No.1, pp. 97-114

[9] IFC Issue Brief/Small and Medium Enterprises, 2010, Dec 31, pp. 1-2

[10] Sari Pekkala Kerr et al. (2017), "Personality Traits of Entrepreneurs: A Review of Recent Literature", *Harvard Business Review Working Paper,* Vol. 13 No.2, pp. 1-52

[11] John, Oliver P., Laura P. Naumann, and Christopher J. Soto (2008), "Paradigm shift to the integrative Big Five trait taxonomy: History, measurement, and conceptual issues", *In Handbook of personality: Theory and research.*, Vol 8 No.1 , pp. 114–158.

[12] Donatus A. Okhomina (2017), "Entrepreneurial postures and psychological traits: the sociological influences of education and environment", *Research in Higher Education Journal,* Vol. 13 No.1, pp. 1- 20

[13] Gartner, W. B. (1989) "Some suggestions for research on entrepreneurial traits and characteristics", *Entrepreneurship: Theory & Practice*, Vol. 14 No.3, pp. 27–37.

[14] Low, M. B. and MacMillan, I. C. (1988), "Entrepreneurship: Past research and future challenges" *Journal of Management*, Vol. 35 No.1, pp. 139-161.

[15] Aldrich, H. and C. Zimmer (1986), "Entrepreneurship through social networks". In: D. Sexton and R. Smilor (eds.): *The Art and Science of Entrepreneurship*. Vol.98 No.6, pp. 3–23

[16] Davidsson, P. and Wiklund, J (2001), "Levels of Analysis in entrepreneurship research: Current research practice and suggestions for the future". *Entrepreneurship Theory and Practice*, Vol. 4 No.2, pp. 81- 99.

[17] Reynolds, P., Storey, D., and Westhead (1994), "Cross-national comparisons of the variation in new firm formation rates". *Regional Studies*, Vol.4 No.24, pp. 443-456.

[18] Bird, B. (1993), "Demographic approaches to entrepreneurship: The role of experience and Background", *Advances in Entrepreneurship firm emergence and growth*, Vol. 12 No. 1, pp. 11-48

[19] Scott, W (1998), "Organizations: Rational, national and open systems". *Englewood Cliffs*, NJ: Prentice-Hall, 4thh edition.

[20] Lubica et al (2016), "The entrepreneurship process and the model of volition", *Journal of Business Research*, Vol. 5 No. 69, pp. 1-28

[21] Krueger & Carsured (1993), "Entrepreneurial intentions: Applying the theory of planned behavior", *Entrepreneurship and Regional Development*, Vol. 4 No.5, pp. 315-330

[22] Hina Shah (2013), "Creating An Enabling Environment For Women's Entrepreneurship In India", *ESCAP South And South-West Asia Office*, pp. 1-68

[23] The 2013 State of Women-Owned Businesses Report (2013), *American Express Open*, pp.1-71

[24] Sarmistha Nandy and Shalini Kumar (2014), "Women Entrepreneurship in 21st Century India", *Global Journal of Finance and Management*, Vol. 9 No.2, pp. 967-976

[25] *Global Entrepreneurial Report (2015):* Tracing the Wealth Creating Paths of Entrepreneurs and Angles, BNP Paribas, pp. 1-52

[26] Siri Terjesen & Ainsley Lloyd (2015), "*The 2015 Female Entrepreneurship Index*: Analyzing the conditions that foster high potential Female Entrepreneurship in 77 Countries", pp. 1-51

[27] Zoltán J. Ács et al (2018), "The Global Entrepreneurship Index 2018", GEDI Report, pp. 1-89

[28] Mastercard Index of Women Entrepreneurs (MIWE) 2018 Report, Mastercard (2018), pp. 1-187

[29] Purva Khera (2018), "Closing Gender Gaps in India: Does Increasing Womens' Access to Finance Help?", *IMF working paper,* pp.1-43

[30] The Global Gender Gap Report*, World Economic Forum (*2018), pp. 1-367

[31] MSME Annual Report 2019-20, Government of India, Ministry of Micro, Small and Medium Enterprises, pp. 1-148.

[32] Fact sheet: Women entrepreneurs in India (2016), *GN Bureau,* pp. 1-5

[33] K. Marichamy (2013), "Rural Women Entrepreneurship In Madurai, Tamilnadu" *Tactful Management Research Journal,* Vol. 2 No.1, pp. 1-8

[34] C. Mani (2011), "Forces behind Entrepreneurship of Women- an Economic Study", *International Journal of Bio-resource and Stress Management,* Vol. 22 No.3, pp. 355-358

[35] Sherly Thomas, V L Lavanya (2012), "A Study on the Growth and Performance of Selected Women Entrepreneurs in Coimbatore District, Tamil Nadu", *IUP Journal of Entrepreneurship Development,* Vol. 9 No.2, pp. 80-88

[36] Gnanadhas, M. Edwin, Venkateswaran, A. Rathiha, R (2013), "Economic Empowerment of Indian Women Entrepreneurs with Special Reference to Tirunelveli District, Tamilnadu India", *Journal of International Economics,* Vol. 4 No.2, pp. 79-85.

[37] A.K. Mohideen, K.Manoj Kumar (2013), "A Study On Challenges Of Women Entrepreneurs In Salem District Of Tamilnadu", ICBR Open Access Journal, Vol.2 No.1, pp. 1-10.

[38] Dr. R. Tamilarasi (2013), "Constraints of Women Entrepreneurs In Salem District", Vol. 2 No.2, pp. 69-76

[39] Zuhaib Mustafa (2011), "Prospects And Challenges Of Women Entrepreneurship: A Study of The Women Entrepreneurs Of Jammu And Kashmir", *National Monthly Refereed Journal Of Research In Commerce & Management,* Vol.4 No.2, pp. 81-91

[40] Dr Farooq A Shah, Zuhaib Mustafa (2014), "Prospects Of Women Entrepreneurship: A Study Of The Women Entrepreneurs Of Kashmir Valley", *Pinnacle Research Journal,* Vol.4 No.1, pp. 103-116

[41] Jeevan Jyoti, Anita (2011), "Factors Affecting Women Entrepreneurship In J&K (India)", *Journal of Services Research,* Vol. 11 No.3, pp. 143-161.

[42] Poonam Parihar, D. K. Singh, V.K. Sharma, R. P. Singh (2008), "Impact of Motivational Factors and Role Stress on Women Entrepreneurs in Jammu", *Indian Research Journal,* Vol.8 No.2, pp. 73-76

[43] Dr. Radha Gupta, Muzzafar Ahmad Bhat (2015), "Women Entrepreneurship: A Case Study of Srinagar District of J&K State", *International Journal of Scientific Research And Education,* Vol. 3 No.2, pp. 74-82

[44] Sairabell Kurbah (2013), "Role of Women Entrepreneurs in The Economic Development of Meghalaya: A North Eastern State, India", *International Association of Scientific Innovation and Research,* Vol. 3 No. 2, pp. 175-183

[45] Dr. T. Nagalakshmi (2015), "Women Entrepreneurship: Government And Institutional Support In Andhra Pradesh – A Study", Arth Prabandh: A Journal of Economics and Management, Vol.4 No.2, pp. 205-229

[46] Dr.S.Tarakeswara Rao, Prof.G.Tulasi Rao (2012), "Women Entrepreneurship In India (A Case Study In Andhra Pradesh)", The Journal of Commerce, Vol. 3 No.2, pp. 132-140

[47] Dr. A. S. Shiralashetti (2014), "Problems of Women Entrepreneurs in District of North Karnataka- A Diagnostic Study", *International Journal in Multidisciplinary and Academic Research,* Vol.4 No.2, pp. 1-13

[48] Bharathi V. Sunagara, Megha Jigalurb (2013), "Critical Issues of Women Entrepreneurship With Special reference to specific business units in North Karnataka", *International Journal of Current Engineering and Technology,* 2013 Vol.3 No.1, pp. 59-64

[49] Nivedita T. Dwivedi, Tanya Mishra (2013), "Women-Empowerment Through Women Entrepreneurship (A Study of Faizabad Zone Of Uttar-Pradesh," *Voice of Research Journal,* Vol.2 No.1, pp. 50-55

[50] Chandrasekar, K. S, Jubi, R,Augustine, Resmi (2008), "Women Entrepreneurship in India -- Fillip to Christian and Islamic, Women State of Kerala, India", *Ahfad Journal,* Vol.25 No. 2, pp. 150-171.

[51] Nirmala Karuna D'Cruz (2015), "Constraints on Women Entrepreneurship Development in Kerala: An analysis of familial, social, and psychological dimensions", *Discussion Paper, Printed at: Kerala Research Programme on Local Level Development*, Vol. 5 No. 2, pp. 5-41

[52] Vinisha Bose (2013), "An Analysis of Women Entrepreneurship Development

Programmes in the State of Kerala". *Journal of Entrepreneurship and Management,* Vol.3 No.2, pp. 41-50

[53] Dr. Vinisha Bose (2013), "Role of Entrepreneurship development agencies in promoting women Entrepreneurship: a study of Kerala", *International Journal of Business and Management Invention,* Vol. 2 No.2, pp. 60-67

[54] Sneha Gopeekrishna (2015), "A Study On Constraints of Women Entrepreneurship Of Kerala", Minor Research Project Submitted To University Grants Commission, pp. 1-8

[55] Abdul Rafeeque AK (2015), "A Study On Prospects And Challenges Of Women Entrepreneurship In Wayanad District Of Kerala State", *Abhinav National Monthly Refereed Journal of Research in Commerce & Management,* Vol.4 No.2, pp. 55-61

[56] Krueger, N. F. y Brazeal, D. V (1994),". Entrepreneurial potential and potential entrepreneurs", *Entrepreneurship Theory and Practice*, Vol. 18 No.2, pp. 91-104

[57] Promoting Entrepreneurship and Innovative SME's in Global Economy: Towards A More Responsible And Inclusive Globalisation, *OECD Conference of Ministers Responsible for Small and Medium Sized Enterprise,* Women Entrepreneurship: Issues & Policies, Istanbul, Turkey 3-5, June 2004, pp.1-74

[58] Sairee Chahal (2018), "Growth of Women Entrepreneurship in India", *Cofounders Town,* 2018.

[59] Maria J. Grant & Andrew Booth (2009)," A typology of reviews: an analysis of 14 review Types and associated methodologies", *Wiley Online library,* Vol. 18 No.2, pp. 1-18.

[60] Rana Zehra Masood (2011), "Emergence of Women-owned Businesses in India-An Insight*", Journal of Art Science & Commerce,* Vol. 2 No.3, pp. 233-243

[61] NCEUS Ce11/4/2010-Pt Government of India Ministry of Micro, Small and Medium Enterprise, Subject: *Micro Small & Medium Enterprises Development (Amendment) Bill, 2014* — Definition of MSME, 2014, pp. 1-16

[62] Small-Scale Women Entrepreneurship in Readymade Garment Industry - An Overview, 2011, pp. 71-114.

[63] Muhammad Usama Anwar & Dr. Amber Gul Rashid (2012), "Female Entrepreneurs – A Review of the Literature and Proposed Conceptual Framework", *Proceedings of 2nd International Conference on Business Management,* Karachi, Pakistan, 2012, pp. 1-30

[64] Government of the People's Republic of Bangladesh, *National Industrial Policy 2010,* pp. 3-6

[65] Yogita Sharma (2013), "Women Entrepreneur in India", *IOSR Journal of Business and Management*, Vol.15 No.9, pp. 9-14

[66] Ruba Rummana (2014), "Theorizing Women Entrepreneurship- In Pursuit of a definition in the light of Literature-the Case of Bangladesh", *International Journal of Advanced Technology & Engineering Research*, Vol.5 No.3, pp. 246-253

[67] MSME Annual Report 2018-19, Government of India, Ministry of Micro, Small and Medium Enterprises, pp. 1-148.

[68] Dr M Danabakyam & Swapna Kurian (2012), "Women Entrepreneurship in Micro, Small and Medium Enterprises (MSME) in Chennai City", *International Journal of marketing, Financial Services & Management Research*, Vol.10 No.2, pp. 68-74

[69] Kolvereid, L. and Moen (1996), "Entrepreneurship among business graduates: does a major in entrepreneurship make a difference?", *Journal of European Industrial Training*, Vol. 23 No.2, pp. 453-457

[70] S. Murali Krishna (2013), "Entrepreneurial Motivation: A Case Study of Small Scale Entrepreneurs in Mekeelle, Ethiopia", *Journal of Business Management & Social Sciences Research*, Vol. 2 No.2, pp. 1-6

[71] L. Suresh Mallya (2015), A thesis on "Successful Entrepreneurs of Indian Origin: Case Study", pp. 1-240

[72] Dime Jamali (2008), "Constraints and Opportunities facing Women Entrepreneurs in developing countries: A relational Perspective", *Gender in Management: An International Journal*, Vol. 24 No.4, pp. 232-251

[73] Reynolds, P., Bygrave, W. and Autio, E (2003), "*GEM 2003 global report*", E.M. Kauffman Foundation, Kansas City, MO, pp. 1-125

[74] Baughn, C., Chua, B.L. and Neupert (2006), K., "The normative context for women's participation in entrepreneurship: a multi-country study", *Entrepreneurship Theory & Practice*, Vol. 30 No. 3, pp. 1-45

[75] Arenius, P. and Minniti, M (2005), "Perceptual variables and nascent entrepreneurship", *Small Business Economics*, Vol.24 No.4, pp. 233-247

[76] Yamoah Emmanuel Erastus, Arthur Stephen, Issaka Abdullai (2014), "Institutional Framework for Promoting Small and Medium Scale Enterprises in Ghana: Perspective of Entrepreneurs", *Australian Journal of Business and Management Research,* Vol.3 No.2, pp. 28-45.

[77] Frederic Sautet (2005), "The Role of Institutions in Entrepreneurship: Implication For Development Policy", Mercatus Policy Series, Mercatus Center's Global Prosperity Initiative, pp. 1-15.

[78] Laxmi B. Parab, R.L. Hyderabad (2014), "State and Institutional Support for Women Entrepreneurship Development: A study of Dharwad District in Karnataka State", *Pacific Business Review International*, Vol.4 No.2, pp. 56-64

[79] Prof. Colin Mason and Dr. Ross Brown (2013), "Entrepreneurial Ecosystems And Growth Oriented Entrepreneurship", *OECD LEED Programme and the Dutch Ministry of Economic Affairs on Entrepreneurial Ecosystems and Growth Oriented Entrepreneurship*, The Hague, Netherlands, 7th November, pp. 1-38

[80] Cohen, B (2006), "Sustainable valley entrepreneurial ecosystems. Business Strategy and the Environment", *Wiley online library*, Vol. 15 No.2, pp. 1–14.

[81] Isenberg, D (2010)., "How to start an entrepreneurial revolution", *Harvard Business Review*, Vol. 6 No. 88, pp. 40–50.

[82] Isenberg, D. (2011)," The entrepreneurship ecosystem strategy as a new paradigm for economic policy: Principles for cultivating entrepreneurship", invited presentation at the *Institute of International and European Affairs*, Dublin, Ireland, 2011, May 12

[83] Feld, B (2012), "Startup communities: Building an entrepreneurial ecosystem in your city". Hoboken, NJ: *John Wiley*.

[84] Mason, C., & Brown (2014), "Entrepreneurial ecosystems and growth oriented entrepreneurship". Paris: *OECD*.

[85] Stam, E (2015), "Entrepreneurial ecosystems and regional policy: A sympathetic critique". *European Planning Studies*, Vol. 23 No.3, pp. 1759–1769

[86] Mack, E., & Mayer (2016), "The evolutionary dynamics of entrepreneurial ecosystems. Urban Studies", Vol. 53 No.4, pp. 2118–2133

[87] Roundy, P. T., Brockman, B. K., & Bradshaw, M (2017), "The resilience of entrepreneurial ecosystems". *Journal of Business Venturing Insights*, Vol.8 No.2, pp. 99–104.

[88] Spigel, B (2017), "The relational organization of entrepreneurial ecosystems", *Entrepreneurship Theory and Practice*, Vol. 41 No.3, pp. 49–72

[89] Edward J. Maleck (2017), "Entrepreneurship and entrepreneurial ecosystems", *Wiley online Journal*, Vol.14 No.1, pp. 1-21.

[90] Reynolds PD, Bygrave WD, Autio E (2003), Global entrepreneurship Monitor: 2003, executive report.

[91] Sunil Shukla et.al (2016), "Global entrepreneurship Monitor Indian Report-2016-17", EDI Ahmedabad.

[92] Nezameddin Faghih and Mohammad Reza Zali (2018), "Entrepreneurship

Education and Research in the Middle East and North Africa (MENA): Perspectives on Trends, Policy and Educational Environment", *Springer Publication,* pp. 231-332

[93] Bénédicte Branchet et al. (2017), "Modeling Entrepreneurship Intentions: An Essay of Typology", *International management Journal,* Vol. 21 No. 3, pp. 109–122

[94] Fishbein, M., & Ajzen (1975), I. Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research. Reading, MA: Addison-Wesley.

[95] Shapero, A., & Sokol (1982), L., "The social dimensions of entrepreneurship," *Encyclopedia of entrepreneurship,* Vol. 17 No.2, pp. 72-90

[96] Ajzen, I (1991),". The theory of planned behavior. Organizational and Human Decision Processes", pp. 179-211

[97] Boyd, N. G., & Vozikis, G. S (1994), "The influence of self-efficacy on the development of Entrepreneurial intentions and actions", *Entrepreneurship theory and practice,* Vol.18 No.3, pp. 53-63.

[98] Promoting Entrepreneurship and Innovative SME's in Global Economy: Towards A More Responsible And Inclusive Globalisation, *OECD Conference of Ministers Responsible for Small and Medium Sized Enterprise,* Women Entrepreneurship: Issues & Policies, Istanbul, Turkey 3-5, June 2004, pp. 1-74

[99] Davidsson, P (2013), "Determinants of entrepreneurial intentions", Ponencia presentada enlaferencia RENT IX *Workshop in Entrepreneurship Research,* Piacenza, Italia.

[100] Davidsson, P. y Honig, B (2003), "The role of social and human capital among nascent entrepreneurs", *Journal of Business Venturing,* Vol. 18 No.3, pp. 301-331.

[101] Nga and Shamuganathan (2010), "The Influence of Personality Traits and Demographic Factors on Social Entrepreneurship Start Up Intentions", *Journal of Business Ethic*s, Vol. 2 No.95, pp. 259-282,

[102] Hikkerova, Lubica & Ilouga, Samuel Nyock & Sahut, Jean-Michel (2010), "The entrepreneurship process and the model of volition," *Journal of Business Research,* Elsevier, 2010, Vol. 5, No. 69, pp. 1868-1873.

[103] Ernst, K.K. (2011), "Heart over mind – an empirical analysis of social entrepreneurial intention formation on the basis of the theory of planned behavior", Doctoral, Schumpeter School of Business and Economics, University of Wuppertal – Bergische Universität Wuppertal.

[104] Evan Douglas (2013)," Reconstructing entrepreneurial intentions to identify predisposition for growth", *Journal of Business Venturing,* Vol. 28 No.2, pp. 633-651.

[105] Shashi Yadav (2018), "Changing Scenario of Business and Management", *Book River Publication,*2018, pp. 1-200

[106] Rammstedt, B., & John, O. P. (2007), "Measuring personality in one minute or less: A 10-item short version of the Big Five Inventory in English and German". *Journal of Research in Personality,* Vol. 1 No.14, pp. 203–212.

[107] Birley, S. and Westhead, P (1999).," A taxonomy of business start-up reasons and their impact on firm growth and size". *Journal of Business Venturing,* 1999, Vol. 9 No. 2, pp. 7-31.

[108] Robichaud, Y., McGraw, E., and Roger, A (2001), "Toward the development of measuring instrument for entrepreneurial motivation". *Journal Development Entrepreneurship,* 2001, Vol.6 No.2, pp. 189-201.

[109] Scheinberg, S. and Macmillan, I. C (1988), An 11 country study of motivations to start a business. *Frontiers of Entrepreneurship Research,* pp. 669-687.

[110] Kåre Sven Moberg & Thomas (2012), "Improving perceived entrepreneurial abilities through education: Exploratory testing of an entrepreneurial self efficacy scale in a pre-post setting", *The International Journal of Management Education*",Vol.11 No.1, pp.1–11

[111] Krueger, N. F (2015), "Entrepreneurial Education in Practice. Part 1: The Entrepreneurial Mindset", Entrepreneurship360 Thematic Paper. Norris, 2015

[112] Martin E. P. Seligman (1998), Book on Learned Optimism, pp. 1-349

[113] Canas et. Al (2003), "Cognitive flexibility and adaptability to environmental changes in dynamic complex problem-solving tasks", Ergonomics, Vol. 46 No. 2, pp. 482-501

[114] Paul D. Reynolds & Richard T. Curtin (1998), "*Panel Study of Entrepreneurial Dynamics Program Rationale and Description*", University of Michigan, pp. 1-15

[115] Martin & Rubin (1995), "A New Measure of Cognitive Flexibility" Psychological Reports, Vol.2 No.76, pp.623-626

[116] Krueger, N. (2017), "Entrepreneurial mindset". Unpublished research instrument, personal Communication, 18 October, 2017

[117] Duckworth, A.L., Peterson, C., Matthews (2007), M.D., & Kelly, D.R. Grit: "Perseverance and passion for long-term goals". *Journal of Personality and Social Psychology,* Vol. 9 No.2, pp. 1087-1101.

[118] Lent, R. W., Brown, S. D. y Hackett, G (2000), "Contextual supports and barriers to career choice: A social cognitive analysis*", Journal of Counseling Psychology,* 2000, Vol. 47 No.3, pp. 36-49

[119] Zhao, H. and Seibert, S.E (2006), "The big five personality dimensions and entrepreneurial status: a meta-analytical review", *The Journal of Applied Psychology*, Vol. 91 No.2, pp. 259-271.

[120] Crant, J.M (1996), "The proactive personality scale as a predictor of entrepreneurial Intentions". *Journal of Small Business Management*, Vol.14 No.4, pp. 42-49.

[121] Linan and Chan (2006)," Testing the Entrepreneurial Intention Model on a Two-Country Sample", *Econ working papers*, pp. 1-36

[122] Kuhl, J., & Beckmann, J. (1994), Volition and Personality: Action Versus State Orientation. Seattle: Hogrefe & Huber Publishers., pp. 231-245

[123] Nicola et. al, SPSS for Psychologists, 6th edition, Macmillan Publication, pp. 1-415.

[124] Sarstedt M., Mooi E. (2014), "Factor Analysis. In: A Concise Guide to Market Research". *Springer Texts in Business and Economics*. Springer, Berlin, Heidelberg, pp. 235-272

[125] Federation of Indian Women Entrepreneurs Report,2017, pp. 1-352

[126] Carree, M., A. van Stel, R. Thurik and S. Wennekers (2002), *Economic Development and Business Ownership: An Analysis Using Data of 23 OECD Countries in the Period 1976- 1996*, Small Business Economics 19, forthcoming.

[127] Carree, M.A. (2002), Industrial restructuring and economic growth, Small Business Economics, Vol.18 No.3, pp. 243-255.

[128] Carree, M.A. and A.R. Thurik (1998), Small firms and economic growth in Europe, *Atlantic Economic Journal*, Vol.26 No. 2, pp. 137-146.

[129] Wilmela et al (2011)," The Impact of Demographic Factors of Entrepreneurs on Development of SMEs in Tourism Industry in Sri Lanka, "International Research Conference on Business and Information At: University of Kelaniya, pp. 62-78.

[130] M. Belén García-Palma et al (2016)," Knowledge and female entrepreneurship: A competence and social dimension", Elseveir, Vol.7 No.2, pp.32-37

[131] Martin Luckas (2015), "Entrepreneurship in education", Entrepreneurship 360 background paper, OECD, pp. 1-45.

[132] Jeevan Jyoti et. al (2011), "Factors affecting orientation and satisfaction of women entrepreneurs in rural India", *Annals of Innovation & Entrepreneurship*, Vol. 2 No.1, pp. 58-73.

[133] Julius Kuhl et al (2001), "Trends and Prospects in Motivation Research", Springer Publication, pp. 123-187

[134] Bennett DA (2001), "How can I deal with missing data in my study?", *Aust N Z J Public Health,* Vol. 25 No.5, pp. 464–469.

[135] Scrieber et. al (2006), "Reporting structural equation modeling and confirmatory factor analysis results: A review", *Journal of education research,* Vol. 18 No. 2, pp. 323-388.

[136] Baker, T.L, Doing Social research (1992), New York: McGraw-Hill Inc, pp. 1-312

[137] Naresh K Malhotra et al, "Essentials of Marketing Research", *Chapter 13,6th edition, Pearson Publication,* pp. 386-402

[138] Schafer JL, Olsen MK (1998), "Multiple Imputation for Multivariate Missing-Data Problems: A Data Analyst's Perspective. Multivariate Behavior ", *Journal of behavioral Sciences,* Vol. 33 No. 4, pp. 545–571.

[139] Peng et al (2013), "Principled missing data methods for researchers", Springer plus, Vol. 2 No.2, pp. 222-243

[140] Hartley HO, Hocking RR (1971), "The Analysis of Incomplete Data. Biometrics", Vol. 4 No. 2, pp. 783– 823.

[141] Teemu et al (2013), "Predicting entrepreneurial behaviour: a test of the theory of planned behavior|", *Journal of applied economics,* Vol. 45 No.3, pp. 697-707

[142] Ahu Tugba (2016), "Personality Traits on Entrepreneurial Intention", Procedia – Social and Behavioral Sciences, Vol. 22 No.9, pp. 12-21

[143] Arminda et al (2011), "Behaviours and entrepreneurial intention: Empirical findings about secondary students", *Journal of International entrepreneurship,* Vol. 9 No.2, pp. 20–38.

[144] Naktiyok, A., Nur Karabey, C. & Caglar Gulluce, A (2010), "Entrepreneurial self-efficacy and entrepreneurial intention: The Turkish case". *International Entrepreneurship and Management Journa*l, 2010, Vol. 6 No.3, pp. 419–435

[145] Samuel et al. (2018) "Entrepreneurial Orientation and Intention: Impact of Entrepreneurial Ecosystem Factors", *Journal of Entrepreneurship education,* Vol. 21 No.15, pp. 48-57

[146] Pihie, Z.A.L., Bagheri, A (2013), "Self-Efficacy and Entrepreneurial Intention: The Mediation Effect of Self-Regulation", *Journal of Vocations and Learning,*20136, Vol. 6 No.3, pp. 385–401

[147] Worthington,R.L, Whitttaker (2006), "Scale Development Research. A content analysis and recommendations for best practices"., *The counseling Psychologist,* Vol. 34 No.6, pp. 806-815

[148] Field, A. (2005), "Discovering Statistics Using SPSS", 2nd edition, Sage Publication Ltd., pp.1-147

[149] Comrey, Comrey, Lee, H. B. (1992). A first course in factor analysis. Hillsdale, NJ: Lawrence Erlbaum, pp. 21-234

[150] Nyaradzo H. Mvududu & Christopher A. Sink (2013), "Factor Analysis in Counseling Research and Practice", Counseling Outcome Research and Evaluation, Vol. 4 No.2, pp. 75-98.

[151] Ledesma, R., Valero-Mora, P., & Macbeth, G (2015), The Scree Test and the Number of Factors: A Dynamic Graphics Approach, *The Spanish Journal of Psychology,* Vol.18 No.3, pp. 11-32.

[152] S. Scheinberg, I.C. Macmillan (1988), "An 11 country study of motivations to start a business", *Frontiers of Entrepreneurship Research,* Vol. 19 No. 8, pp. 669-687

[153] S. Birley, P. Westhead (1994), "A taxonomy of business start-up reasons and their impact on firm growth and size", *Journal of Business Venturing*, Vol.9 No. 7, pp. 7-31

[154] Crant, J.M (1996), "The proactive personality scale as a predictor of entrepreneurial intentions", *Journal of Small Business Management*, Vol. 19 No.6, pp. 42-49.

[155] Robichaud, Y., McGraw, E., and Roger, A (2001), "Toward the development of Measuring instrument for entrepreneurial motivation". *Journal Development Entrepreneurship,* Vol. 6 No.2, pp. 189-201.

[156] Schierer et al (2010), "Optimism", Clin Psychol Rev. Vol. 30 No.7, pp. 879–889,

[157] Hair et al. (2010), "Multivariate Data Analysis", Prentice Hall Publication, 2010, pp. 1-500.

[158] Fornell & David (1981), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error", *Journal of Marketing Research,* Vol.12 No.3, pp. 1-18.

[159] MSME Schemes, National Institute for Micro, Small and Medium Enterprises (ni-msme), Ministry of MSME (government of India), pp. 1-163

# APPENDICES

# Appendix A: SALSA Framework

| Type of review | Methods Used by SALSA | | | |
|---|---|---|---|---|
| Literature Review/Narrative Review/Overview | **Search**<br>• May or may not include comprehensive searching | **Appraisal**<br>• May or may not include quality assessment | **Synthesis**<br>• Typically, narrative | **Analysis**<br>• Analysis may be chronological, conceptual, thematic, etc. |
| Scoping Review | • Completeness of searching determined by time/scope constraints. May include research in progress | • No formal quality assessment | • Typically, tabular with some narrative commentary | • Characterizes quantity and quality of literature, perhaps by study design and other key features. Attempts to specify a viable review |
| Critical Review | • Seeks to identify most significant items in the field | • No formal quality assessment.<br>• Attempts to evaluate according to contribution | • Typically, narrative, perhaps conceptual or chronological | • Significant component: seeks to identify conceptual contribution to embody existing or derive new theory |
| Systematic Review | • Aims for exhaustive, comprehensive searching | • Quality assessment may determine inclusion/exclusion | •Typically, narrative with tabular accompaniment | • What is known; recommendations for practice. What remains unknown; uncertainty around findings, recommendations for future research |
| Meta-Analysis | • Aims for exhaustive, comprehensive searching.<br>• May use funnel plot to assess completeness | • Quality assessment may determine inclusion / exclusion and/or sensitivity analyses | • Graphical and tabular with narrative commentary | • Numerical analysis of measures of effect assuming absence of heterogeneity |
| Mapping Review | • Completeness of searching determined by time/scope constraints | • No formal quality assessment | • May be graphical and tabular | • Characterizes quantity and quality of literature, perhaps by study design and other key features. May identify need for primary or secondary research |
| Qualitative Systematic Review | • May employ selective or purposive sampling | • Quality assessment typically used to mediate messages not for inclusion/exclusion | •Qualitative, narrative synthesis | • Thematic analysis, may include conceptual models |
| Meta-synthesis* | • Aims for rigorous, systematic search of relevant studies | • Quality assessment may determine inclusion/exclusion and/or relevance | • May involve narrative commentary with tabular and graphical representation | • Interpret and transform findings from multiple qualitative studies to reflect the explanation of the phenomena |
| Realist Review | • Formal Systematic search | • Assessment of relevance and rigor | • Typically, tubular with some narrative commentary | • Identify the attributes of 'what works, how, for whom, in what circumstances and to what extent' for any intervention |
| Review of Reviews/ Umbrella Reviews | • Identification of component reviews, but not primary studies | • Quality assessment of studies within component reviews | • Graphical and tubular with some narrative commentary | • What is known recommendation for practice<br>• What remain unknown; recommendation for future research |

*Adopted from: The details of The Search, Appraisal, Synthesis and Analysis (SALSA) framework presented with permission from John Wiley and Sons from the following reference: Grant MJ, Booth A. A typology of reviews: an analysis of 14 review types and associated methodologies. Health Information & Libraries Journal. 2009;26(2):91-108.*The type (Meta Synthesis), which was not included in the Grant et al article, has been included by the authors of this manuscript.*

# Appendix B: Cover Letter & Questionnaire

## COVER LETTER

Dear Participant,

My name is Sakshi Chhabra and I am a full time research scholar student at BITS Pilani, Pilani Campus,Rajasthan.

For my research thesis project, I am examining the antecedents of entrepreneurial intention and what can be done to promote more women entrepreneurs in Indian MSMEs .
For the same reason, I am inviting you to participate in this research study by completing the attached surveys. The following questionnaire will require approximately 15-20 minutes to complete.

In order to ensure that all information will remain confidential, please do not include your name. Copies of the surveys will be kept for performing the analysis for the study. If you choose to participate in this project, please answer all questions as honestly as possible and return the completed questionnaires promptly.

Participation is strictly voluntary and you may refuse to participate at any time. Thank you for taking the time to assist me in my educational endeavors. The data collected will provide useful information regarding promoting women to choose entrepreneurship as a career. If you would like a summary copy of this study, please complete and detach the Request for Information Form and return it to me in a separate envelope. Completion and return of the questionnaire will indicate your willingness to participate in this study. If you require additional information or have questions, please contact me at the address and mail given below.

Regards,
Sakshi Chhabra
Research Scholar
Department of Management
BITS Pilani,Pilani Campus
Email: p2014011@pilani.bits-pilani.ac.in

# Questionnaire

**1. Name (optional)**_____

**2. Age**: Below 20 21 to 30 31 to 40
Above 40

**3. Educational Qualification**:

Primary Schooling Secondary Schooling Senior Secondary Schooling

Higher Secondary Schooling Under Graduate Post Graduate

**4. Work Experience**: Less than 1 year 1 to 3 3 to 5

Above 5

**5. Marital Status** : Single Married

**6. Family size**: Less than 3 3 to 5 More than 5

**7. Whether your parent(s) ever were in any business**? Yes No

**8. Did any of your relatives or friends ever started a business**? Yes
No

9. **Before starting this business, you were**:

Employed/working Had own business Home maker

Studying Any other (please specify): _____

**10. Before starting the enterprise, did you made any effort to acquire required skills?**
Yes No

If yes, briefly mention the type of skill(s) acquired & how did you acquire the skill

**11. What is/are the reason(s) for starting this enterprise?**

**12. Name of your enterprise:** _____

**13. Your enterprise belongs to:** Trading Manufacturing
Service

**What type of products/services are dealt by your enterprise?**

**14. Nature of your enterprise:**

Sole proprietorship Partnership Private limited Company

Public limited Company Not for profit

**Rate the below mentioned questions on the scale of 1 to 5**

| |
|---|
| 1-Strongly Disagree<br>2-Disagree<br>3-Neutral<br>4-Agree<br>5-Strongly Agree |

**1. I see myself as someone who:**

| | | | | | |
|---|---|---|---|---|---|
| is reserved | 1 | 2 | 3 | 4 | 5 |
| is generally interesting | | | | | |
| tends to be lazy | | | | | |
| is relaxed, handles stress well | | | | | |
| has few artistic interests | | | | | |
| is outgoing, socialable | | | | | |
| tends to fight faults with others | | | | | |
| does a thorough job | | | | | |
| tends to get nervous easily | | | | | |
| has an active imagination | | | | | |

**2. Rate the following Statements:**

| | | | | | |
|---|---|---|---|---|---|
| A. After years of growth, sales of your business have decreased significantly and the sales decline caused by something about you or by something about other people or circumstances. Answer the following? | 1 | 2 | 3 | 4 | 5 |
| In uncertain times like this, I usually expect the best | | | | | |
| If something can go wrong for me, it will. | | | | | |
| Even if the sales decline in future, I will be always optimistic about my future. | | | | | |
| Overall, I expect more good things to happen to me than bad | | | | | |
| B. Your company's internal cash flow is much worse than expected and the cashflow shortfall caused by something about you or by something about other people or circumstances. Answer the following? | | | | | |
| In uncertain times like this, I usually expect the best | | | | | |
| If something can go wrong for me, it will. | | | | | |
| Even if there is a cash shortfall, I will be always optimistic about my future. | | | | | |
| Overall, I expect more good things to happen to me than bad | | | | | |
| C. Your company's production is well behind schedule and the slower production caused by something about you or by something about other people or circumstances | | | | | |
| In uncertain times like this, I usually expect the best | | | | | |
| If something can go wrong for me, it will. | | | | | |
| Even if there is a slower production, I will be always optimistic about my future. | | | | | |
| Overall, I expect more good things to happen to me than bad | | | | | |

**3. Rate the following Statements:**

| | | | | | |
|---|---|---|---|---|---|
| I prefer to have my own business than earning a higher salary | 1 | 2 | 3 | 4 | 5 |
| My personal philosophy is to do "whatever it takes" to establish my own business. | | | | | |
| I am willing to put maximum effort to establish my business. | | | | | |
| Spending time with my family is more important than establishing the enterprise | | | | | |

**4. I started this enterprise because:**

| Salary in my previous employment was not enough to meet my needs | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Previous employment did not provide me growth opportunities | | | | | |
| At the work place I was unhappy with the work environment | | | | | |
| My previous job did not fully utilize my potential/strengths | | | | | |
| My job was monotonous and not challenging | | | | | |
| I was unable to get employment | | | | | |
| To make more money | | | | | |
| To create/provide employment opportunities | | | | | |
| To meet a unmet need in the market | | | | | |
| I was unable to get employment | | | | | |
| To make more money | | | | | |
| To create/provide employment opportunities | | | | | |
| To meet a unmet need in the market | | | | | |
| To be my own boss | | | | | |
| To continue my family tradition of being in business | | | | | |
| Inspired by the success of entrepreneurs/other role models | | | | | |
| To take advantage of government schemes | | | | | |
| To gain greater recognition in the society | | | | | |
| To have job security | | | | | |
| Due to involuntary exit from previous job | | | | | |
| Me previous company was shut down | | | | | |
| To act on my business idea | | | | | |
| If there's other reason please specify: | | | | | |

**5. Before starting this enterprise:**

| I was confident about my skills and abilities to run my own business. | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| I had sufficient knowledge/information about the business that I wanted to start | | | | | |
| I was confident that I will be a successful entrepreneur | | | | | |
| I was passionate to start my own business as early as possible | | | | | |
| I was waiting for the right time to start my business | | | | | |
| I was mobilizing/arranging the resources to start my own business | | | | | |

**6. How much confidence do you have in your ability to....?**

| Come up with new ideas | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Manage time in projects | | | | | |
| Interpret financial statements | | | | | |
| Achieve project goals | | | | | |
| Identify opportunities for new ways to conduct activities | | | | | |
| Structure tasks in a project | | | | | |
| To get things done with limited resources | | | | | |
| Network (i.e. make contact with and exchange information with others) | | | | | |
| Tolerate unexpected change | | | | | |
| Put together right group/team in order to solve a specific problem | | | | | |
| Form partnerships | | | | | |
| Persist in the face of setbacks | | | | | |
| Estimate a budget for a new project | | | | | |
| Work productively under continuous stress, pressure and conflict | | | | | |
| Think outside the box | | | | | |
| Control costs for projects | | | | | |
| Manage uncertainty in projects and processes | | | | | |
| Improvise when you do not know what the right action/decision might be | | | | | |
| If there's other reason please specify: | | | | | |

**7. Rate the following statement?**

| **In your opinion, Do you think that:** | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Governmental policies favors the new firms. | | | | | |
| The support for new and growing firms is a high priority for policy at the state & central government level | | | | | |
| New firms can get most of the required permits and licenses in about a week. | | | | | |
| A wide range of government assistance for new and growing firms can be obtained through contact with a single agency. | | | | | |
| There are an adequate number of government programs for new and growing businesses. | | | | | |

**8. Rate the following statements?**

| I can communicate an idea in many ways. | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| I feel like I never get to make decisions. | | | | | |
| I can find workable solutions to seemingly unsolvable problems. | | | | | |
| I seldom have choices when deciding how to behave. | | | | | |
| I am willing to work at creative solutions to problems. | | | | | |
| In any given situation, I am able to act appropriately. | | | | | |
| My behavior is a result of conscious decisions that I make. | | | | | |
| I have many possible ways of behaving in any given situation. | | | | | |
| I have difficulty using my knowledge on a given topic in real life situations. | | | | | |
| I am willing to listen and consider alternative for handling a problem. | | | | | |
| I have the self-confident necessary to try different way of behaving. | | | | | |
| I can communicate an idea in many ways. | | | | | |
| I feel like I never get to make decisions. | | | | | |
| I can find workable solutions to seemingly unsolvable problems. | | | | | |
| I seldom have choices when deciding how to behave. | | | | | |
| I am willing to work at creative solutions to problems. | | | | | |
| In any given situation, I am able to act appropriately. | | | | | |
| My behavior is a result of conscious decisions that I make. | | | | | |
| I have many possible ways of behaving in any given situation. | | | | | |
| I have difficulty using my knowledge on a given topic in real life situations. | | | | | |
| I am willing to listen and consider alternative for handling a problem. | | | | | |
| I have the self-confident necessary to try different way of behaving. | | | | | |
| I can communicate an idea in many ways. | | | | | |
| I feel like I never get to make decisions. | | | | | |
| I can find workable solutions to seemingly unsolvable problems. | | | | | |
| I seldom have choices when deciding how to behave. | | | | | |
| I am willing to work at creative solutions to problems. | | | | | |
| In any given situation, I am able to act appropriately. | | | | | |
| My behavior is a result of conscious decisions that I make. | | | | | |
| I have many possible ways of behaving in any given situation. | | | | | |
| I have difficulty using my knowledge on a given topic in real life situations. | | | | | |
| I am willing to listen and consider alternative for handling a problem. | | | | | |
| I have the self-confident necessary to try different way of behaving. | | | | | |
| Have you availed any financial assistance through government scheme(s)?<br><br>Yes No | | | | | |

If yes, Please mention the scheme:

Financial assistance availed for (tick all those apply) Seed Grant ☐ Equity ☐ Debt ☐

| | | | | | |
|---|---|---|---|---|---|
| How satisfied are you with the financial schemes provided by ***central government***? | | | | | |
| How satisfied are you with the financial schemes provided by ***state government***? | | | | | |

If No, what are the reasons:

Have you availed any Marketing assistance through government scheme(s)?

Yes No

If yes, Please mention the scheme:

Marketing assistance availed for: (tick all those apply)

Product Development ☐ Pricing ☐

Promotion ☐ Sales ☐

(tick all those apply)

| | | | | | |
|---|---|---|---|---|---|
| How satisfied are you with the marketing assistance schemes provided by ***central government***? | | | | | |
| How satisfied are you with the marketing assistance schemes provided by ***state government***? | | | | | |

If No, what are the reasons:

Have you availed any Production assistance through government scheme(s)?

Yes No

If yes, Please mention the scheme:

Production assistance availed for(tick all applied)

Input ☐ Technology ☐

Inventory ☐ Quality ☐

| | | | | | |
|---|---|---|---|---|---|
| How satisfied are you with the production schemes provided by ***central government***? | | | | | |
| How satisfied are you with the production schemes provided by ***state government***? | | | | | |

If No, what are the reasons:

Other than the above schemes, are there any other central/state government schemes you have availed? If yes, please specify the details?

| **9. Rate the following statements?** | **1** | **2** | **3** | **4** | **5** |
|---|---|---|---|---|---|
| I consider myself as a successful entrepreneur. | | | | | |
| Are there any issues and challenges you have faced during your entrepreneurial journey? If yes, please specify the details? | | | | | |

**Section-III**

Answer the following statements quickly & honestly. There is ***no right or wrong answers***. Tick the option applicable.

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1. When I know I must finish something soon,
   A. I have to push myself to get started. ☐
   B. I find it easy to get it done and over with. ☐

2. When I have learned a new and interesting game:
   A. I quickly get tired of it and do something else. ☐
   B. I can really get into it for a long time. ☐

3. When I´ve worked for weeks on one project and then everything goes completely wrong:
   A. It takes me a long time to get over it. ☐
   B. It bothers me for a while, but then I don´t think about it anymore. ☐

4. When I don´t have anything in particular to do and I am getting bored:
   A. I have trouble getting up enough energy to do anything at all. ☐
   B. I quickly find something to do. ☐

5. When I'm working on something that's important to me: ☐
   A. I still like to do other things in between working on it.
   B. I get into it so much that I can work on it for a long time. ☐

6. When I am getting ready to tackle a difficult problem:
   A. It feels like I am facing a big mountain that I don´t think I can climb. ☐
   B. I look for a way that the problem can be approached in a suitable manner. ☐

7. If I had just bought a new piece of equipment (for example, a laptop) and it accidentally fell on the floor and was damaged beyond repair:
   A. I would get over it quickly. ☐
   B. It would take me a while to get over it. ☐

8. When I have to solve a difficult problem:
   A. I usually get on it right away. ☐
   B. I have trouble sorting out things in my head. ☐

9. When I have to talk to someone about something important and, repeatedly, can´t find her/him at home:
   A. I can´t stop thinking about it, even while I´m doing something else. ☐
   B. I easily forget about it until I can see the person again. ☐

10. When I read an article in the newspaper that interests me:
   A. I usually remain so interested in the article that I read the entire article. ☐
   B. I still often skip to another article before I've finished the first one. ☐

11. When I am told that my work has been completely unsatisfactory:
   A. I don´t let it bother me for too long. ☐
   B. I feel paralyzed. ☐

12. When I have a lot of important things to do:
   A. I often don´t know where to begin. ☐
   B. I find it easy to make a plan and stick with it. ☐

13. When one of my co-workers brings up an interesting topic for discussion:
   A. It can easily develop into a long conversation. ☐
   B. I soon lose interest and want to go do something else. ☐

14. When I´m stuck in traffic and miss an important appointment:
   A. At first, it´s difficult for me to start doing anything else at all. ☐
   B. I quickly forget about it and focus on something else. ☐

15. When I am busy working on an interesting project:
   A. I need to take frequent breaks and work on other projects. ☐
   B. I can keep working on the same project for a long time. ☐

16. When I have to carry out an important but unpleasant task:
   A. I do it and get it over with. ☐
   B. It can take a while before I can bring myself to do it. ☐

17. When something really gets me down:
   A. I have trouble doing anything at all. ☐
   B. I find it easy to distract myself by doing other things. ☐

18. When I am facing a big project that has to be done:
   A. I often spend too long thinking about where I should begin. ☐
   B. I don´t have any problems getting started. ☐

19. When several things go wrong on the same day:
   A. I don't know how to deal with it. ☐
   B. I just keep on going as though nothing had happened. ☐

20. When I read something I find interesting:
    A. I sometimes still want to put the article down and do something else. ☐
    B. I will sit and read the article for a long time. ☐

21. When I have put all my effort into doing a really good job on something and the whole thing doesn´t work out:
    A. I don´t have too much difficulty starting something else. ☐
    B. I have trouble doing anything else at all. ☐

22. When I have an obligation to do something that is boring and uninteresting:
    A. I do it and get it over with. ☐
    B. It usually takes a while before I get around to doing it. ☐

23. When I am trying to learn something new that I want to learn:
    A. I'll keep at it for a long time ☐
    B. I often feel like I need to take a break and go do something else for a while. ☐

****THANK YOU FOR THE PARTICIPATION****

# Appendix C: Government Schemes Promoting Entrepreneurship in India

1. Prime Minister Employment Generation Programme (PMEGP)
2. Scheme of Fund for Regeneration of Traditional Industries(SFURTI)
3. A Scheme for Promotion of Innovation, Rural Industry & Entrepreneurship(ASPIRE).
4. Janshree Bima Yojana for khadi artisans(JBY)
5. Market Development Assistance(MDA)
6. Scheme for providing financial assistance for R & D activities of Coir Board under Central Sector Plan Scheme of Science & Technology (S&T) of the Coir Board
7. Coir Udyami Yojana(CUY)
8. Coir Vikas Yojna(CVY)
9. Enterprise Development Schemes
10. Agriculture Marketing Schemes
11. Industrial Policy and Promotion Schemes
12. Certified Filing Centres (CFCs) Operated by Professionally Qualified Persons/Bodies to facilitate e-filing of Documents
13. EES Filing scheme & Information
14. Fast Track Exit Mode
15. Petro Chemical Schemes
16. Nutrient Based Subsidy (NBS)
17. DOP Schemes (Dept. of Pharmaceutical)
18. Export Credit Guarantee Corporation of India Limited Schemes
19. Common Effluent Treatment Plants (CETPs
20. SPICES Board Schemes
21. Fellowship of Outstanding Persons in the Field of Culture
22. Building Grants, Including Studio Theatres.
23. Scheme for 'Providing Financial Assistance on Bar-Code' an NMCP Scheme
24. Scheme for 'Promotion of ICT in Indian Manufacturing Sector (ICT)'- an NMCP Scheme
25. 'Micro & Small Enterprises Cluster Development Programme (MSE-CDP)'
26. Credit Linked Capital Subsidy for Technology Upgradation (CLCS- TU)
27. 'Credit Guarantee Fund for Micro and SmalI Enterprises'

28. 'Market Development Assistance (MDA) to MSMEs'
29. Strengthening of Training Infrastructure of existing and new Entrepreneurship Development Institutions'
30. 'Micro Finance Programme'
31. Scheme for 'National Awards'
32. Supporting 5 selected universities / colleges to run 1200 entrepreneurship clubs per annum'
33. Trade Related Entrepreneurship Assistance and Development (TREAD) Scheme to Women
34. Scheme for 'Support for entrepreneurial and managerial development of SMEs through incubators'- an NMCP Scheme
35. Entrepreneurship Skill Development Programmes (ESDP)
36. Vendor Development Programme for Ancillarisation'
37. Scheme for ' Enabling manufacturing sector to be competitive through Quality Management Standards and Quality technology tools'- an NMCP Scheme
38. 'Building Awareness on Intellectual Property Rights' (IPR) for the Micro, Small & Medium Enterprises- an NMCP Scheme
39. 'Lean Manufacturing Competitiveness of Micro Small and Medium Enterprises (LMCS)'- an NMCP Scheme
40. Setting up Mini Tool Room & Training Centres under PPP Mode'- an NMCP Scheme
41. 'Building Design expertise of MSMEs Manufacturing sector (Design clinic scheme)'- an NMCP Scheme
42. Marketing Assistance and Technology Up-gradation of MSMEs'- an NMCP Scheme
43. Scheme for 'Technology and Quality Upgradation (TEQUP) Support to MSMEs'- an NMCP Scheme
44. Coal Loading and Transportation
45. Management of CNG station
46. Allotment of Mother Dairy Milk booths and Safal shops
47. Gopaljee Dairy Milk booths/Milk shops/Retail outlets
48. Common Effluent Treatment Plants (CETPs)
49. Grants-in-Aid for Voluntary Agencies
50. Waste Minimization & Clean Technology
51. Antyodaya Anna Yojana (AAY)

52. Private Entrepreneurs Guarantee (PEG)
53. Pradhan Mantri Mudra Yojana
54. Credit Linked Capital Subsidy (CLCS)
55. Swarojgar Credit Card
56. NABARD Warehousing scheme
57. Centre for Innovation Incubation and Entrepreneurship (CIIE) Scheme
58. Gujarat Venture Finance Limited (GVFL)
59. National Scheme of Apprenticeship Training
60. Technology Development Mission
61. Development of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy (AYUSH) Clusters
62. Extra Mural Research
63. Promotion of AYUSH Intervention in Public Health Initiatives
64. Promotion of Information, Education, and Communication (IEC)
65. Capital Goods Scheme
66. Excise duty concession to PWDs
67. Custom Duty Concession
68. R&D Funding
69. Technology Incubation and Development of Entrepreneurs (TIDE)
70. Special economic Zone Scheme
71. Electronics Hardware Technology Park (EHTP)
72. Duty Exemption & Remission
73. Udyogini Scheme(Women)
74. Namma Magalu Namma Shakthi for Girls insurance facility, Karnataka
75. KSFC Subsidy Scheme
76. Karnataka mahila abhivrudhi yojane (kmay) (For Women Equality)
77. Kittur Rani Channamma award, Cash prize to individuals and institutions (Women)
78. Santhwana Scheme for women victims of dowry, rape, sexual harassment, domestic violence, Karnataka(Women)
79. Scheme of assistance to women for taking up job oriented courses fees, scholarships
80. Skill Development Programme for destitute, orphan, deserted women/children skill development and vocational training, Karnataka
81. Stree shakthi programme in karnataka to provide Fund and training and Marketing (Women)

82. Bhagyalaxmi scheme for girls of below poverty line(BPL), Karnataka (Women)
83. KSIDC(kerala State Industrial Development ) Scheme for Women
84. KSED(Kerala State Entrepreneurship Development)
85. ESS(Entrepreneurial Support Scheme)
86. Scheme for payment of grant under Women's Industries Programme
87. Scheme for providing Margin Money Loan to SSI Units
88. Scheme for providing State Investment Subsidy
89. Reimbursement of One Time Guarantee Fee and Annual Service Fee
90. Women Industry Scheme
91. Self-employment for youth
92. Apprenticeship Training
93. Craftsmen Training (ITIs)
94. Skill Development in 34 Districts Affected by Left Wing Extremism
95. Skill Development Initiative (SDI)
96. Upgradation of ITIs through 1396 PPP
97. Nai Roshni - For leadership development of minority Women
98. Nalanda Project for Minorities
99. Seekho aur Kamao - For skill development of Minorities
100. Research/Studies, Monitoring and Evaluation of Development
101. SIDBI Schemes
102. NABARD Schemes
103. Scheme of Mining' for the mining of Construction Material (Minor Minerals)
104. Seed Money Scheme (SMS)(Maharashtra)
105. Maharashtra Centre of Entrepreneurship Development
106. Distt. Industries Center Loan Scheme
107. National Equity Fund Scheme
108. Self Employment and Talent Utilisation (SETU)
109. Capacity Building and Technical Assistance (CB&TA)
110. North Eastern Development Finance Corporation Ltd. (NEDFi)
111. North-Eastern Region Urban Development Programme
112. North-East Rural Livelihoods Project (NERLP)
113. Advertising and Publicity
114. Rajiv Awas Yojana (RAY)
115. Rajiv Rinn Yojana (RRY)

116. Corpus Fund Scheme (CFS)
117. Delhi Kerosene Free Scheme(DKFS)
118. Aajeevika Skills Development Programme
119. Indira Aawas Yojna
120. Prime Minister's Rural Development Fellows (PMRDF)
121. Provision of Urban Amenities to Rural Areas(PURA)
122. MGNREGA Programme
123. Development/Upgradation of WM and MHP
124. Development of Solar Parks and Ultra Mega Solar Power Projects
125. RDD&D and Manufacture of New and Renewable Energy
126. Wind Resource Assessment in uncovered/new areas under NCEF
127. Yuva Udyamita Protsahan Yojana
128. Rajasthan Financial Corporation (RFC)
129. Rajasthan: Loan Scheme For Young/First Generation Entrepreneurs
130. Rajasthan udyog laghu loan
131. Assistance toWE in Rajasthan
132. DST Rajasthan
133. Financial assistance for Administering Road Safety Programmes
134. National Highway Accident Relief Services Scheme (NHARSS)
135. Providing financial assistance on International Cooperation
136. Performance and Credit Rating Scheme for Micro and Small Enterprises
137. Assistance to Training Institutions Scheme(ATI)
138. Marketing Assistance Scheme
139. Udaan training programme for unemployed youth of J&K
140. National Skill Certification & Monetary Reward (STAR scheme)
141. Pradhan Mantri Kaushal Vikas Yojana
142. Venture Capital Fund for Scheduled Castes
143. International S&T Cooperation (ISTC)
144. State Science & Technology Programme (SSTP)
145. Science and Technology for Weaker Sections (STAWS)
146. Tribal Sub-Plan
147. Science and Technology for Women
148. National Science & Technology Entrepreneurship Development Board (NSTEDB)
149. Critical Technology Programme

150. DBT Schemes
151. National Scheduled Tribes Finance & Development Corporation Schemes
152. NEEDS (New Entrepreneur cum EDS)
153. EDS(Entrepreneur Development Scheme)
154. MSME Funding Scheme
155. General Term Loan Scheme
156. WCTL for Manufacturing Sector Scheme
157. Small Window Scheme
158. Scheme for Purchase of New/used Windmill
159. Bill Financing Schemes
160. Pooled Finance Development Fund
161. NUIS
162. Entrepreneurship Development' Programme For Women Owned Businesses(UP)
163. Gender Budgeting
164. Support to Training and Employment Programme for Women (STEP)
165. Financial Assistance for Promotion of Youth Activities and Training(FAPYAT)
166. National Programme for Youth and Adolescent Development (NPYAD)
167. National Youth Corps (NYC)

# List of Publications and Conferences

1. Sakshi Chhabra, R Raghunathan and NVM Rao(2020)., "The antecedents of entrepreneurial intention among women entrepreneurs", ***Asia Pacific Journal of Innovation and Entrepreneurship***, Vol. 14, No. 1, pp. 76-90

2. Sakshi Chhabra, R Raghunathan and NVM Rao(2020),"Investigating the role of motivation in Strengthening Entrepreneurial Intention among Women Entrepreneurs in India",: ***Springer Nature, part of series Sustainable Production, Life Cycle Engineering and Management: Enhancing Future Skills and Entrepreneurship)***,pp 281-292

***3.*** Sakshi Chhabra, R Raghunathan(2017), "Nurturing Women Entrepreneurship in India through Governmental Programmes: An Oriental Overview", ***12th Biennial Conference on Entrepreneurship),4$^{th}$ EDI Proceedings,*** EDI library

4. Sakshi Chhabra, R Raghunathan(2019) , "Understanding Entrepreneurial Ecosystem and Role of Government in Fostering Women Entrepreneurship in India, ***NIPM NATCON-2019***: National Conference on "India's Changing Paradigm: Skills and Entrepreneurship for Global Competitiveness", September 25-27, 2019.

5. Sakshi Chhabra, R Raghunathan(2016) ,"Sustainable Entrepreneurship through Innovative Pedagogy : A Futuristic Overview" ,***Academic Conferences and Publishing International Limited Reading, UK,*** Proceedings of the 4th International Conference on Innovation and Entrepreneurship The Ted Rogers School of Management, Ryerson University, Toronto, Ontario, pp. 11-20

6. Sakshi Chhabra, R Raghunathan(2019), "Investigating the role of motivation in Strengthening Entrepreneurial Intention among Women Entrepreneurs in India", ***3rd Indo-German Conference on Sustainability in Engineering***, BITS Pilani

**ACHIEVEMENT:**

- Won the Best Poster Award titled "Promoting Women Entrepreneurship in Indian Micro, Small and Medium Enterprises (MSMEs):An Empirical Analysis in the ***4th International Conference on Innovation and Entrepreneurship***, The Ted Rogers School of Management, Ryerson University, Toronto, Ontario, (28-29 Apr,2016)

# BIOGRAPHY OF THE SUPERVISOR

R Raghunathan is an Associate Professor in the field of Strategy and Entrepreneurship. He has served twenty years as faculty member at the Department of Management, Birla Institute of Technology and Science, Pilani, Pilani Campus. For the past two years he is associated with the Department of Economics & Finance, Birla Institute of Technology and Science, Pilani, Hyderabad Campus. He completed Masters in Foreign Trade (Bharathiar University), M.Phil. (Management) (BITS, Pilani) and Ph.D. (BITS, Pilani). He has a broad teaching experience of over twenty years in various fields of Management. His research interests include entrepreneurship, business negotiations, managerial skills and competencies, strategy, international business and channels of distribution. He has been identified as one of “The top 50 Flipped Learning Leaders in Higher Education Worldwide” by Flipped Learning Global Initiative (FLGI). He has been featured in the Annual List 2018 "100+ GLOBAL FLIPPED LEADERS TO LEARN FROM".

# BIOGRAPHY OF THE STUDENT

Sakshi Chhabra is a full time Research Scholar at Department of Management BITS Pilani, Pilani Campus. She has been working on "Promoting Women entrepreneurship in Indian MSMEs: An empirical analysis" as a part of her research thesis. She started her career as a Business Development Executive. She has more than 7 years of work experience and has worked in various roles including an academic assistant, researcher and co instructor to name a few. Her research interests include entrepreneurship, sustainable entrepreneurship, entrepreneurial mindset and entrepreneurship in micro, small and medium businesses. Most of her research work has been published in peer reviewed journals. She has won the best poster award titled "Promoting Women Entrepreneurship in Indian Micro, Small and Medium Enterprises(MSMEs): An Empirical Analysis in the 4th International Conference on Innovation and Entrepreneurship at Ted Rogers School of Management, Ryerson University, Toronto, Ontario, (28-29 Apr,2016) for her research. She is an active member of "Nirmaan (NGO Club at BITS)" and Cultural club PCA (Punjab Cultural Association).