

# Human Capital and Growth of Women Led Fashion and Apparel Firms

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**Abstract** — Human capital in terms of the entrepreneurial family background, educational experience etc., has found to have impact on the performance of the entrepreneurs and has become the important area of entrepreneurial research. The background of the study comes from the growing importance laid on women entrepreneurs and their impact on the economic progress worldwide. According to the Global Entrepreneurship Monitor (GEM), one in eleven (8.9%) women are involved in entrepreneurship across the globe and India occupies the second position among the 22 countries where 14.1 percent of women have ventured into entrepreneurship [16]. With growing importance to the human capital and women entrepreneurs, this study is focused to find the relationship between the human capital and the growth of women led fashion and apparel firms. A self-administered questionnaire was used to collect information on the human capital from the sample in the study area. For the study, the growth of women led firms was classified into four levels based on the two key variables of growth viz., employment generation and the sales turnover. Descriptive statistics with percentage and frequencies was used for analysis of the data collected. Chi-square was used to test the hypothesis.

**Keywords**—Human Capital Variable, Women Entrepreneurs, Micro, small and medium scale enterprises, Fashion and Apparel Enterprises

## I. INTRODUCTION

ENTREPRENEURSHIP has been a male-dominated phenomenon from the very early age, but time has changed the situation and brought women as today's most memorable and inspirational entrepreneurs. It is estimated that women entrepreneurs presently comprise about 10% of the total number of entrepreneurs in India, with the percentage growing every year. If the prevailing trends continue, it is likely that in another five years, women will comprise 20% of the entrepreneurial force [18]. In almost all the developed countries in the world, women are putting their steps at par with the men in the field of business. Recent statistics confirm

that women's economic activities play a crucial role in the growth of many of the world economies [17]. Most of the work conducted considered women's motivations to start a business and the subsequent effect of those motivations on growth [13], [4], the effect of their location, urban or rural, on business performance [15], and the effect of the size and sector on business development [7].

Also, literature on entrepreneurship identifies number of factors that determine the growth of the firms [8], [20]. However, there is no unified theoretical model on firm growth. Some firm growth is motivated by external opportunities and some firms are encouraged by internal inducements. The factors that are focused in the literature are the individual specific characteristics termed as entrepreneurial characteristics, the business characteristics and the firm characteristics [2], [21]. The present work emphasizes the entrepreneurial characteristics which comprises of two key components – the first one comprises of entrepreneurs characteristics such as behavior, personality attitude [21], their capabilities including education and training that create higher expectations in some industry sector. Other entrepreneurial factors identified by [21] are previous management, experience, family history, functional skills and relevant business sector knowledge. Several previous studies [10] found that individual background such as education, former work experience had an impact on entrepreneurial intention and endeavor. Human capital theory is an extension of the individual specific characteristics which generally argues that individuals with more or higher human capital achieve higher performance when executing tasks [3]. Two key demographic characteristics viz., education and experience, underlie the concept of human capital [3]. The knowledge gained from education and experience represents a resource that is heterogeneously distributed across individuals and is thus central to understanding differences in opportunity identification & exploitation [22], [1]. Further, empirical studies have shown that human capital variables are positively related to become a nascent entrepreneur; that it increases opportunity recognition and even entrepreneurial success [1], [12].

Reference [21], suggests the entrepreneurial factors such as previous management, experience, family history, functional skills and relevant business sector knowledge as the important entrepreneurial factors. The effect of education has been widely studied. Empirical evidence on the effects of education

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on firm performance is mixed. In ten out of seventeen empirical studies surveyed [5], a positive relationship between prior level of education and firm performance is found. For many of the women surveyed, the founding of their own enterprise has been the only way of managing economically. From their view point, the previously acquired abilities and skills, a good vocational skill, have been an even more important factor than the economic resources when the firm was established [19]. It is also found that the entrepreneurs are more likely to be from families in which the parents owned a business. However, there is little evidence on the impact of family background on the growth prospects of an entrepreneurial venture [24].

Given that there are different views on the human capital and its impact on the growth of the firms; the objectives of this study are (i) to categorize the human capital variables and (ii) to find the relationship between the human capital variable and the growth of the enterprises.

## II. REVIEW OF LITERATURE

Reference [11], gives the definition of human capital as skills and knowledge that individuals acquire through investments in schooling, on-the-job training and other types of experiences. The model of human capital followed by [3], suggests differentiating human capital into two distinct human capital attributes which includes human capital investments versus outcomes of human capital investments and task related human capital versus human capital non-related to task. The extension of this concept is found in the work done by [9], who suggests the categorization of human capital into two components: General human capital and entrepreneurial specific human capital. The general human capital as cited by [9] includes level of education, business management training, prior work experience, experience in parental business in non-similar industry, management and supervisory experience and business ownership experience. The entrepreneurial specific human capital includes the industry specific training, experience in parental business in similar industry, industry specific experience and age of the firm. Research done by [14], classifies the human capital as generic and specific human capital based on the model proposed by reference [3]. Generic human capital relates to general knowledge acquired by entrepreneurs through both formal education and professional experience. Specific human capital consists of capabilities of individuals that can directly be applied to the entrepreneurial job in the newly created firm. Following the different models proposed based on the original model suggested by Becker, this paper suggests to look at the following attributes of the human capital:

- Education
- Training
- Managerial experience
- Entrepreneurial parental background

## III. MEASURE OF FIRM GROWTH

The independent variable for the study is the growth of the firm which could be measured on the basis of the employment growth and the economic growth. The most common method people use to measure business success is financial worth. The more the entrepreneur and business are worth; the more successful the entrepreneur is considered to be. Reference [6], suggests longevity, turnover from sale and increase in size as measured by the number of employees for measuring the success of the business. Based on the literature the financial aspect of the business in terms of the sales turnover and the employment generation are considered for measuring the success of women entrepreneurs.

## IV. METHODOLOGY

This study requires two-stage research design which comprises of exploratory study and a formal descriptive study.

The first part of the study was intended to explore the constructs to be included in the study that has an impact on the growth of women led fashion and apparel firms. The exploration of the available literature helped in listing of the constructs to be included in the study and defining and redefining the hypothesis.

The exploratory study was followed with the formal study involving the data collection and the analysis of the data to describe the association of human capital with the growth of the women led fashion and apparel firms. The study was a cross sectional in which the data is gathered just once over a period of two months in order to answer the research questions [23]. The hypotheses were tested based on the empirical data collected through the questionnaire. The research design also included the field work through personally administered questionnaire and mailed questionnaires.

Based on the literature review and the research objectives, following hypothesis were derived:

H1: There is an association between the education and the growth of women led fashion and apparel firms.

H2: There is an association between the training and the growth of women led fashion and apparel firm.

H3: There is an association between the managerial experience and the growth of women led fashion and apparel firm.

H4: There is an association between the entrepreneurial parental background and the growth of women led fashion and apparel firm.

To test the hypothesis a detailed survey of the women led fashion and apparel firms was conducted. The criteria for inclusion in this study were that the fashion and apparel entrepreneurial firms are the ones that is owned and managed by women. The study area for the research is Coastal Karnataka and hence the enterprises should operate in geographical proximity of the Coastal Karnataka. The sample for this study focuses fashion and apparel firms owned and operated by women. They were identified from the data collected from District Industrial Centre. A questionnaire was

developed for the study indicating the dependent and independent variables. Accordingly the data was collected and analyzed to list the human capital that are essential for the growth of women led fashion and apparel enterprises.

#### V. DATA COLLECTION AND PROCESSING

The data on the firm growth and the human capital was collected from women entrepreneurs operating fashion and apparel firms in Coastal Karnataka. Proportionate stratified random sampling method was employed to select the women entrepreneurs for the study. The questionnaire was administered for 361 women entrepreneurs which was reduced to 291 based on the complete responses received for the questionnaire. The dependent variable for the study i.e., growth was measured based on the employment generation calculated as employment index and the profit calculated in terms of percentage increase from the start-up. The employment index was calculated as difference between the employment from the year of starting the business and the year of the survey divided by the average of the two. The entrepreneurs were ranked on the basis of their Average Composite Rank Index (sum of ranks obtained on dependent variables/total number of dependent variables) for both dependent variables. Subsequently, the firms were classified into four levels of growth and analyzed for its association with human capital. Data collected were tabulated and processed using SPSS software.

#### VI. RESULTS

The entrepreneurs were classified into four groups of growth for detailed analysis using Delinious Hodges Cumulative Method.

TABLE I  
CLASSIFICATION OF WOMEN ENTREPRENEURS BASED ON THE GROWTH

S.No	Category	f	%
1	Very high (301-400%)	65	22.3
2	High (201-300%)	81	27.8
3	Medium (101-200%)	86	29.9
4	Low (0-100%)	58	19.9

Table I that about 50 percent of women led fashion and apparel firms are classified under very high and high growing firms showing the positive impact of these firms on social and economic measures. About 20 percent of women led fashion and apparel firms are found out to be engaged in low growth.

Table II shows the frequencies of human capital. The table shows about 62.9% possessing education up to 10th standard and the remaining 37.1% possessing education above 10th standard. About 65.6% women entrepreneurs had educational training in fashion design and about 39.5% of women entrepreneurs had entrepreneurial training. About 31.5% of women entrepreneurs had entrepreneurial parental background and about 77.7% had prior experience related to the field before starting the enterprise.

TABLE II  
FREQUENCIES OF HUMAN CAPITAL

S.No	Category	f	%
1	Education		
	Uneducated	1	0.3
	Up to10th standard	182	62.5
	PUC	81	27.8
2	Graduation	27	9.3
	Training (Fashion)		
	Yes	191	65.6
3	No	100	34.4
	Training(Entrepreneurship )		
4	Yes	115	39.5
	No	176	60.5
5	Managerial experience		
	Yes	226	77.7
5.	No	65	22.6
	Entrepreneurial Family		
	Yes	91	31.3
	No	198	68.0

The data on these variables were cross-tabulated to find out the frequency of human capital variable with the levels of growth of the firms. Table III shows the cross-tabulation of the human capital with the levels of growth of the firms.

TABLE III  
CROSS-TABULATION OF HUMAN CAPITAL WITH GROWTH OF FIRMS

S.No	Category	Growth Levels [Values in () represent percentage]			
		Very High	High	Medium	Low
1	Education				
	Uneducated	36(55.4)	29(35.8)	28(32.2)	16(27.6)
	Up to10th standard	29(44.6)	52(64.2)	59(67.8)	42(72.4)
2	Training (Fashion)				
	Yes	53(81.5)	55(67.9)	57(65.5)	26(44.8)
3	No	12(18.5)	26(32.1)	30(34.5)	32(55.2)
	Training (Entrepreneurship)				
4	Yes	39(60.0)	26(32.1)	33(37.9)	17(29.3)
	No	26(40.0)	55(67.9)	54(62.1)	41(70.7)
5	Managerial experience				
	Yes	44(67.7)	60(74.1)	73(83.9)	49(84.5)
5.	No	21(32.3)	21(25.9)	14(16.1)	9(15.5)
	Entrepreneurial Family				
	Yes	19(30.2)	23(28.4)	25(28.7)	24(41.1)
	No	44(69.8)	58(71.6)	62(71.3)	34(58.6)

The table shows that about very high (55.4%) and high (35.8%) growth firms were operated by women entrepreneurs whose educational levels were above 10th standard. The parental background when cross-tabulated did not show any significant impact with the growth of the firms. Previous experience (67.7%), training in fashion design (81.5%) and training in entrepreneurship (60.0%) are shown to have impact on the very high growth of the firms. The association and level of association is inferred through chi-square test and crammer's V test which is shown in table IV. The hypothesis is accepted or rejected based on the chi-square test.

Based on the values found in the table IV, the human capital in terms of education, training specific to the field and entrepreneurship are found to be associated with the growth of the firms. However, managerial experience and entrepreneurial family background are not found to be associated with the firm

growth

TABLE IV  
STRENGTH OF SIGNIFICANCE OF THE HUMAN CAPITAL WITH GROWTH OF  
WOMEN LED FASHION AND APPAREL FIRMS

S.No	Category	Chi-square pvalue	Cramme r's V test	Strength of association
1	Education	0.005	0.21	Moderate
2	Training (Fashion)	0.000	0.25	Moderate
3	Training(Entrepreneurship )	0.001	0.23	Moderate
4	Managerial experience	0.049*		
5.	Entrepreneurial Family	0.341*		

\*are found to be insignificant.

## VII. CONCLUSION

The results reveal that the growth of women led fashion and apparel firms are largely based on the human capital acquired through formal education. Specific human capital in terms of the training in fashion is found to have association with growth. The paper emphasizes that the generic and specific human capital are equally important in the growth of the women led firms. The entrepreneurial family background and the managerial experience however are not found to be associated with the growth of the firm.

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