

## **IDENTIFICATION OF HUMAN CAPITAL DEVELOPMENT FACTORS FOR ENTREPRENEURSHIP: WITH SPECIAL REFERENCE TO LUCKNOW CITY**

**Mrs Akanksha Singh<sup>1</sup> and Dr. Kaushiki Singh<sup>2\*</sup>**

<sup>1</sup> Research Scholar, Department of commerce, Dr. Shakuntala Misra national Rehabilitation University, Lucknow Uttar Pradesh

<sup>2</sup> Assistant Professor, Department of commerce, Dr. Shakuntala Misra national Rehabilitation University, Lucknow Uttar Pradesh

\*Corresponding Author email: [kaushikinirupamsingh@gmail.com](mailto:kaushikinirupamsingh@gmail.com)

### **Abstract**

**Purpose** – This exploratory study's major goal is to examine the specified human capital development required for contemporary entrepreneurs and entrepreneurship.

**Design/methodology/approach** – The author performed a quantitative study using a specially constructed questionnaire, a sample of 480 young people aged between 18 and 35, drawing on a thorough evaluation of the major contributions to research and practise in the area of human capital and entrepreneurship. The responses gathered were analysed using exploratory factor analysis.

**Findings** – The close ended questionnaire identified four key human capitals development needed by entrepreneurship. The determined factors of human capital development extracted through factor analysis are skills, education, career planning and competence for entrepreneurship.

**Research limitations/implications** – The study is based on data collected by a sample of 480 young people from Lucknow city, according to a quantitative approach that focuses on a specific social field, and therefore the results cannot be immediately generalised to other fields.

**Practical implications** – The study identifies the key factors of human capital development needed for entrepreneurship, in order to generate employability and create value.

**Originality/value** – Empirical evidence connecting entrepreneurship with the development of human capital is lacking. This paper has relevance for enterprise assistance organisations looking to stay current with the demands of entrepreneurs striving to build their businesses.

**Keywords:** Entrepreneurship, Human capital development, skills, competence education and career planning.

### **1. Introduction**

In the twenty-first century, entrepreneurship has emerged as one of the key drivers of productivity, innovation, and employment possibilities in all nations, including India. Entrepreneurs are regarded by Yusof as agents of economic change on a global scale and as members of the community who are essential to the growth of a society (Yusof, 2010).

The process of starting a firm and growing it for the sake of social cohesion and the advancement of a country is called entrepreneurship. The process of starting a business demands effort on your part, money, time, and personal fulfilment. Human capital development, on the other hand, considers people to be the most crucial component of any development. Human development extends both inside and outside of individuals. Nowadays,

reducing unemployment and achieving sustainable economic levels are the fundamental challenges to the development of a country's human capital. Therefore, entrepreneurship is a core part of the human capital development (Hafizuddin & Bin Abdul Lattif, 2019).

## **2. Literature Review**

### *2.1. Defining Human Capital Development and Entrepreneurship*

Adam Smith was one of the first proponents of HCD, and he described it as "the acquired and useful skills of all the residents or people of the nation" (Smith, 1776). Similarly, Folloni and Vittadini (2010) has also adopted the same definition in his study. The term "human capital" refers to intangible assets that "manifest as competences and dedication of the individuals i.e. their skills, experience, potential and ability" (Ceridian UK Ltd., 2007:1). OECD(2011) perceives human capital as competencies, knowledge, skills and qualities that individual possesses which empower them to create personal, social and economic importance. According to Muhammad et al. (2014), the decision to invest in human identical to physical capital, depends on the future requirements and developments. There are two key benefits to investing in human resource development: it boosts the nation's labour force productivity and expands job options.

In light of the aforementioned claim, Omolayo (2006) proposed that entrepreneurship is the act of founding a firm, negotiating commercial transactions, and taking risks in order to generate income using the acquired educational skills and knowledge. Further he also identified that entrepreneurship is the process of combining creative and original ideas with managerial and organisational abilities in order to bring together people, money, and resources. According to Jonathan (2010), entrepreneurship is the ability and willingness to create, plan, and run a business endeavour while accepting any risks involved in doing so in order to turn a profit. Operationally, entrepreneurship refers to the attitude and capacity of a person or persons to gain educational skills in order to investigate and take advantage of investment possibilities, develop, and successfully run a business firm. Additionally, entrepreneurial traits may contribute to a new business endeavour depending on the resources amassed through education and experience. Thus, Teece (2011) concurred that there is a close relationship between successful entrepreneurship and the development of human capital. This is understood in light of the fact that entrepreneurs are created via the acquisition of skills, knowledge, and competences. The pursuit of sustainable human capital development is also necessary in order to give individuals the knowledge and abilities needed for employability, job creation, and entrepreneurial growth (Igba et al., 2015).

#### *2.1.1. Education*

Education is the first important factor that is a good indicator of human capital. It was regarded as a formal learning process by Becker (1964). According to him, education is a formally structured method of learning in which information, abilities, and habits related to a certain topic or fields are transmitted. It is regarded as a crucial component of human capital. It was utilised as a measure of human capital in a tonne of empirical research (Mincer, 1958; Schultz, 1961; Becker, 1964; Romer, 1990).

#### *2.1.2. Skills*

It is the capacity to do tasks or activities using an adaptable approach that involves objects or ideas (cognitive skills) and people with different perspectives (interpersonal skills).

### *2.1.3. Competences*

Boyatzis (2008) defines competence as a core trait of a person that may be a purpose, quality, talent, point of view of one's self-image, social component, or body of knowledge that he or she employs. These characteristics manifest themselves in visible and recognisable patterns of behaviour that are related to job performance and frequently include knowledge, skills, and capacities.

### *2.1.4. Career Planning*

When someone intentionally plans their career, they become aware of their own abilities, interests, knowledge, motivations, and other qualities; they learn about possibilities and options; they determine their job-related objectives; and they create action plans to help themselves reach those goals (Dessler, 2008).

## *2.2. Theoretical Review*

### *2.2.1. Human Capital Theory*

Human capital theory (HCT) is a theoretical framework that suggests using education, training, and skill acquisition as a means of increasing production, individual's efficiency, and general socioeconomic growth (Sofoluwe et al., 2013). Human capital theory is the basis for this study's theoretical framework. The classic book on human capital by Schultz and Becker (1993) and the field of microeconomic development theory are the sources of human capital theory. A company can benefit from investing in human capital (Unger et al., 2011). The research claims that investing in human capital increases an entrepreneur's capacity, which helps them take advantage of commercial possibilities. According to Samad (2013) A company that is able to distinguish its brand from rivals through the development of distinctive products will stand to gain in the long run. The elements of production that are utilised to produce products and services but are not heavily consumed during production are referred to as "capital" in economics. All economic sources of production, consumption, and transactions required to transport goods to consumers are controlled by the human factor (Boldizzoni, 2008). This suggests that the main factor in manufacturing that adds value to the process is human capital. Thus, this idea serves as the study's foundation. The investment on human capital is an advisable and productive deal similar to investment in nation's physical assets (Olaniyan&Okemakinde, 2008).

### *2.3. Empirical Review*

Becker came to the conclusion that the national economy can generate the greatest amount of income by investing in human capital, which will spur economic growth. These investments also help to assess the demand for fresh information, innovation that advances the technological sector, and the general advancement of a nation (Becker, 1964). This means that only when human capital is utilised, fostered, and developed then only entrepreneurship and entrepreneurs can flourish. According to some academics, rather than firm ownership, the success of entrepreneurs can be linked to their better human capital (Sanders and Nee, 1996, Borjas 1990). Åstbro and Bernhardt (2005) argue that, those with the strongest human capital are best eligible to be entrepreneurs. Igba et al. discovered in his finding that young people and recent graduates

who are ready and competent to work are unable to do so because they lack the fundamental knowledge(education), skills and competences needed to launch a business. People in this circumstance become dissatisfied because they are unable to handle the constant barrage of family and social obligations. These inexperienced young brains may be used by dishonest people in the community to commit all kinds of crimes and mayhem, which they would outright detest if they were actively involved in something constructive—a benefit that entrepreneurship offers to both individuals and society as a whole. Entrepreneurship can only grow and thrive if human capital is properly harnessed, nourished, and developed. Entrepreneurship would remain a faraway dream without strong human capital (Igba et al., 2015). Thus, this develop author interest in identifying the determined factors of human capital development for entrepreneurship.

Therefore, present study depicts the result on human capital development factors for encouraging entrepreneurship considering young people between 18-35 age of Lucknow city. This would enable important findings and conclusions to be drawn from the investigation, which would then enhance the argument for the development of human capital components for entrepreneurship. The paper stat from the general overview about entrepreneurship and human capital development. Further, put light on relation between them through various literatures followed by research methodology adopted to explore factor of human capital development and encouragement of entrepreneurship. Next section present finding and analysis done using descriptive statistics and exploratory factor analysis. Lastly, study present its conclusive remark along with recommendation, limitation and its future implication.

### **3. Research Objective**

The crucial human capital development determinants for entrepreneurship in the context of youth have barely been explored. The majority of the literature is from a Western viewpoint, and there aren't many actual studies on how young people in Lucknow City are developing their human capital and engaging in entrepreneurship. As a result, the prime objective of this research article is to identify the human capital development elements for promoting entrepreneurship among young people in Lucknow.

### **4. Research Methodology**

#### *4.1. Research Design*

The nature of the current study is exploratory and descriptive. The exploratory factor analysis statistical method was applied in SPSS 26 V to investigate and discover the determining variables of human capital development for entrepreneurship.

#### *4.2. Data collection*

Use of both primary and secondary data were done in the study. The primary data were collected from the sources listed in Table 1 using a questionnaire. Additionally, secondary information was gathered from pertinently published research papers and articles.

**Table 1**

Construct	Ref. for construct	Sub-construct	Ref. for sub-construct	Ref. of instrument
Human Capital Development	Khayinga, C. M., & Muathe, S. (2018)	Education	Khayinga & Muathe, (2018)	Mubarik, M. S. (2015)
		Skills	Khayinga & Muathe (2018)	Mubarik, M. S. (2015)
		Career planning	Khayinga & Muathe (2018)	Chetana, N., & Mohapatra, A. K. (2017)
		Competence	Boyatzis (2008)	Boyatzis (2008)

#### 4.3. Data gathering

To examine the prime objective of the study the data were gathered from youth (age between 18-35) of Lucknow city. A Likert five-point scale questionnaire were distributed among 510 respondents out of which 480 complete responses were received. Questionnaire consist two section i.e section A and section B. Section A is of demographic profile and section B consist four sub section which represent factors of human capital development.

### 5. Analysis and Discussion

#### 5.1. Demographic profile of respondents

The demographic profile of respondents was analysed through frequency and percentage as shown in Table 2. Out of total 480 respondents, majority of them i.e., 276 (57.5 percent) were males and 204 (42.5 percent) were females. In the questionnaire, the age-group was divided into two categories, 18-24 years, and 25-35 years. Table 2 shows that, highest percentage of the respondents belonged to age group 18-25 years (57.1 percent), followed by 42.9 percent respondents of the age group 25-35 years. Lastly, education is considered as one of the main parameters of human capital development. As expected, the educational qualifications of the respondents are moderately good. Out of 480 respondents, 35 percent of respondents were Graduate, 33 percent of respondents were Post Graduate, 26 percent of respondents were 12th pass, whereas only 6 percent of respondents completed professional courses.

**Table 2: Demographic Profile of Respondents**

Demographic Profile	Frequency	Percentage (%)
GENDER		
Male	276	57.5
Female	204	42.5
AGE GROUP		
18-24	274	57.1
25-35	206	42.9
ACADEMIC QUALIFICATION		
12th pass	123	25.6
Graduation	168	35
Post-graduation	160	33.3

Professional	29	6
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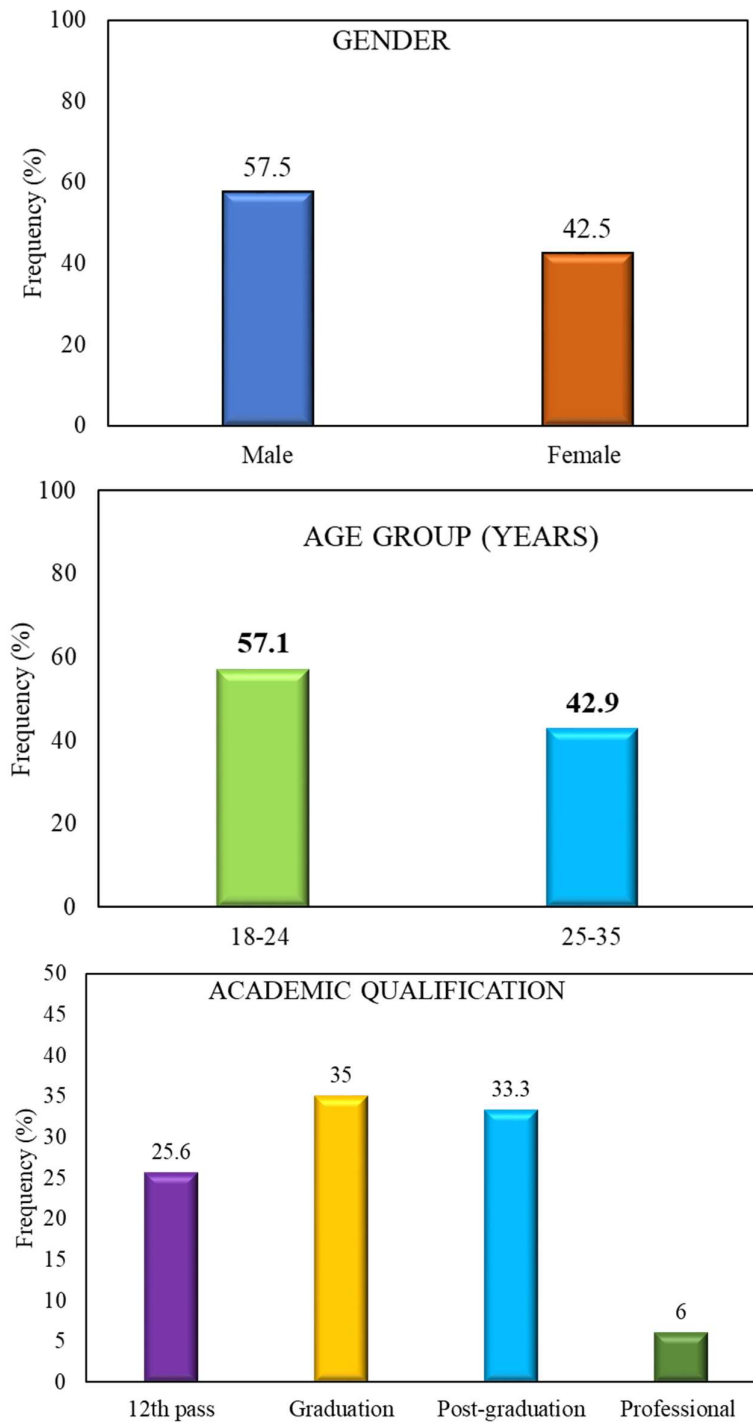


Fig: 2.1

### 5.2. Reliability Scale

Reliability of the scale items is tested using Cronbach Alpha Coefficient. From the observation of the table, it is understood that “item to total correlation”, i.e., correlation of all 14 items with their total sum score varies from 0.389 (Item 4) and 0.956 (Item 14). This indicates that there have been sufficient positive correlation values of at least 0.572 for all items in the scale measuring underlying dimensions of human capital development. As there is sufficient correlation between each item and total sum score, all these items in the scale are considered to be internally consistent with each other in measuring human capital development for entrepreneurship. Data of these 14 items are valid items.

It is further apparent from the table that the Cronbach’s alpha reliability coefficient is 0.970, indicating that the degree of internal consistency among 14 items in the scale measuring human capital development has been Excellent. As the scale items measuring human capital development for entrepreneurship are highly reliable and internally consistent, further analyses have been carried with collected data.

After ascertaining the reliability of the items in the scale measuring human capital development, the underlying dimensions of human capital development are evaluated using principal component factor analysis with Varimax rotation.

**Table 3: Reliability Analysis**

Sr. No	Description of Scale Items	Item Total Correlation	Cronbach's Alpha if Item Deleted
1	HCD 1	.694	.976
2	HCD 2	.910	.968
3	HCD 3	.877	.980
4	HCD 4	.389	.972
5	HCD 5	.931	.968
6	HCD 6	.909	.968
7	HCD 7	.954	.967
8	HCD 8	.890	.968
9	HCD 9	.825	.969
10	HCD 10	.790	.969
11	HCD 11	.868	.968
12	HCD 12	.787	.969
13	HCD 13	.603	.970
14	HCD 14	.956	.968

<b>Cronbach's Alpha Reliability Coefficient</b>	0.970
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**5.3. KAISER-MEYER-OLKIN AND BARTLETT'S TEST**

The KMO and Bartlett test evaluate all available data together. **A KMO value over 0.5 and a significance level for the Bartlett's test below 0.05 suggest there is substantial correlation in the data.**

**Table 4: KMO and Bartlett's Test**

<b>KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.721
Bartlett's Test of Sphericity	Approx. Chi-Square	8631.8 10
	df	302
	Sig.	.001

As per the above, KMO value is 0.721 which is greater than 0.5 indicating that the sampling is adequate and p value is .001 which is lesser than 0.05. Hence, it is adequate to conduct factor analysis for the given data.

**Table 5: Eigen values of Factors Underlying dimensions of human capital development.**

	<b>Total Variance Explained</b>								
	<b>Initial Eigenvalues</b>			<b>Extraction Sums of Squared Loadings</b>			<b>Rotation Sums of Squared Loadings</b>		
<b>Component</b>	<b>Total</b>	<b>% of Variance</b>	<b>Cumulative %</b>	<b>Total</b>	<b>% of Variance</b>	<b>Cumulative %</b>	<b>Total</b>	<b>% of Variance</b>	<b>Cumulative %</b>
1	18.466	76.943	76.943	18.466	76.943	76.943	18.466	76.943	76.943
2	1.324	5.515	82.458	1.324	5.515	82.458	1.324	5.515	82.458
3	1.070	4.457	86.915	1.070	4.457	86.915	1.070	4.457	86.915
4	.671	2.794	89.709	.671	2.794	89.709	.671	2.794	89.709

As shown in Table 5, the initial eigen values, that is eigen values before Varimax rotation, for first four factors are above one, indicating these are major aspects underlying dimensions of human capital development. The above factor of human capital development together explains 89.71 per cent of the variances in the actual data pertaining to dimensions of human capital development.



**Table 6: Factor Loadings of Items with Extracted Factors (After Varimax Rotation)**

<b>Rotated Component Matrix</b>				
Coding	Component			
	1	2	3	4
HCD 1	.742			
HCD 2	.942			
HCD 3	.904			
HCD 4				.409
HCD 5				.958
HCD 6				.935
HCD 7			.968	
HCD 8			.912	
HCD 9			.860	
HCD 10			.800	
HCD 11		.598		
HCD 12		.514		
HCD 13		.544		
HCD 14		.545		
Extraction Method: Principal Component Analysis.				
Rotation Method: Varimax with Kaiser Normalization.				
a. Rotation converged in 5 iterations.				

Table 6 depicts that there are 14 items in four components (as shown in Table 7) extracted from human capital development factor data.

Table 7

Coding	Name of sub construct	No. of items
HCD 1, HCD 2, HCD 3.	SKILLS	3
HCD4, HCD 5, HCD 6.	EDUCATION	3
HCD 7, HCD 8, HCD 9, HCD 10.	COMPETENCE	4
HCD 11, HCD 12, HCD13, HCD 14.	CAREER PLANNING	4

## 6. Conclusion

In current scenario, human capital development is one of the important and emerging field across the globe. The empirical study was endorsed by respondent and conform the literature. Four component were identified namely skills, education, competences and career planning as determined factors of human capital development for developing entrepreneurship among youth. As mention in study of Igbaet al. (2015) entrepreneurship can only be possible with strong human capital.

## 7. Limitation and recommendation

The study is constrained since it only takes into account youngsters in Lucknow who are between the ages of 18 and 35. The government should also actively participate in human capital development to provide an enabling climate for entrepreneurial businesses to prosper.

## 8. Future scope

To generalise the findings, the study must be conducted in other states and countries. As for the implications of the findings, the authors contend that by paying particular attention to the entrepreneurially oriented human capitals of nations, notably Lucknow, investigated in this research, they may increase their employment rate and value generation.

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