INDIVIDUAL HUMAN CAPITAL FORMATION THROUGH BASIC SKILLS – AN EXPLORATORY STUDY

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Abstract

The blend of skills and knowledge is referred to as the Human Capital Formation. In the contemporary period, there has arisen a need for the individuals to concentrate on their basic skills, soft skills, employability skills along with their educational knowledge to have an overall growth in the career. The basic skills include the LSRW skills, Decision making skill, Problem solving skill, Logical Reasoning, Technical know-how, etc. These basic skills of individuals may be influenced by various factors including their personal characteristics and other circumstantial elements. This paper is empirical and exploratory in nature. The objectiveof this paper is to evaluate the influence of personal traits on basic skills of an individual. Basic skills are measured in Likert scale, demographic factors are also accounted for the study. 500 responses are used for the study which shows that there are certain factors influencing the basic skill of an individual.

Key words: Individual human capital formation, Basic skills, LSRW skills, Problem solving, Personal characteristics.

Introduction

Human Capital is an intangible resource and has been defined by researchers and organisations in numerous ways. The origin of the concept of Human Capital can be traced to the work of Adam Smith in the 18th Century. He underlined the importance of the acquired and useful abilities of all the inhabitants or members of the society. An individual will incur costs to obtain such abilities, once acquired they stand as "a capital fixed and realized, as it were, in his person."

Review of Literature

Theodre W. Schultz (1961) specified about human capital in an article in the American Economic Review. He stated that human capital should be considered as an investment just like others in a business.

Brooking (1996) describes that assets connected with human refer to skills and expertise, problem solving ability, leadership styles and abilities and everything that is personified in the employees.

Dess and Picken (1999) define human capital as deeply embedded and is inseparable from abilities, knowledge, skills or experience. They categorised human capital such as action skills, information gathering skills, information processing skills, communication skills, experience, knowledge, social skills, view on value, belief and attitude.

Lynn (2000) considers human capital embraces all the skills and capabilities of the people working in an organisation, it can be seen as an inventory of individual's skill and knowledge within an organisation.

Human capital refers to the people who possess skills, experience and knowledge and are of economic value to organisations.

De La Fuente and Ciccone (2002)states that the build-up process of the human capital is also vital. The composition of knowledge and skill is referred to as the human capital.

Rastogi (2002) "knowledge, competency, attitude and behaviour embedded in an individual" as the description of human capital.

Obisi (2003)noted that through education, specific human capital abilities can be learnt which may include acquisition of knowledge relating specifically to concepts, development of abilities and development of skills, attitudes.

Objectives of the Study:

1. To know the demographic profiles of the student respondents.

2. To identify the underlying latent dimensions of Basic Skills variables.

3. To study the influence of personal characteristics on total Basic Skills.

Hypothesis for the study

Null Hypothesis (H_0):

1. The personal characteristics of student respondents doesn't influencethe total basic skills.

Research Methodology

The intention of this exploratory study is to examine the basic skills acquired by the students of selected colleges from Chennai city. The scope of the study is restricted to the limits of Chennai city only. The study is analytical in nature and primary data was collected through a well-designed structured questionnaire using simple random sampling. 645 questionnaires were administered to the respondents and

529 filled questionnaires were received and only 500 questionnaires were usable. The demographic profiles were measured through nominal and ordinal scales. The level of basic skills acquired was measured using 5 point Like art scale from Strongly Agree to Strongly Disagree. To check the internal reliability of scale, Cronbach's Alpha reliability coefficient was used. The value being 0.756, scale is fairly consistent and reliable. The data collected were subjected to Percentage analysis, Descriptive Statistics, Factor analysis and Multiple Regression using SPSS Version 17.

Analysis and Discussions

Table 1
Demographics of the Respondents

Gender	Male	379 (76%)
	Female	121 (24%)
Education level	BE	272 (54%)
	BA/B.Sc	77 (16%)
	MBA/MCA	151 (30%)
Father's Educational level	No formal education	101 (20%)
	School	140 (28%)
	UG	177 (35%)
	PG	82 (17%)
Mother's Educational level	No formal education	143 (29%)
	School	126 (25%)
	UG	153 (30%)
	PG	78 (16%)
Father's Occupation	Government	142 (28%)
	Private	151 (30%)
	Self-employed	170 (34%)
	Retired	37 (08%)
Mother's Occupation	Home maker	317 (63%)
	Government	77 (16%)
	Private	81 (16%)
	Self-employed	25 (05%)
Age	Mean	20.51
	Standard Deviation	1.803
	Median	21
	Mode	20
	Skewness	-0.111
Family Members Employed	Mean	1.7
	Standard Deviation	0.913
	Median	2
	Mode	1
	Skewness	1.681

Table 1 shows that majority of the respondents are male (76%), pursuing their UG degree (70%). A sizeable number of respondents' parents are graduated. Majority of the respondents' father are self-employed and mothers are home makers. The average age of respondents is 21 years and that of number of family members employed is two.

The factor analysis has been applied to understand the underlying dimensions of 10 Basic Skills variables and reduce them into a limited number of manageable and independent factors. The Principal Component Analysis of Extraction Method and Rotation Method of Varimax with Kaiser Normalisation has been used in the factor analysis and the results are shown in the tables 2 to 5.

Table 2

Descriptive Statistics, Communalities and MSA of Basic Skills Variables

Basic Skills Variables	Mean	S.D	Communalities	MSA
Reading	4.480	0.745	0.632	0.767
Writing	4.470	0.608	0.611	0.792
Speaking	4.370	0.715	0.605	0.737
Listening	4.440	0.651	0.562	0.781
Mathematics	3.890	1.009	0.856	0.741
Creative Thinking	4.270	0.714	0.391	0.766
Decision Making	4.290	0.697	0.627	0.742
Problem Solving	4.160	0.790	0.563	0.786
Technical Know-how	3.930	0.830	0.549	0.836
Logical Reasoning	4.040	0.807	0.522	0.817

Table 3

KMO and Bartlett's Test for Factorization of Basic Skills Variables

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	**0.779**
Bartlett's Test of Sphericity Approx. Chi-Square	**1134.221**
Df	**45**
P-Value	**0.000**

Table 4

Variance Explained by Basic Skills Factors

Rotation Sums of Squared Loadings			
Component	**Eigen Values**	**% of Variance**	**Cumulative %**
1	2.541	**25.412**	25.412
2	2.255	**22.548**	47.961
3	1.121	**11.210**	**59.171**

Table 5
Basic Skills Factors

Factors	Basic Skills Variables	Factor Loading
Factor 1 **Cognitive factor**	Decision making	0.766
	Problem solving	0.731
	Logical reasoning	0.711
	Technical know-how	0.710
	Creative thinking	0.560
Factor 2 **Language factor**	Reading	0.768
	Writing	0.762
	Speaking	0.747
	Listening	0.674
Factor 3 **Numerical factor**	Mathematics	0.891

The tables 2to 5show that with the range of communalities of the 10 Basic Skills Variables from 0.391 to 0.856 and that of MSA from 0.737 to 0.836 reveal that those 10 Basic Skills variables can be factorized. KMO Measure of Sampling Adequacy Value of 0.779 and Chi-Square Value of 1,134.211 at d.f of 45.00 with P-Value of 0.000 in Bartletts' Test of Sphericity reveal that the Factor Analysis is applicable for factorization of Basic Skills variables.

Three factors have been extracted and they explain **59.171%** of the variance in the 10 Basic Skills variables. The most dominant factor is Factor 1 with the explained variance of **25.412%** and it has 5Basic Skills Variables namely, Decision making, Problem solving, Logical reasoning, Technical know-how and Creative thinking in the order of importance of their correlation with it and therefore, it has been labelled as **Cognitive Factor**.

The second most dominant one is factor 2 with the explained variance of **22.548%** which consists 4 Basic Skills Variables namely, Reading, Writing, Speaking and Listening in the order of importance of their correlation with it and has been named as **Language Factor**.

The third most dominant one is factor 3 with the explained variance of **11.210%** which consists of 1 variable namely Mathematics in the order of importance of their correlation with it and has been named as**Numerical Factor**.

Thus, 10 Basic Skills variables have been reduced to three independent factors of which the most dominant one is Cognitive Factor followed by Language Factor and Numerical Factor.

The Multiple Regression Analysis has been applied to study the significance influence of the personal characteristics on the total basic skills and the results are shown in tables 6 to 8.

Table 6
Multiple Regression Results of influence of Personal Characteristics on Total Basic Skills

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.265	0.070	0.053	4.15548

Table 7

Analysis of Variance of influence of all Profiles on the Total Basic Skills

		Sum of Squares	Df	Mean Square	F	Sig.
Model	Regression	640.549	9	71.172	4.122	0.000
	Residual	8461.329	490	17.268		
	Total	9101.878	499			

Table 8
Profiles significantly influencing and not influencing the Total Basic Skills

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Inference
		B	Std. Error	Beta			
	(Constant)	33.729	2.466		13.677	0.000	
	Age	0.229	0.117	0.097	1.967	0.050	S
	Gender	0.239	0.503	0.024	0.474	0.636	NS
	Edn. Level	-0.051	0.260	-0.011	-0.197	0.844	NS
	Father's education	0.641	0.274	0.149	2.340	0.020	S
	Mother's education	-0.163	0.281	-0.040	-0.578	0.563	NS
	Father's occupation	0.285	0.207	0.063	1.382	0.168	NS
	Mother's occupation	-0.176	0.219	-0.038	-0.801	0.423	NS
	Monthly Income	0.755	0.208	0.176	3.626	0.000	S
	No. of family members employed	0.167	0.215	0.036	0.778	0.437	NS

Table 6 to 8 show that age, father's education and monthly income have significant positive influence on Total Basic Skills. As the age, father's education level and monthly income increases the basic skills acquired by the students too increases. Other characteristics like gender, educational level, mother's education, father's occupation, mother's occupation and number of family members employed doesn't have significant impact on the total basic skills acquired.

Findings and Suggestions

1. The students prefer the cognitive skill compared to the other skills. Math skill is the least considered by them which has to be looked upon.
2. As age increases, the basic skills also increase. It is imperative that, as one ages his exposure and capacity increase which results in increased basic skills. This would be possible only when he exposes and builds his capacity. Therefore, the students should expose themselves to various avenues of capacity building activities.
3. It is an interesting fact that the increase in students' fathers' education increases the students' total basic skill. It may be due to the guidance and monitoring that the respondents receive from their fathers'. Therefore, it is also advisable that a learned father may improve the basic skill of his ward.
4. Higher monthly income of the respondents also leads to increase in total basic skills. This may be due to the fact that the bumper income enables the students to get exposed and to learn an additional skill which boosts and enhances their total basic skills. Hence, the students with high income background should share their expertise to the other marginalised students which may also increase the total basic skills.

Limitations of the study

1. The study has been conducted only on students with respect to Chennai city. Thus, the conclusions cannot be generalised.
2. The responses may vary over time as they are associated with insights and traits.
3. The responses are personal estimations of the respondents and are subjected to error.

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