



The Review of Human Development Index to Determine the Contribution of Higher Education in the Education Index

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ABSTRACT

The present study was undertaken with the aim of the review of the human development index to determine the contribution of higher education in education index. The population under study consists of two: a) In the quantitative part All staff and authorities in some parts of the departments of Education, Islamic Azad University, Payam Noor, National, Medical and Bushehr provinces who are college educated. B) In the qualitative part faculty members of national universities, medical sciences, Islamic Azad and Payam Noor Bushehr province provinces. Sampling in this study was a multi-stage cluster sampling that was carried out in two stages. A) Theoretical sampling for qualitative research, the sample included a number of experts in the field of human development, which faculty members sampling were targeted. In order to interview with faculty members of these persons were invited and interviewed. b) Sampling for quantitative research, sampling in this study was a multi-stage cluster sampling. Two instruments were used in this study: In the quantitative questionnaires and qualitative interviews. Data analysis included confirmatory factor analysis. Results were as follows, higher education through: impact on the living standards of the share of recurrent expenditure on higher education, higher education scholarships to cover the gross rate influence on the education of the influence of human.

Keywords: human development index, higher education, education, Health, Income, life expectancy.

INTRODUCTION

Nations tendency to get the common wealth and improvement which is accompanied with keeping the humanity munificence and identification. Has a root in history, this subject has been considered in these decades as improvement. Improvement is consisted of changes which case a movement of a social system from undesirable situation life style to the better one. These changes are holed by a collection of social aims and a group of deliberated process which has role in this change like economic, social, cultural and political process [14].

Nowadays, development is considered to just as a commercial laws (axle) but is considered as cultural and knowledge to make development clear, it needed to discuss about development in different ways as extending the ability of mental capacity, knowledge quality, technical proficiency, invention and, human being capability to solve the commercial, social, cultural, and political problems and making situation to import of society sources, facilities and abilities and totally, upgrading the material and immaterial situation of life for all [44]. In another word, improvement is a connection of executive and pervasive (universal) process which is begun by human and it fallows the objection of making the existence situation of all society people better [31]. Human improvement is consist of the process of the extensional people choices that lead to a long and health life knowledge achievement, and new standard of life, enjoyment achieving knowledge and enjoying new standards of life. Another choices include political liberality, ensured human law, and self-esteem [44].

Universities have essential role to create invention theories, to make collection, and to transfer the knowledge. Although, the motor needed producing knowledge to get improvement, just would get start from research and instruction, would lead to help producing proficiency, management, improvement, social engineering change, and to keep cultural and social valor [5].

Advanced instruction is the most important factor in stable human improvement. Nelson Mandela believes that instructions is the most powerful weapon to change the world. Instruction is considered extendedly a real tool to reinforce commercial growth social and private cases [3].

United Nations Organization manifests would clear the important place of advanced instructure.

In conversation of today improvement. Universal bank points to advanced instruct true directly and believes that more and better availability to advanced improvement which is accompanied with national intentional and effective systems can help the improving process of a country to reach stable improvement

and especially to realign some observation that is invalid all instruction level, length of lifetime and equality of sexes, advanced instruction is one of immense important form of investment in human investment (finance – enterprise)[44].

In fact we can call advanced instruction as high level or special form of investigation that has great portion in commercial growth. Advanced instruction, correctly is considered as improvement another in new international economy. Advanced instruction portion in improvement is varied, as: helping to make economy industrial, supplying human with professional proficiency, technical and managing. Power in the present situation of knowledge and informational society, not only the advanced instruction play a role of treating human force but also, create knowledge which is the milestone factor of commercial growth. Finally, the most important thing is that advanced instruction by education and research help to absorb, create and broadcast the knowledge and play a great role to form a powerful government and being universal[13,19,41].

Problem proposing

Based literary and instruction, seldom, would cover the needed work proficiency which can secure the real low or the acceptable level of life of people. Nowadays, asking for job for high level of education clerks is a lot.

This case, especially in the situation of being universal will lead to get better working chances and to care higher payments for educated person and will have direct affection on advanced instruction. The new analysis show that Advanced instruction play an important role in improvement [43].

Advanced instruction has essential and important role in human, social, and commercial development. One of the most important purpose of advanced instruction is building advanced and improved society which is adapted to new science and technology [41].

Advanced instruction and instruction in an extended content of itself is known as the most important tool to get the stable improvement. In fact advanced instruction in Iran plays an important role to achieve the improvement objectives. The main task of advanced instruction system of Iran are: acquisition, training, researching and play role to get the stable improvement and upgrade the society situation specially. It means that make high qualified graduated people and deliver them as a responsible citizen to the society and provide good chance to learn in a higher level or having ability to learn through the lifetime. Knowledge and instruction are infrastructure of improvement. Advanced instruction is consider as an essential pillar of human improvement which all over the world [12]. Educated people with improve the capacity and proficiency analyzing which can move the economy and support the society and get some decision that effect all the society [11].

According to this point that universal improvement has had increasing progress through these years, the famous scientists believe that , energy, first materials, or asset could not be really the essential factor in human improvement, but Advanced instruction the country improvement in any way of scientific, cultural, social is a production of optimized function of fragment systems of that country. If in a common situation, each of this fragment system of their task in a good way, it would be possible to get the prolific though growth in the low level for most of the people of society and scientific improvement for the high level of it. One of the systems which has a great role in improving process of the country is advanced instruction .Now days, instruction and researching institutes, and on the head of them universities have a great role to make a program for a country. Each country advanced instruction is one of the effective factors to get the social, cultural and economic improvement policies. Treating proficient human forces as a countries improvement base, knowledge production, knowledge research would happen by universities and advanced instructional centers [25].

Generally the situation of being flourished and inflorescence of each country is hidden in human asset improvement and their treatment and improvement and treatment is also applied by university instruction [23].

MATERIALS AND METHODS

Tools for data collection and performance

The instruction of gathering data in this research are:

A- Interviewing

To categories the primary components of this research, interviewing has been utilized to catch this aim members of university faculty members in courses like: instructional management, instruction curriculum, lesson curriculum have been the philosophy of acquisitioned treating have invited to codify the primary components in a session[12].

B) Questionnaire

- After playing the interviews and codifying the primary components of human development. We'll receive the second part of research.

In this research to collect the needed information which are related to the human development components, questioner is used that is confide based upon applied interviews.

Statistical modifying of the model components

Statistical modifying of the model components is described in following table in which for all factors and the components of the research model, average, and variance, it is expressed, as identified in this table, the average of all factory are above of 3, and the factor of life standards has 4. 04 average as the highest average and after it acquisition factor has 4.01 has the second degree and their factors higher than the mean and are in a same level.

Table1-Mean and Standard Deviation of the Research Variables

Factor	Indicators	Mean of indicator	Mean of factor	Standard deviation of indicator	Standard deviation of factor
Living Standard	GDP per capita	4.12	4.04	0.6	0.7
	Current Cost of Higher Education share of GDP	3.96		0.8	
Education	Gross rate of educational coverage ratio in higher education with coefficient of $\frac{1}{100}$	4.02	4.01	0.77	0.79
	Combined enrollments at all levels with coefficient of $\frac{1}{100}$	3.97		0.86	
	Adult literacy rate with coefficient of $\frac{1}{100}$	4.04		0.75	
Health	Life expectancy	3.92	3.92	0.68	0.68

Education

The result of the analysis of indicators of educational component is presented in table number 2 and the figure 1 and 2 according to the standard models and T- value. Also the load factor of each diverse in standard form has been expressed. As it is visible in figure 1, two indicators of impure rate of educational cover in advanced instruction and the rate of adults literate has the highest in instruction component.

Table 2: Load factor of education

Indicators of Education	Fitting IndicatorRMSEA	Significant level	T-Value for Statistical Model	Chi-Square	Load factor
Gross rate of educational coverage ratio in higher education with coefficient of $\frac{1}{100}$	0.066	0.000	23.01	1.23	0.95
Combined enrollments at all levels with coefficient of $\frac{1}{100}$	0.066	0.000	21.14	1.23	0.9
Adult literacy rate with coefficient of $\frac{1}{100}$	0.066	0.000	22.99	1.23	0.95

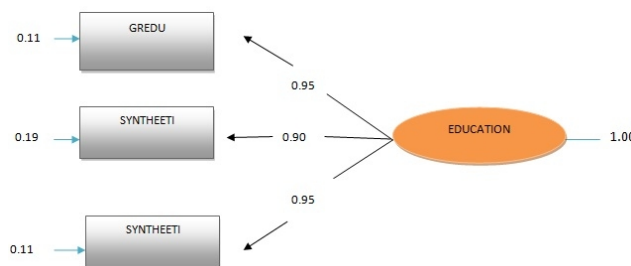


Figure 1: Load Factor for Education

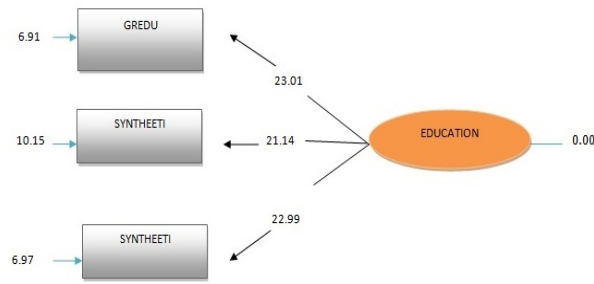


Figure 2: T-Value for Education

Human Development Index adjusted based on the Higher Education (Dependent Variables of Model)

To assess the dependent variables of model from correlation a main factors are used to form the research model. So, in this model we can get the aim (dependent variables of model) for these a factors if, they have positive and high criterion with adjusted human development indicate according to advanced instruction. The following table (2) shows that all factors with adjusted human development indicate according to advanced instruction in the level of 95, has high positive correlation which is meaning full. So, the justifiability of all of them and finally the question form will be accepted.

Table3: Load Factor for Human Development Index adjusted based on the Higher Education

Human Development Index adjusted based on the Higher Education	Fitting Indicator RMSEA	Significant level	T-Value for Statistical model	Chi-Square	Load factor
Life Standard	0.012	0.000	12.99	7.23	0.74
Education	0.012	0.000	14.48	7.23	0.84
Health	0.012	0.000	10.44	7.23	0.59

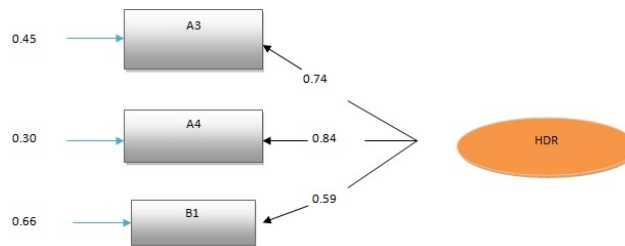


Figure 3:Load Factor for Human Development Index adjusted based on the Higher Education

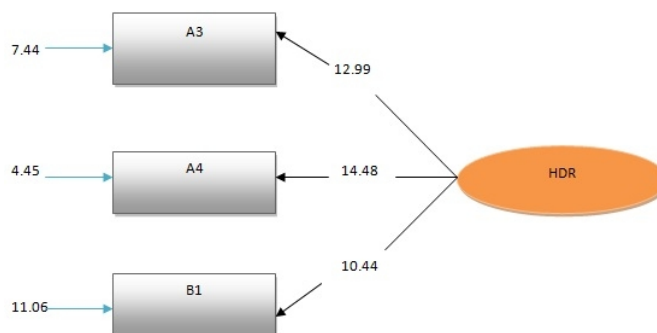


Figure 4: T-Value model for Human Development Index adjusted based on the Higher Education Criterion-related validity

To calculate the Criterion-related validity is determined by three key factors of research model. Therefore, in this model, these three factors validity depends positively Criterion-related validity descriptive statistics indicators, human development moderated on Higher Education have. Following table (Table 4) shows that all of the human development index adjusted based on higher education in ensuring 95% have a positive and significant correlation. Thus, the criterion-related validity, and consequently they all questionnaires confirms.

Table 4: Correlation between variables

Human Development Index adjusted based on the Higher Education	Health	Education	Standard of life	Factors
0.45	0.44	0.56	1	Standards of living
p-value:0.002				
0.38	0.33	1		Education
p-value:0.001				
0.31	1			Health
p-value:0.001				
1				Human Development Index adjusted based on the Higher Education

The Result of Model Solving by Path Analysis

The result of model solving with the method of analysis way.

- To assess the next theory, it is needed to test and process the recommended model first.

So, by using the lizrel software 8.5 the structural model of research was designed and tested. According to the limitation of the software to process a huge number of given data parameter, the average of the received answers for each dimension is utilized as needed data for the test. The received result of solving that is reported in table number 5 and the next part as it is visible, most of the processing indicators which are derivate from the software, show the perfect processing of data in the model.

Table 5: Fitting Indicators of the model

Indicators	Proposed model	Satisfactory level
Chi-Square to Degree of Freedom	4	Less than 3
RMSEA	0.037	Less than 0.08
GFI	2.33	More than 0.9
AGFI	0.06	More than 0.9
NFI	0.78	Between 0.8 and 0.9
NNFI	0.97	More than 0.9
CFI	0.98	More than 0.9

The testing result after running by the software is formed as the figure number 5 and table number 6 generally to assess the rate of the correctness of the relationships (acceptance or rejection of relationships which are defined in the model of the research) and all the cases between the diveses are spotted and for each way and probe level are checked. According to the received proportion statement giving would be possible.

Table 6: the result of testing path

Path		Prob. Level	T Statistic
From	To		
Path no 1:Health	Adjusted Human Development Index	0.000	2.15
Path no 2:standards of living	Adjusted Human Development Index	0.000	1.99
Path no 3:Education	Adjusted Human Development Index	0.000	2.18
Path no 4:Health-standards of living	Adjusted Human Development Index	0.45	1.07
Path no 5: standards of living-Education	Adjusted Human Development Index	0.000	5.23
Path no 6:Health-Education	Adjusted Human Development Index	0.11	0.97

The result of the previous table shows the highest correction relationship which are existed in the research model (in a meaningful level of 95%).

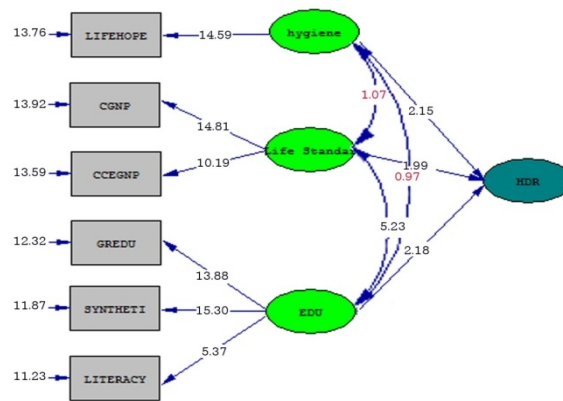


Figure 5: path analysis of the model of research

According to the getting result of table 6 and figure 5, the final model of this research is designed as figure 6:

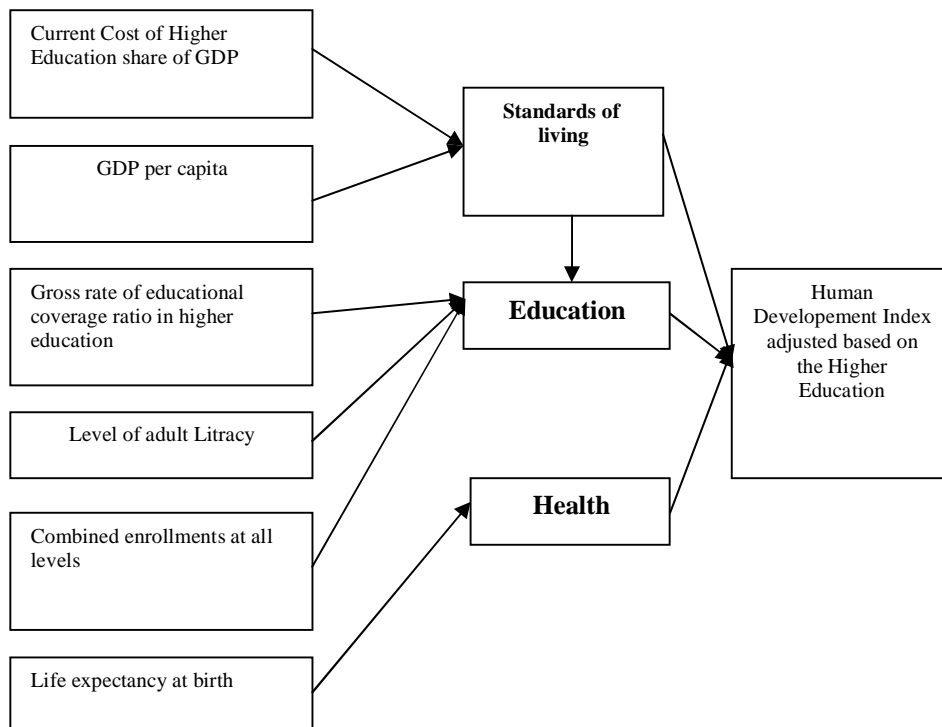


Figure 6: Model of Research

DISCUSSION AND CONCLUSIONS

As mentioned in Chapter 2, the Human Development Index cited by a report presented to the United Nations in 2010, consists of three general criteria (standards of living, health and education) and a total of four indicators (factors) are included. These components include life expectancy at birth is the average length of the period spent on training, the waiting period for children's education, age, and per capita GDP. has seen:

- 1) The standard of living structure, the share of current expenditure on higher education component was added to the model. So this new model structure consists of two components: the contribution of the current cost of education index and GDP.
- 2) The educational structure, proposed indicators include gross rates of educational coverage in higher education, the gross rates of educational coverage in the three sections of the adult literacy rate.
- 3) In the case of the health structures such as the share of people with university education and life expectancy in people with university education was introduced.

So we can summarize the changes in the human development index for achieving human development index based on higher education, as the table below:

Table 7: The variables considered for each of the three dimensions of human development index adjusted based on higher education

Dimensions of development	Model of Human Development of United Nation (2010)	Human Development Index adjusted based on the Higher Education
Living standards	GDP Indicator	Current Cost of Higher Education share of GDP
		GDP Indicator
Education	Expected duration of education for children in the age	Gross rate of educational coverage ratio in higher education
		Gross rate of educational coverage ratio at 3 level
	The average duration is spent to education	Level of adult literacy
Health	Life expectancy at birth	Share of the People with university education
		Life expectancy of the People with university education

According to the Human Development Index is adjusted based on higher education, the overall index is obtained by combining the partial indices, the following formulas to calculate indicators, three persons, living standards, education and health, is used.

Standard of living index= [(current cost of higher education's share of GDP)*(GDP per capita)⁻¹]

About this indicator must be summarized in a review perspective view of the faculty members of the index suggests that the share of public spending government spending on higher education, higher education costs, the share of social spending, education spending share of total education spending, per capita spending on higher education is real.

Education index= [(Gross enrollment rate in higher education) ¹/₃ + (combined gross enrollment rates at all levels) ¹/₃ + (adult literacy rate) ¹/₃]

About this indicator must be summarized in a review perspective view of the faculty members of the index suggests that gross enrollment rate at all levels, including absorption rates and coverage are exceptional children education, justice, education and gender parity index, literacy rate, literacy rate is 15-24 years of age.

Life expectancy=[(The share of people with university education)⁻¹+(Life expectancy of the People with university education)]⁻¹

Now, according to the above criteria, the geometric mean method for combining the three component indexes to achieve human development index adjusted based on higher education can be used:

Human Development Index adjusted based on higher education = (Life expectancy index + Education + Living Standard Index) (1/3).

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